



WORKSTATION APPLICATION

NVIDIA POWERdraft Release Notes

Software Version 15.06

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CHAPTER 1

THE NVIDIA POWERDRAFT DRIVER

This chapter contains the following topics:

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- “Key Features” on page 2
- “Release History” on page 3
- “Supported Languages” on page 4
- “Overview of Resolved Issues by Version” on page 4
- “Known Issues” on page 8

Overview

NVIDIA[®] POWERdraft[™] is an NVIDIA Quadro[®] workstation application utility.

The NVIDIA POWERdraft driver (software) is seamlessly integrated into the AutoCAD environment and contains significant improvements over existing driver technology. NVIDIA POWERdraft driver provides an extremely fast and reliable platform for AutoCAD. 32-bit display list technology and knowledge of the NVIDIA graphics adapter are combined to provide an optimal solution for Windows AutoCAD users.

NVIDIA POWERdraft includes the **MagniView**, **MultiView**, and **Cockpit** utilities, which are designed to enhance the AutoCAD drafting environment without interfering with its functionality. Fully dynamic and integrated through the NVIDIA **SmartFocus** technology, each utility is transparent to AutoCAD and available during any AutoCAD command.

The AutoCAD display driver, *WHIP!*, is part of the AutoCAD plotting engine, which is a new feature in AutoCAD 2000. NVIDIA POWERdraft replaces the *WHIP!* display pipeline but does not replace the plotting pipeline or affect the AutoCAD plotting functionality.

Note: For details on using the features of POWERdraft, refer to the *NVIDIA POWERdraft User's Guide*.

Key Features

NVIDIA POWERdraft 3D Hardware Renderer

To support AutoCAD 3D functionality, NVIDIA POWERdraft includes the 3D Hardware Renderer, which accelerates AutoCAD 3D viewing modes such as 3D Orbit or Gouraud Shaded.

Note: The Hardware Renderer has been enhanced for the current release (version 15.06) of NVIDIA POWERdraft.

NVIDIA POWERdraft Cockpit

Cockpit lets you use your pointing device to dynamically pan and zoom your current AutoCAD view. Fully integrated into the AutoCAD **MDI (multiple document interface)** environment through the NVIDIA SmartFocus technology, Cockpit has an easy-to-use graphical navigation interface, which allows you to take full advantage of the enhanced NVIDIA POWERdraft performance.

NVIDIA POWERdraft MultiView

Also fully integrated into the AutoCAD MDI environment, the MultiView utility provides a visual History of previous views, where each view is represented on a button face. Instant access to previous views allows you to record and playback selected views in a consistent manner. Using MultiView, you can also efficiently manage AutoCAD Named Views.

NVIDIA POWERdraft MagniView

The MagniView utility functions as a graphical magnifying glass giving your drawing a more detailed appearance.

NVIDIA POWERdraft Toolbar

The NVIDIA POWERdraft toolbar provides convenient access to several NVIDIA POWERdraft commands.

NVIDIA POWERdraft Hot Keys

For common actions such as **Pan**, **Zoom**, and **Redraw All**, NVIDIA POWERdraft provides configurable key combinations called **Hot Keys**. Hot Keys work transparently and are always accessible within AutoCAD.

NVIDIA POWERdraft Drawing Optimization

NVIDIA POWERdraft provides a configurable **Display Update** cache to accelerate the execution of Lisp scripts.

Online Help

When you have any NVIDIA POWERdraft window open, press **F1** to display online Help, which provides detailed user information about the application. You can view Help outside the application if needed.

Additional Documentation

Consult the following documentation for further details on POWERdraft system requirements, installation and configuration, and using POWERdraft features.

- NVIDIA POWERdraft *User's Guide*
- NVIDIA POWERdraft *Online Help*

Release History

[Table 1.1](#) contains a summary of NVIDIA POWERdraft releases and the versions associated with them.

Note: Some versions listed may not have been released outside of NVIDIA.

Table 1.1 NVIDIA POWERdraft Release History

Release	Version	Comments
Release 15.06	15.06.00 – 15.06.xx	Releases ongoing
Release 15.05	15.05.00 – 15.05.13	

Table 1.1 NVIDIA POWERdraft Release History

Release	Version	Comments
Release 15.04	15.04.00 – 15.04.02	
Release 15.03	15.03.00 – 15.03.02	
Release 15.02	15.02.00 – 15.02.02	

Supported Languages

User Interface

The NVIDIA POWERdraft application 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 POWERdraft 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

Overview of Resolved Issues by Version

This sections contains lists of resolved issues categorized by POWERdraft version number.

- [“Issues Resolved in Version 15.05.11” on page 5](#)
- [“Issues Resolved in Version 15.05.10” on page 5](#)
- [“Issues Resolved in Version 15.05.09” on page 5](#)
- [“Issues Resolved in Version 15.05.04” on page 5](#)

- “Issues Resolved in Version 15.05.02” on page 6
- “Issues Resolved in Version 15.05.01” on page 6
- “Issues Resolved in Version 15.04.01” on page 6
- “Issues Resolved in Version 15.04” on page 6
- “Issues Resolved in Version 15.03.02” on page 6
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- “Issues Resolved in Version 15.02.00 - 15.02.02” on page 7
- “Issues Resolved in Version 15.01.06” on page 7
- “Issues Resolved in Version 15.01.04” on page 7
- “Issues Resolved in Version 15.00.07” on page 8

Issues Resolved in Version 15.05.11

The current release of NVIDIA POWERdraft adds enhanced Setup (Installation/Option) options.

Issues Resolved in Version 15.05.10

Under Windows 2000 and Quadro4 500 GoGL, fixed problem with having to render model twice in AutoCAD with POWERdraft open.

Issues Resolved in Version 15.05.09

- Fixed problem with mouse trail in POWERdraft.
- Under Synergy2000/Quadro2 EX, fixed problem with corrupted display of paper space in Architectural Desktop 3.3 running with POWERdraft 15.05.06.
- Fixed problems with Cockpit Pan and Zoom in Layout View.

Issues Resolved in Version 15.05.04

- Fixed problem where there was a system hang during plotting when attempting to print.
- Under Windows XP, fixed problem with pauses between drawing lines.

Issues Resolved in Version 15.05.02

- Fixed problem with AutoCAD freezing during POWERdraft startup.
- Fixed issue where POWERdraft did not restore Named Views with saved User Coordinate System (UCS).

Issues Resolved in Version 15.05.01

- Added AutoCAD 2002 support.
- Fixed problem where the AutoCAD Grid did not refresh correctly in POWERdraft 15.04.xx and 15.05.
- Updated POWERdraft `readme.txt` and Help content; i.e., generalized the file name references for application to all releases of POWERdraft.
- Fixed problem with inaccessible foreign language content after POWERdraft installation.
- Fixed corrupted true color raster images in MagniView and AerialView.

Issues Resolved in Version 15.04.01

- Fixed Win NT 4.0 with Quadro2 Pro/EX access violation.
- Updated POWERdraft Help.

Issues Resolved in Version 15.04

Added enhanced support for dual-processor systems.

Issues Resolved in Version 15.03.02

Fixed issue where AutoCAD 2000i ended with fatal error when using True Type Fonts.

Issues Resolved in Version 15.03

- Added support for AutoCAD 2000i and 2000i-based applications.
- Fixed wrong `.hdi` renderer file configuration in POWERdraft Setup.

Issues Resolved in Version 15.02.00 - 15.02.02

- Fixed: When running the NVIDIA POWERdraft Setup program, an unknown component named “lang_int” is selectable.
- Fixed: Under Windows 2000 with Quadro2 Pro or Quadro2 EX, minor cosmetic defects appeared during installation of NVIDIA POWERdraft.
- Fixed: Under Windows 2000 with Quadro2 Pro or Quadro2 EX, the NVIDIA POWERdraft logo was incorrect.
- Fixed: NVIDIA POWERdraft had display problems under Windows 2000 with Quadro2 Pro or Quadro2 EX.
- Fixed: Under Windows NT 4.0 with Quadro, the uninstallation program did not remove all of the NVIDIA POWERdraft files.
- Fixed: Under Windows 2000 with Quadro2 MXR and AutoCAD 2000, truck model in the Sample folder was corrupted using the `nvidia6.hdi` driver.

Issues Resolved in Version 15.01.06

- Fixed the Render command.
- Fixed exclusive installation of 3D Hardware Renderer.
- Implemented the new hot key “Wireframe now”.
- Accelerated the performance of AutoCAD AerialView. The AerialView dynamic update mode feature is very useful, even with large drawings.
- Added new Cockpit feature, which allowed crosshairs and other construction elements to be displayed during remote pan and zoom.
- Added another new Cockpit feature, which restored the old view when you abort dynamic pan & zoom by pressing the ESC key before releasing the mouse button.
- For Cockpit dynamic pan and zoom, improved the drawing order for most cases, which is especially useful for very large drawings.
- Significantly accelerated the dragging list, which is used in commands such as Copy, Move, and Rotate.

Issues Resolved in Version 15.01.04

- Included enhancements for Cockpit, which offered rapid and flicker-free dynamic zoom and pan, a feature that is also available through the Cockpit Remote Control.

- Offered a faster drawing speed compared to the AutoCAD application without NVIDIA POWERdraft.

Issues Resolved in Version 15.00.07

Version 15.00.07 was the first version of NVIDIA POWERdraft and included:

- 3D Hardware Renderer to accelerate AutoCAD 3D viewing modes
- MultiView (a new feature)
- Configurable Hot Key for convenient navigation
- Configurable Drawing Optimization to accelerate execution of Lisp scripts
- Settings (integrated in the AutoCAD Options) option to configure NVIDIA POWERdraft
- New commands

Known Issues

The following software limitations are known to exist in the current version of NVIDIA POWERdraft:

- [MagniView: Rendering of 2D Images](#)
- [Export Formats](#)
- [Model Space and Layout Mode](#)
- [Cockpit and Plot Preview/3D Orbit](#)
- [Entity Selection in a 3D View](#)
- [“Redraw All” Hot Key](#)
- [OLE Objects](#)

Note: Some of these issues may be fixed in future releases.

MagniView: Rendering of 2D Images

The MagniView utility in POWERdraft is designed to show 2D graphics of the current viewport only. A 2D sample image such as city map opens in paperspace with the default paperspace viewport (viewport 1) active. The default paperspace viewport mainly contains the floating viewport borders and may also contain text. Consequently, MagniView can only show viewport borders and text when starting with this setting.

Note: To view the complete image, click one of the floating viewports to make it active. MagniView will then switch to show all the 2D graphics contained in that viewport.

Export Formats

The following export formats are not supported; i.e., the files generated are valid but do not contain any entity:

- **Windows Meta Files (*.wmf)** (The command is `_EXPORT Metafile.`)
- **Slide Files (*.sld)** (The command is `_MSLIDE.`) Slide files are supported with NVIDIA POWERdraft version 15.02.00 or higher.

Model Space and Layout Mode

The following limitations only apply to Model Space and Layout Mode (paper space) but do not apply to Plot Preview:

- When using non-rectangular viewports in layout mode, the entities inside those viewports are not clipped properly to the viewport border.
- End caps and join styles are not displayed.
- Line types may appear different from AutoCAD line types.
- The drawing order of TrueTypeText and elliptical arcs is different from the original AutoCAD.

Cockpit and Plot Preview/3D Orbit

Cockpit does not work in Plot Preview or in 3D Orbit.

Entity Selection in a 3D View

When selecting an entity in a 3D view, the corresponding highlighted entity may be off by one pixel to the side. When using the NVIDIA POWERdraft 3D Hardware Renderer, fewer of these display errors occur than with `wopengl6.hdi`.

“Redraw All” Hot Key

In a 3D viewport, the **RedrawAll** hot key does not repair pixel errors with drawing entities, but non-drawing entities such as highlights, grips, or the crosshairs are redrawn.

OLE Objects

OLE Objects are not supported in POWERdraft.