



NVIDIA Quadro™4 XGL **Control Panels Guide**



*n*VIDIA®

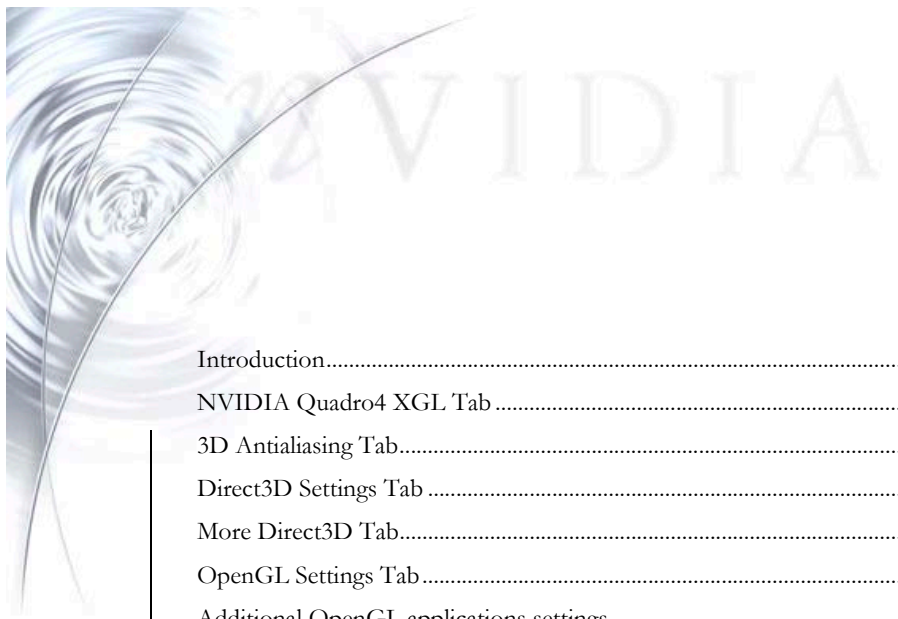


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Introduction

The following is a guide to the control panels for NVIDIA's Quadro4 XGL series and nView™ Multi-display Technology. This document will use the Quadro4 900 XGL product running under Windows® XP to demonstrate the control panels, but these settings apply to all Quadro4 XGL products except where noted. These control panels are a set of tools to unleash all of the features found on these powerful products.

To access Quadro4 XGL control panels, go to **Settings** on the Windows Start menu, then select **Control Panel**, and double click on the **Display icon** to bring up the Display Properties window. Click on the **Settings** tab, select the monitor labeled **1**, and then click the **Advanced** button (see Figure 1). This will bring up the **Advanced Properties pages**.

The following tabs are not specific to NVIDIA GPUs and will not be addressed in this document:

- General
- Adapter
- Monitor
- Troubleshoot
- Color Management

These are Microsoft's Tabs. Please refer to the Windows Manual or Windows Help for explanations of those tabs.

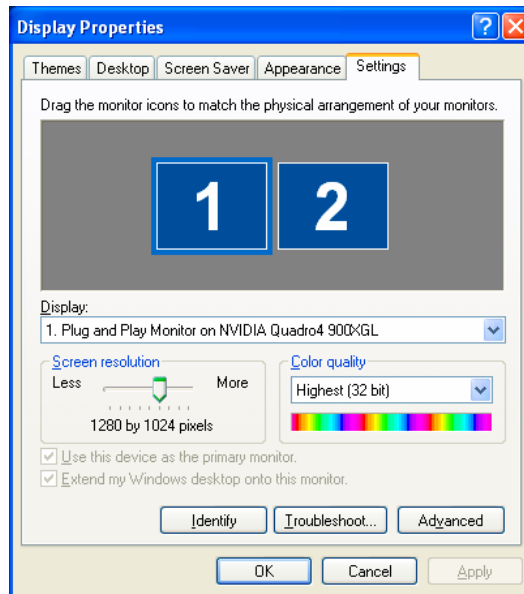


Figure 1. **Display Properties Control Panel**



NVIDIA Quadro4 XGL Tab

The **NVIDIA Quadro4 XGL** tab provides users with information about the NVIDIA GPU on their graphics card and access to many of the GPU's settings. The control panels found under **Additional Properties** are for advanced users and therefore not intended for all users.

As seen in Figure 2, the **NVIDIA Quadro4 XGL** tab displays relevant information about the Graphics Processor, System Configuration, and Driver Versions that is useful to both end users and technical support (when applicable).

To gain access to the advanced features of the Quadro4 XGL family of GPUs, click **Additional Properties**. There are five new tabs: **3D Antialiasing Settings**, **Direct3D Settings**, **OpenGL Settings**, **Overlay Controls**, and **Desktop Utilities**.

NVIDIA on the Internet will launch hyperlinks to www.NVIDIA.com for driver updates, product information, and news.

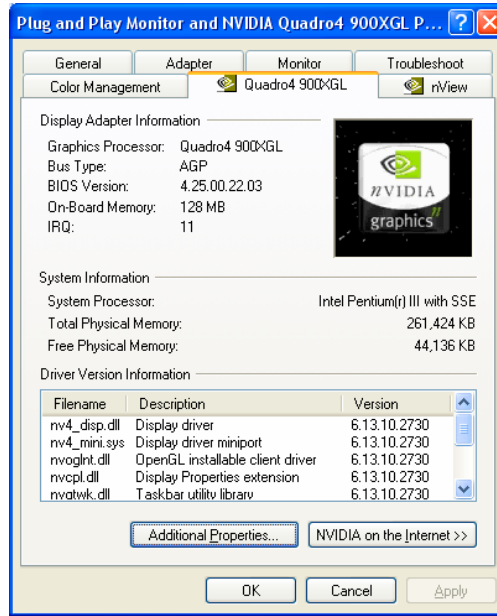


Figure 2. **Quadro4 XGL Info Tab**

3D Antialiasing Tab

One of the most compelling features of the Quadro4 XGL products is the support for **Antialiasing (AA)**. For the first time, users can experience High Resolution Antialiasing (HRAA) at incredibly fast frame rates. NVIDIA recommends selecting **Allow applications to control Antialiasing mode** when using a DirectX 7/8 application. These applications generally have AA options built directly into them that allow users to select their AA mode while running the application. However, to force AA on any application, please select a manual setting:

Allow applications to control the Antialiasing mode

Manually select the Antialiasing mode will override any application setting for AA and includes the following options:



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- **Off** (no antialiasing)
- **2x** is a two-sample-per-pixel mode.
- **Quincunx Antialiasing** is an exclusive hardware AA mode developed by NVIDIA to deliver high quality AA, without the performance penalty of higher settings.
- **4x** is a four-sample-per-pixel mode.
- **4xS** (Direct3D only) enables Antialiasing using the 4x skewed mode. This offers higher image quality than 4x mode at slightly lower performance than 4x mode.

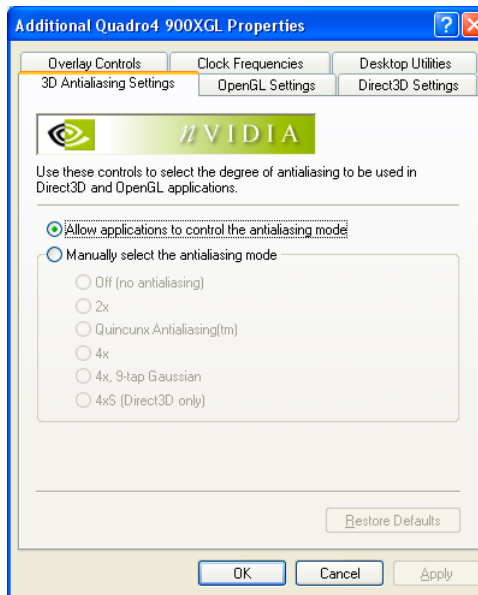


Figure 3. **3D Antialiasing Settings Tab**

Note: The 4XS setting affects only Direct3D applications. When running OpenGL® applications, OpenGL will use the next capable Antialiasing setting (i.e. the option setting found immediately preceding the 4xS setting).

Restore Defaults restores the settings to NVIDIA's default setting, which is no AA.

Direct3D Settings Tab

Performance and Compatibility

- **Enable fog table emulation** is used to turn fog table emulation *on* or *off*. Direct3D specifies that a display adapter capable of D3D hardware acceleration should be able to implement either vertex fog or table fog. Some applications do not correctly query the Direct3D hardware capabilities and expect table fog support. Enabling this feature ensures that these applications will run properly with the NVIDIA GPU.
- **Display logo when running Direct3D applications** enables the NVIDIA logo in Direct3D.



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- Enabling this setting will display the NVIDIA logo in the lower corner of the screen while running Direct3D applications.

MIP map detail level allows adjustment of the LOD (Level of Detail) bias for Mip maps. A lower bias Mip mapping will provide better image quality, while a higher bias will increase application performance. Choose from five preset bias values: **Best Image Quality, High Image Quality, Blend, High Performance, and Best Performance.**

PCI Texture Memory Size: allows the graphics processor to utilize up to the specified amount of system memory for texture storage (in addition to the memory installed on the display adapter itself). Note that the maximum amount of system memory that can be reserved for texture storage is calculated based on the amount of physical RAM installed in the computer. The more system RAM, the higher the value can be set.

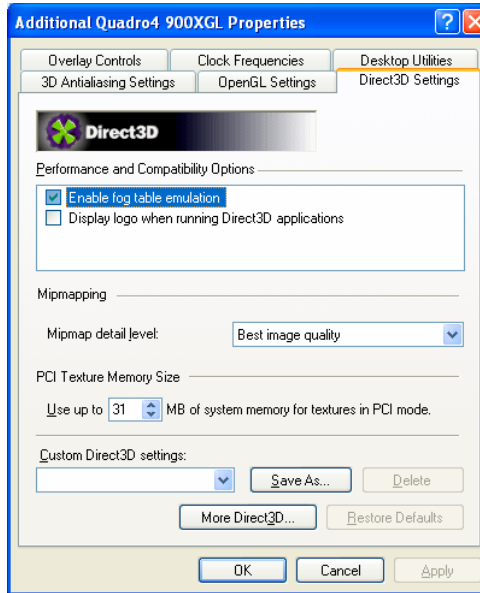


Figure 4. **Quadro4 XGL Direct3D Tab**

Note: This setting applies only to PCI display adapters (or AGP display adapters running in PCI compatibility mode).

Custom Direct3D Settings displays a list of the custom settings (or “tweaks”) the user has saved. Selecting an item from the list will activate the setting. To apply the setting, click **OK** or **Apply**.

Save As lets the user save the current settings (including those set in the “More Direct3D” dialog) as a custom “tweak.” Saved settings will then be added to the adjacent list. Once the user has found the optimal settings for a particular Direct3D game, saving the settings as a custom tweak allows the user to quickly configure Direct3D before starting an application and eliminates the need to set each of the options individually.

Delete deletes the custom setting currently selected in the Custom D3D Settings field.

Restore Default restores the factory default settings.

More Direct3D brings up the More Direct 3D tab.

More Direct3D Tab



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Texel Alignment changes the hardware texture-addressing scheme for texels (texture elements).

Changing these values will change where the texel origin is defined. The default values conform to the Direct3D specifications. Some software may expect the texel origin to be offset elsewhere. The image quality of such applications will improve if the texel origin is redefined. Use the slider control to adjust the texel origin between the upper left corner and the center of the texel.

Restore Defaults restores the factory default settings.

Note: When the Coolbits registry key is turned on, the disable Vertical Sync (VSync) tab will appear under the **More Direct3D** Tab. See the last section of this document for enabling the Coolbits registry key.

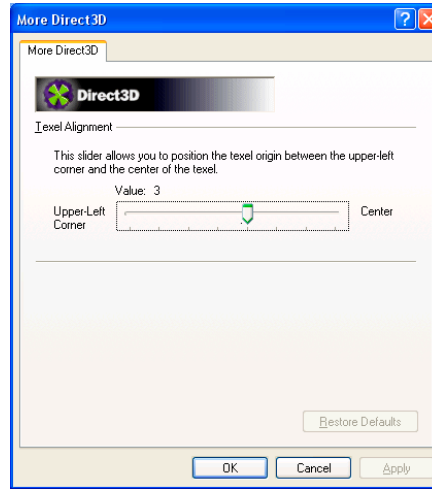


Figure 5. **More Direct3D Tab**

OpenGL Settings Tab

The OpenGL settings are the most commonly used control panels for the Quadro workstation family of products. These settings are used to setup and configure your OpenGL application's settings.

The Custom OpenGL Application Settings is the *most important* option when using a Quadro product. In order to maximize your productivity with a particular application, please select it from the list of pre-configured applications.

Note: Additionally, when testing Quadro performance characteristics, it is recommend that Vertical sync be turned off *after* selecting the **Custom OpenGL Application Setting**.

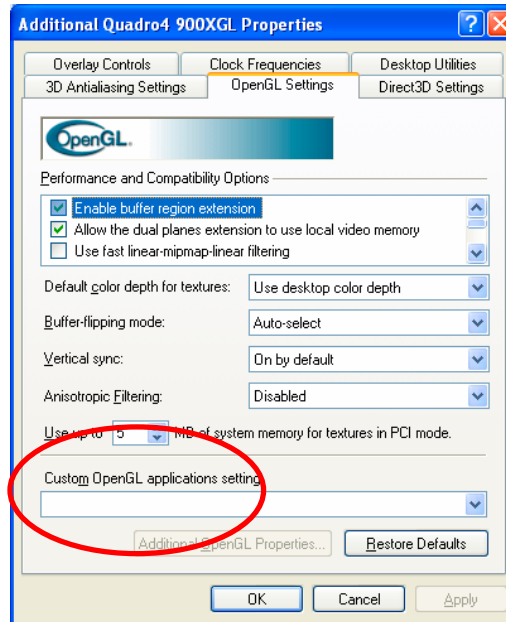


Figure 6. **Quadro4 XGL OpenGL Tab**

Performance and Compatibility Options

- **Enable buffer region extension** allows the drivers to use the OpenGL



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extension `GL_KTX_buffer_region` that can increase application performance in 3D modeling applications that support this extension.

- **Allow the dual pane extensions to use local video memory** allows the use of local video memory when the `GL_KTX_buffer_region` extension is enabled.

Note: This setting has no effect if the “Enable buffer region extension” option above is disabled.

- **Use fast linear-mipmap-linear filtering** allows fast linear-Mip map-linear filtering, which increases application performance but at the expense of some image quality. In many cases, a loss of image quality may not be noticeable, so the user may want to take advantage of the extra performance that is gained by enabling this feature.
- **Disable support for enhanced CPU instruction sets** disables driver support for enhanced instructions used by certain CPUs. Some CPUs support additional 3D instructions that complement the NVIDIA graphics processor and improve performance in 3D applications. This option allows the user to disable support for these additional 3D instructions in the drivers. This can be useful for performance comparisons or for troubleshooting.
- **Force 16-bit Depth buffer** is only supported under Windows NT4.0/2000/XP. This option forces the OpenGL driver to use a 16-bit depth buffer regardless of the pixel format chosen by the application. This feature improves the performance of depth buffer clears and operations but at the expense of less precision in the depth buffer.
- **Unified Back Buffer, Quadbuffered Stereo, and OpenGL Overlays** options are *only* supported under Windows XP/2000/NT

Note: If quadbuffered stereo or OpenGL overlays do not work properly, you may want to try setting different screen resolutions and refresh rates until you arrive at a setting or combination of settings for better results.

- **Unified Back Buffer** only supported can improve the performance of OpenGL applications that use multiple windows. When this option is enabled, the OpenGL driver allocates one back buffer and one depth buffer at the same resolution of the display. This method makes more efficient use of video memory for applications that create multiple windows. When disabled, the OpenGL driver allocates a back buffer and depth buffer for every window created by that application.

Note: This option must be enabled to activate such features as OpenGL overlay planes and quadbuffered stereo API; explanations of those options follow.



- **Enable Quadbuffered Stereo API** allows the drivers to export stereo pixel formats so that OpenGL applications can support stereo viewing and stereo shutter glasses.

Note: OpenGL stereo overlays cannot be enabled simultaneously. Once activating this option, notice that the **Additional OpenGL Properties** buttons is enabled. Click this button for access to OpenGL Stereo configuration panel.

Enable Quadbuffered Stereo API allows the drivers to export

- **Enable Overlays** allows the drivers to export overlay pixel formats. Some applications (for example, Softimage3D) require overlay planes, which are used as a paletted surface in addition to the normal color (RGB) buffer. Overlays are especially useful for overlapping drawing areas that are independent of the 3D image itself, such as menus and cursors. Overlays are supported in 16-bit and 32-bit color modes

Note: OpenGL stereo and overlays cannot be enabled simultaneously. Once activating this option, notice that the **Additional OpenGL Properties** buttons is enabled. Click this button for access to OpenGL Stereo configuration panel.

- **Default color depth for textures** determines whether textures of a specific color depth should be used by default in OpenGL applications. Use desktop color depth will always use textures of the color depth at which the Windows desktop is currently running. The **Always use 16 bpp** and **Always use 32 bpp** options forces the use of textures of the specified color depth, regardless of the desktop settings.
- **Buffer flipping mode** determines the buffer-flipping mode for full-screen OpenGL applications. The user can select from the **block transfer** method (Use block transfer), the **page flip** method (Use page flip) or **Auto-select**. Auto-select allows the driver to determine the best method based on the hardware configuration.
- **Vertical sync** lets the user specify how vertical sync is handled in OpenGL. Always off will always disable vertical sync in all OpenGL applications. **Off by default** will keep Vertical Sync disabled, unless an application specifically requests that it be enabled. **On by default** will keep Vertical Sync enabled, unless an application specifically requests that it be disabled.
- **Anisotropic Filtering** allows OpenGL to use anisotropic filtering for improved image quality. Note that enabling this feature improves image quality at the expense of performance.
- **Use up to [xx] MB of system memory for textures in PCI mode** allows the graphics processor to utilize up to the specified amount of system memory for texture storage (in addition to the memory installed on the display adapter itself). This setting applies only to PCI display adapters (or AGP display adapters running in



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PCI compatibility mode). Note that the maximum amount of system memory that can be reserved for texture storage is calculated based on the amount of physical RAM installed in the computer. The more system RAM, the higher the value the user will be able to set.

- **Custom OpenGL application settings** (Windows XP/2000/NT4.0 *only*) This option displays a list of preconfigured settings that correspond to OpenGL workstation applications. If the application you are currently using is listed here, it is critical to select it to ensure maximum performance and compatibility.
- **Save As. . .** lets the user save the current settings as a custom “tweak.” Saved settings will then be added to the adjacent list. Once the user has found the optimal settings for a particular OpenGL application, saving the settings as a custom tweak allows the user to quickly configure OpenGL before starting the program and eliminates the need to set each of the options individually.
- **Delete** lets the user delete the custom setting currently selected in the Custom OpenGL settings field.
- **Restore Defaults** restores factory default settings.

Additional OpenGL applications settings

If you checked the **Enable Quadbuffered Stereo API** option on the OpenGL Settings panel, click the **Additional OpenGL Properties** option button to open the OpenGL Stereo panel

- **Enable Overlay in OpenGL.** See the explanation under “Enable Overlays” In the previous section.
- **Enable Stereo in OpenGL** enables stereo in OpenGL. To run stereo applications with shutter glasses or other hardware, the NVIDIA driver exports OpenGL stereo pixel formats and organizes memory to allow stereoscopic and monoscopic applications to be used simultaneously..

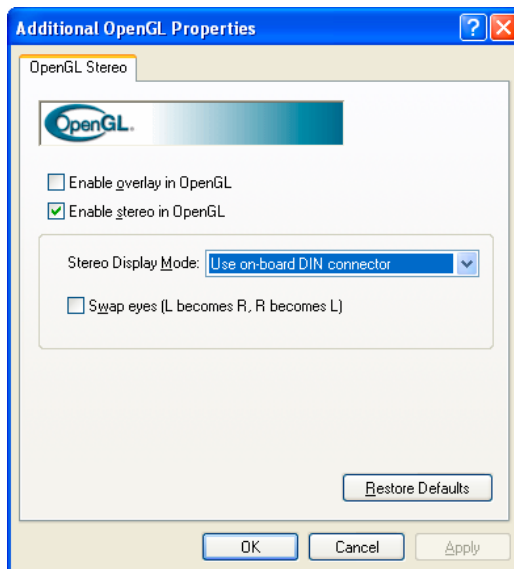


Figure 7. **Additional OpenGL Properties**

Note: OpenGL stereo overlays cannot be enabled simultaneously. Enable this option only if it is



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necessary. Some applications automatically choose a stereo format while other applications may not function properly in stereo pixel format. Stereo viewing requires additional onboard graphics memory and may not be available under all resolutions. You may want to reduce the resolution or color depth if you have problems viewing in stereo.

- **Stereo Display modes** The NVIDIA driver supports a variety of stereo hardware. If you use stereo hardware other than the default, select a display mode from the list box.
- **Use shutter glasses:** Select this option only if you use an ELSA 3D REVELATOR or compatible adapter. These adapters will translate the monitor signal to the standardized 3-pin DIN used by most available stereo hardware. NVIDIA driver supports a variety of stereo hardware. If you use stereo hardware other. You do not need to use the adapter if your graphics card has a built-in 3-pin DIN connector!

Note: If you are encountering problems with stereo viewing with shutter glasses, you may want to experiment with different refresh rate settings for your monitor. For example, your shutter glasses will not work on a panel set to a very low refresh rate.

- **Use Vertical Interlace Monitor:** Select this option if you have connected an auto-stereo flat panel to your graphics card.
- **Use nView Clone mode** Select this option if you have passive stereo hardware. This option is *only* available on NVIDIA GPU-based dual-display cards. To use this option, you need to have connected the projectors to the dual-display card and enabled nView Clone mode from the nView page. One head will show the left eye of the image and the second head will show the right eye.
- **Use onboard DIN connector:** If your graphics card has a built-in 3-pin DIN connector, select this option to enable the feature. In this case, you do not need extra adapters such as those shipped with the ELSA 3D REVELATOR or StereoGraphics glasses. You can connect any stereo hardware using the 3-pin DIN connector directly to the graphics card.
- **Use Blue-line Code for StereoGraphics Products:** Select this option if you use an adapter shipped with StereoGraphics StereoEyes or compatible products. These adapters translate the monitor signal to the standardized 3-pin DIN connector used by most available stereo hardware. You do not need to use the adapter if your graphics card has a built-in 3-pin DIN connector.
- **Swap eyes (L becomes R, R becomes L):** In case you cannot view a stereo effect, select this option to exchange the left and right images. In general, you may need to enable this option only on vertical interlace monitors and in passive mode.



Overlay Color Control Tab

These controls adjust the video and DVD playback settings on the display in order to achieve optimal image quality:

Note: The slider for each option will remain grayed out until a video stream (AVI, MPEG, DVD, etc.) is opened.

- **Brightness** adjusts the level of brightness for video playback.
- **Contrast** adjusts the level of video contrast for video playback.
- **Hue** controls the hue or gradation of color for video playback.
- **Saturation** controls the saturation of color for video playback.
- **Restore Defaults** restores factory default settings.

Video Mirror leverages nView's Multi-display Technology by allowing users to watch a video stream full screen on one display while still maintaining a fully functional desktop on the other display. This option will only appear active if multiple displays are connected and configured in **Extended Desktop** or **Clone Mode**.

After clicking on the **Video Mirror** button on the Overlay menu, activate it by selecting a **Full Screen Device**. In Extended Desktop mode, only the **Auto-select** option will appear. In Clone mode, all options are available. Auto-Select will output the video full screen to the second display as indicated from the Display Properties page.

Aspect Ratio selects the aspect ratio of the full screen video. NVIDIA recommends that most users select **Track overlay aspect ratio** since the aspect ratio tracks the video settings of the original video. The other settings force the video to be a specific setting and are used only to achieve the correct aspect ratio in certain instances.

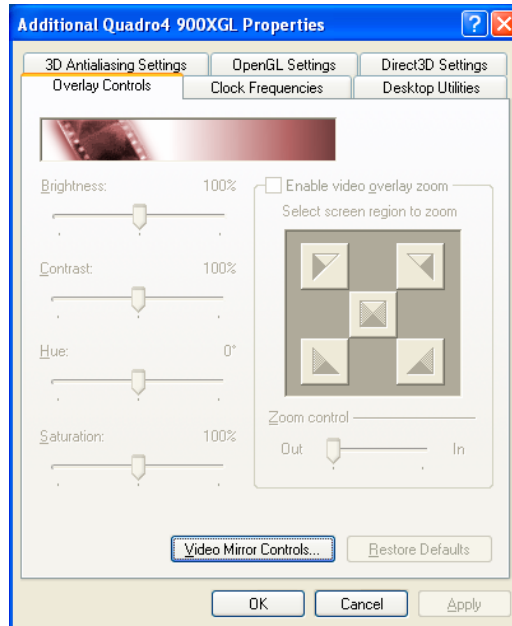


Figure 8. Quadro4 XGL Overlay Tab

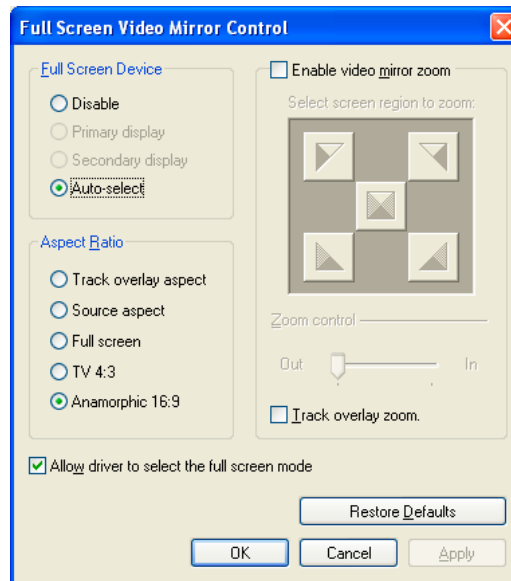


Figure 9. Quadro4 XGL Video Mirror



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Allow driver to select the full screen mode is an advanced setting enabled by default. When enabled, the Video Mirror driver selects the optimal display mode for the full-screen device. When disabled, the Video Mirror uses the desktop mode that is currently set on the display device.

Enable video mirror zoom allows the user to zoom in on a specific portion of the video stream. Once enabled, the user can control the zoom region by selected one of five areas. **Zoom control** slider controls the level of zoom on the video mirror device. If the user wishes to zoom on the source video as well as the video mirror zoom, click the checkbox next to **Track overlay zoom**.

Restore Defaults will restore the factory default settings.

Desktop Utilities Tab

The **Desktop Utilities** Tab allows users to enable/disable the **QuickTweak** control panel on the Windows Taskbar, which will give quick access to the many of the Quadro4 XGL's advanced settings, including the nView control panels. Click the box labeled **Display the QuickTweak icon in the Taskbar** to enable it. The user may then select which icon to display in the taskbar. To enable the nView Desktop Manager right now, click the box next to **Enable Desktop Manager**.

Once the QuickTweak taskbar is activated, the user can interact with it on the taskbar using the mouse. Double left mouse clicking on it will bring up the **Display Properties > Settings page**. Right mouse clicking on the QuickTweak taskbar will bring up the following submenus:

- **3D Antialiasing Settings** allows users to quickly select their Antialiasing level as opposed to selecting it from the 3D Antialiasing control panel.
- **Custom OpenGL Settings** allows users to select the customized OpenGL settings they created from the **OpenGL** Tab. Users can also **Restore Driver Defaults** from here as well.
- **Custom Direct3D Settings** allows users to select the customized Direct3D settings

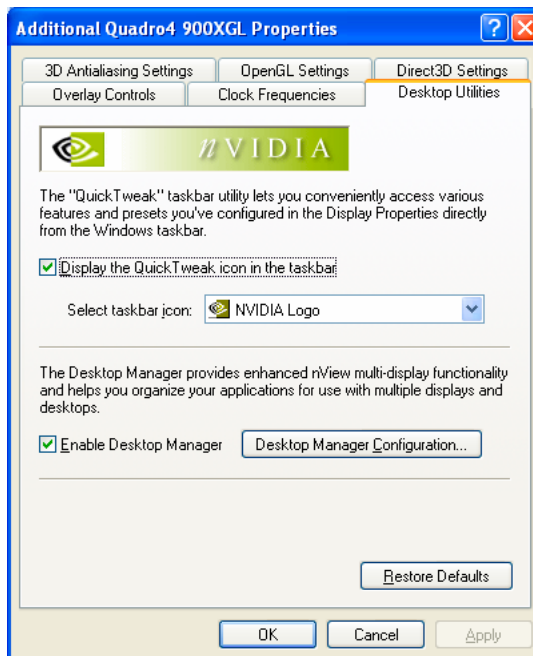


Figure 10. **Desktop Utilities Tab**



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they have created from the **Direct3D** Tab. Users can also **Restore Driver Defaults** from here as well.

- **Custom Color Settings** allows users to select the customized Color Correction settings they have created from the **Color Correction** Tab. Users can also **Restore Hardware Defaults** from here as well.
- **Desktop Manager** allows users to **Enable** and **Disable** nView quickly. Users can also bring up the nView Properties tab and quickly switch between desktops. See the nView section below for more information of multi-display settings.
- **Adjust Display Properties** will bring up the **Display Properties > Settings** page.
- **QuickTweak Properties** allows users to customize the look and feel of the QuickTeak page.
- **Mouse Buttons** allows the user to select which button to use to click the QuickTweak to activate the menus.
- **Confirmation** allows the user to disable the warnings for QuickTweak changes.
- **3D Menus** will display with QuickTweaks menus with a 3D look.

Note: All Quadro4 XGL GPUs are nView-enabled. If the user has enabled Windows Extended Desktop mode, the QuickTweak taskbar will show two display options **Display 1** and **Display 2**, each with the following submenu items: 3D Antialiasing, Custom OpenGL Settings, Custom Direct3D Settings, and Custom Color Settings.

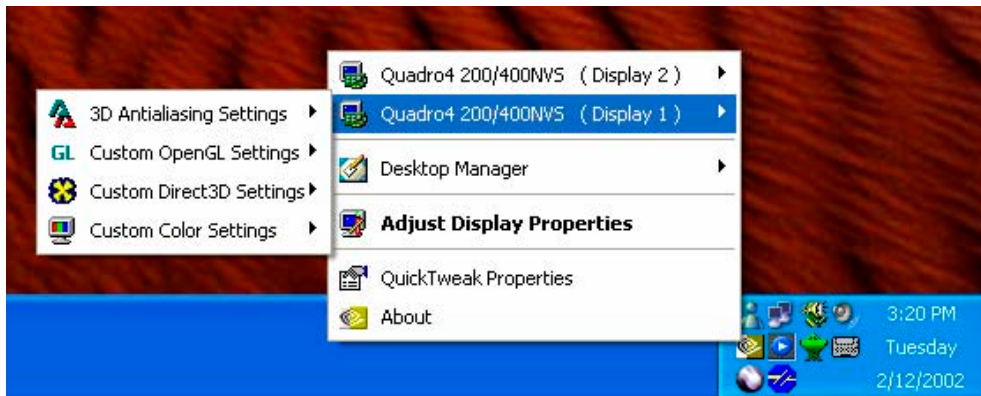


Figure 11. **NVIDIA QuickTweak Icon**

Device Selection Tab



The **Device Selection** Tab helps users change the settings for the specific display connected to the Quadro4 XGL.

From the **Display Properties>Settings** page select either **Monitor 1** or **Monitor 2** by highlighting it and selecting Advanced. Browse to the **Device Selection** Tab and click “**Device Adjustments**” to access the advanced display settings.

Note: In nView Span or Clone mode, the user must browse to the nView Tab and then select “**Device Settings>Select Output Device**” to access the Color Correction, Screen adjustments (Analog and Digital), and Display timings control panels.

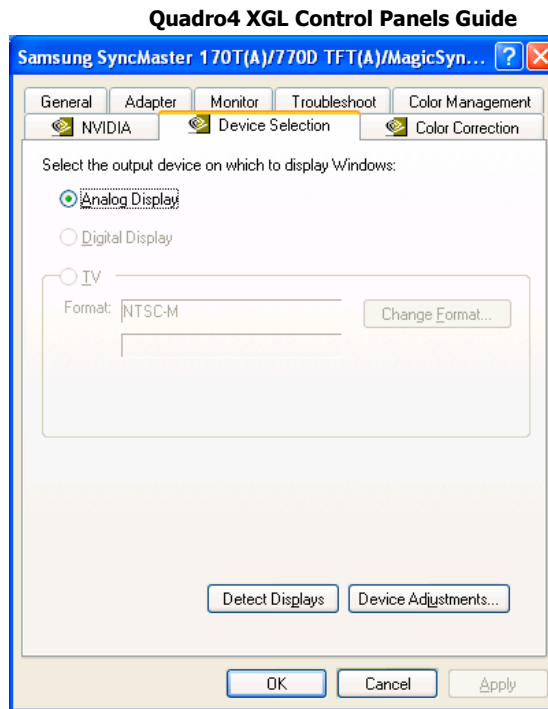


Figure 12. **Quadro4 XGL Device Selection Tab**



Screen Adjustment: Analog Monitor

This control changes the on-screen position of the display, allowing for more fine-tuning than standard built-in monitor controls.

To adjust the screen position, move the mouse over the monitor image and drag the desktop to the desired position while holding down the left mouse button. Use the arrow positioning buttons for fine adjustments.

To reset factory default settings push **Default**.

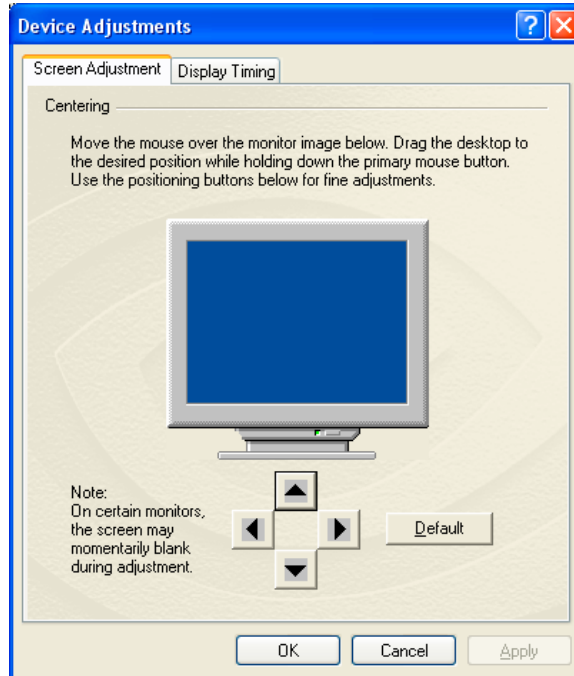


Figure 13. **Screen Adjustment Tab**



Screen Adjustment: Digital Flat Panel

The options **Use display adapter scaling** and **Centered Output** determines the placement of the image on the flat panel display when running at resolutions lower than the maximum supported resolution. The **Use monitor scaling** option is available for flat panels that support multiple native resolutions.

Note: The Digital Flat Panel's maximum resolution is displayed at the bottom of this tab.

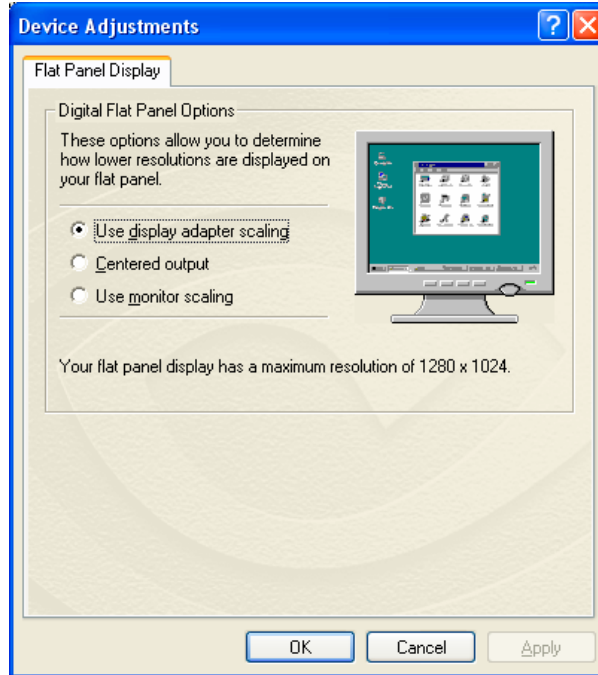


Figure 14. Flat Panel Display Tab



Display timing: Analog Monitor

The **Display timing** window allows users to select the proper timing mode for the display:

➤ **Auto-detect (let Windows determine the proper mode)**

This allows Windows to receive the proper timing information directly from the monitor itself. This is the default setting. Note that some older monitors may not support this feature. This is the recommended mode for most computers as Windows can generally determine the monitor timings properly this way to ensure there are no visual artifacts on screen.

➤ **General timing Formula (GTF)**

A standard used by most new hardware.

➤ **Discrete Monitor timing (DMT)**

An older standard still used on some hardware. Enable this option if the hardware requires DMT.

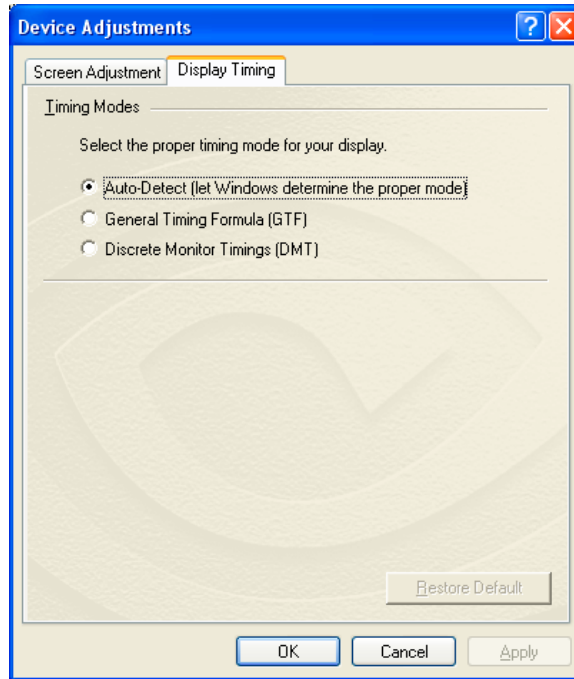


Figure 15. **Quadro4 XGL Analog Monitor Display timing Tab**

The **Display timing** button will restore factory default settings.



Digital Vibrance Control

In addition to the standard color controls, the Quadro4 XGL color Correction Properties allow users to enable Digital Vibrance Control (DVC), NVIDIA's patent pending technology that allows for digitally controlling the color separation and intensity of all images on each display through a simple control panel. The result is richer color, and brighter, cleaner, more ergonomically pleasing images.

Color Correction Tab

The color Correction tab allows users to customize the **gamma saturation**, **brightness**, and **contrast** and **Digital Vibrance** for the Windows Desktop.

- **Digital Vibrance** - This is a mechanism for controlling color separation and intensity, boosts the color saturation of an image. Use the slider to boost the color to the desired setting.
- **Active Color Channel** - This selects which color channel to modify with the slider: All channels (Red, Green, and Blue), Red, Green, or Blue.
- **Brightness** - This slider adjusts the level of brightness.
- **Contrast** - This slider adjusts the level of contrast.

Gamma - This slider adjusts the level of gamma. This affects the saturation of the channel selected and may cause the display to appear light or dark.

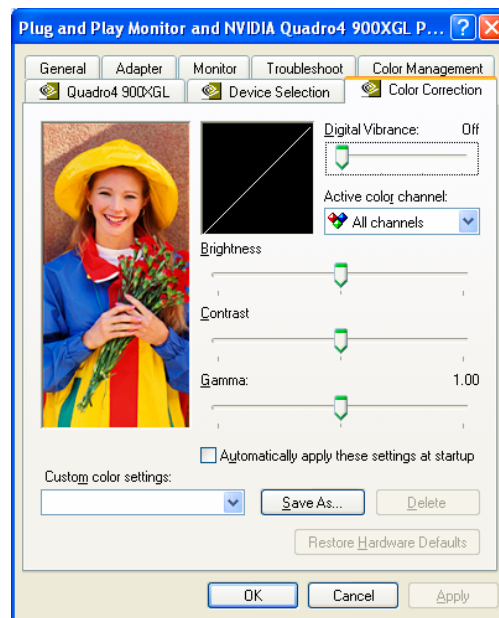


Figure 16. Quadro4 XGL Color Correction Tab

The user can choose to **Automatically apply these settings at startup** by clicking a box.

Custom Color Setting- After adjusting the display, save the custom settings. A click on **Restore hardware defaults** will return the display to the factory default settings.

Note: In nView Span or Clone mode the Color Correction Tab is available from “**Device Settings>Select Output Device.**”



nView Multi-display Technology

With the introduction of nView Multi-display Technology, NVIDIA is redefining the industry standard for Multi-display technologies with key new features in software and hardware. Designed from the ground up as a software and hardware solution, nView leverages NVIDIA's industry leading Detonator XP software architecture and graphics processing units (GPUs) to deliver users easier Multi-display setup, robust multi-desktop management, and full window and application management. All Quadro4 XGL products fully support nView and provide the best multi-display management software available.

nView Desktop Manager is also the only Multi-display software that stores desktop settings on a per users basis – rather than a global basis – under all versions of Windows. This can be a great benefit in the corporate market because many users can share the same machine and still maintain their own unique settings in a free seating environment.

This section will cover the main features of nView available from the control panels.

Enabling Multi-displays

Before enabling nView's advanced features, it is important to enable Multi-displays in the operating system.

With Windows 2000, users need to browse to the **Display Properties>Settings>Advanced>nView** and turn on a **Span** mode. Users can select **Horizontal** or **Vertical** spanning modes. When this setting is enabled, each monitor has the same resolution and color depth.

With Windows XP or Windows 98/Me, users need to enable Extended Desktop mode for the best Multi-display experience. To turn it on, browse to **Display Properties>Settings** and notice there are two monitors, labeled **1** and **2**. The second monitor is currently grayed out. Left mouse click on

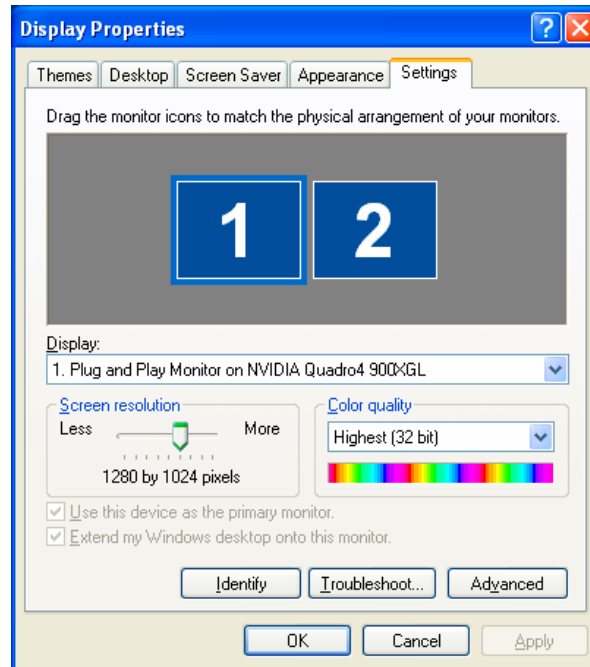


Figure 17. **Quadro4 XGL Display Properties Tab**



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it and then check the box labeled **Extend my Windows desktop onto this monitor**. The second monitor should now be active, and users can drag each monitor in order to change their placement. Users can independently change resolution and color depth for each monitor.

Note: When Extended Desktop mode is enabled, the **nView Tab** will not appear under **Display Properties>Settings>Advanced**.

Setup Wizard

The nView setup wizard helps users configure the most commonly used features through simple to use menus. Each step of the way users are prompted with text, diagrams, and pictures to configure nView for their individual needs.

The setup wizard can be launched two ways. The first way is to enable multi-displays, and then reboot Windows. After logging in, the setup wizard will start automatically. The second way is to launch the wizard from the nView Desktop Manger page. Once the Desktop Manger is enabled (see Desktop Utilities section above), users can either right click on the desktop background and select **nView Settings** or right click on the QuickTweak icon and select **Desktop Manager>nView Properties**. This will bring up the **nView Desktop Manager Tab**. Click on the button labeled **Wizard** to launch the setup utility.

The Setup Wizard consists of 11 pages that will each help users customize their multi-display setup.

Note: Setting up the Multi-display configuration using the Setup Wizard is the easiest way to configure nView. Make sure the second display is connected for the Wizard to launch automatically.



Figure 18. **nView Setup Wizard**



Profiles Tab

nView Profiles allows users to create and save unique profiles for different configurations. Each profile stores the entire nView state in a single file. If a user has a notebook computer, he can create separate profiles for when he is connected to a second monitor at the office and when he is at home with only his laptop. This allows him to save his entire nView Desktop Manager settings in a single file and he can quickly switch between nView states.

Only Windows users with administrator privileges can edit nView profiles. This is done for security purposes to allow IT managers to prevent technical support calls by users who change nView settings on accident. Please consult Windows documentation for information on enabling administrator access.

To load a new profile, highlight it from the profile list and click **Load Profile**. All nView settings will be loaded for this profile.

Create a new profile by clicking on **New Profile** and assigning it a name. Then, configure all the nView settings for this unique Profile. A user can browse to all the tabs found under the nView Desktop Manager and assign custom settings. When finished, go back to the **Profile** tab and click **Save Profile**.

A profile can be deleted by highlighting it from the profile list and clicking **Delete Profile**.

In addition, the Profiles Tab allows users to re-launch the nView Setup Wizard if they wish to quickly reconfigure their setup by clicking on the **Wizard** button.

To unload nView, click on the **Unload nView** button. To turn nView back on, click on the same button now labeled **Load nView**.

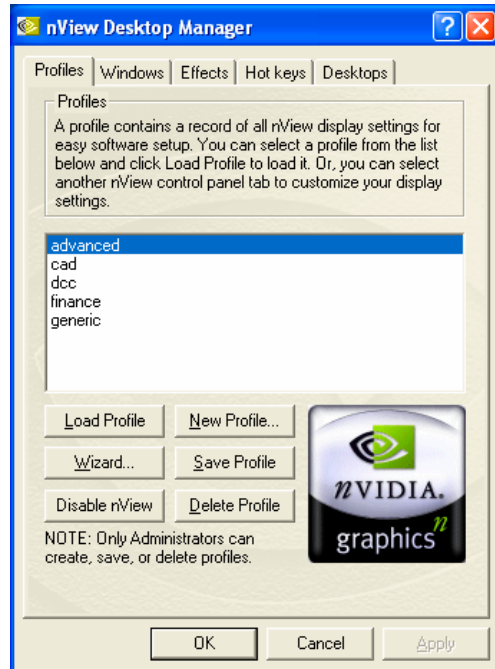


Figure 19. nView Desktop Manager Profiles Tab



Windows Tab

The nView **Windows Tab** allows users to fix problems that occur in multi-display modes. The most common problems nView fixes are window spanning across monitors, dialog box repositioning, application position memory, and full desktop application maximizing.

The Windows Control section allows users to configure the placement of application windows when using multiple displays. By default, nView does not allow any windows to span between multiple displays. To enable window spanning, click the checkbox **Enable window spanning across monitors**. This will only enable the master window for that application to span across both displays. The checkbox for **Enable child window spanning across monitors** enables child windows to span across monitors. nView also lets users application windows to the maximize to the full desktop (spanning across all monitors) with a button on the title bar. Click **Show full-desktop maximize button on title bar** to enable this feature.

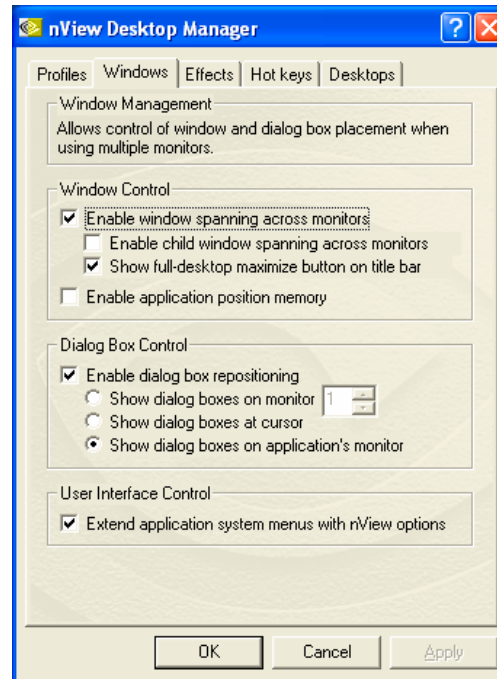


Figure 20. nView Desktop Manager

Users can check **Enable application position memory** to allow nView to remember where each application is placed on screen. This saves valuable time by not forcing users to resize and change placement of applications on screen after they have optimized their layout for their multi-display setup.

In addition to windows control, nView's Dialog Box Control section allows users to reposition dialog boxes for their unique multi-display setup. First, enable this option by clicking the checkbox **Enable dialog box repositioning**. Then, a user needs to select where the dialog will be displayed: on a specific monitor, at the mouse cursor, or on the application's monitor.

nView's User Interface Control option enables advanced system menu extensions that allow quick access to all nView features. Click the checkbox **Extend application system menus with nView options**. Once this option is enabled, right mouse click on any application title bar and select **nView Extensions** (see Figure 20) to quickly configure individual application nView settings.

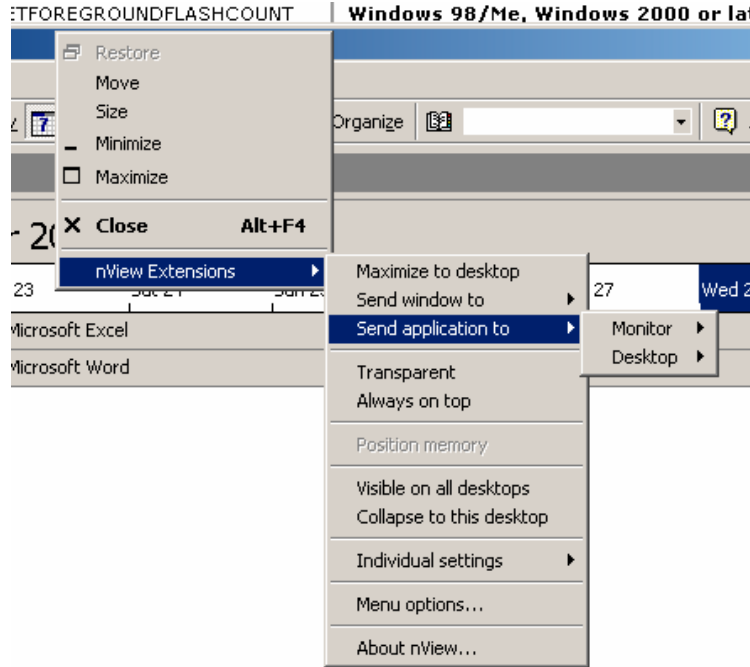


Figure 21. nView System Menu Extensions

Effects Tab

nView offers advanced Windows effects such as transparency effects and accelerating maximizing windows in order to enable quicker access to application windows on cluttered desktops. Users can quickly grab and window and see what is hidden behind it in order to find the critical window they are searching for.

Click the checkbox next to **Make windows maximize faster** to enable faster minimize/maximize option for every window.

To enable transparency, click the checkbox next to **Make windows transparent when dragged**. Users can then control the **transparency level** for each window on a scale of 0 to 80 percent.



The advanced zoom capabilities of nView allow users to enlarge portions of the screen quickly and with more flexibility than other multi-display software. Users need to configure their **zoom window style – magnifying glass or center on cursor** – and then configure hot keys to launch the window or simply click the button **Launch Zoom Window**.

- **magnifying glass** is a window that users can drag over an area to see a zoomed region.
- **centered on cursor** launches a separate window that users can put anywhere that zooms anything at the mouse cursor.

Once the zoom window has launched, users can control the level of zoom using the mouse keys plus shift and/or control by enabling the mouse

The zoom window also has controls for **Zoom Level, Zoom Refresh, and Zoom Style**.

Zoom Refresh is the only new option available for uses from the zoom window.

Users can select **5, 10, 15, 20, 25, or 30** frames/second for the zoom refresh. The higher the number of frames/second, the more memory bandwidth needed to process the zoomed portion of the screen.

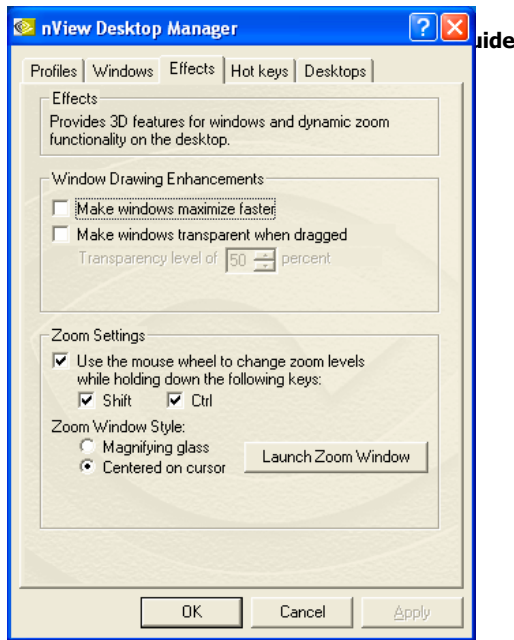


Figure 22. **nView Desktop Manager Effects Tab**

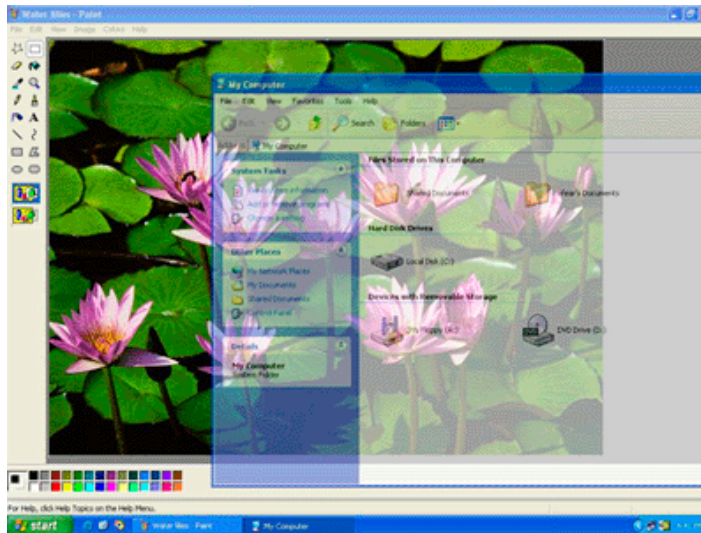


Figure 23. **Example of nView Transparency Effects**



Hot keys Tab

All nView features can be quickly controlled via hot keys. nView contains an easy to use configuration utility that lets users bind every possible nView action to a keyboard hot key.

To bind a new key, highlight the nView function from the **Select an Action** list. Next, press a key combination in the dialog box for that hot key. Finally, click the **Add** button.

Users can also **Remove** a hot key by highlighting it from the **Active Hot keys** section, or they can simply **Remove All**.

Whether it is managing windows, changing desktops, or utilizing the zoom window, nView's hot keys allow users to maximize productivity by controlling common actions with single key strokes.

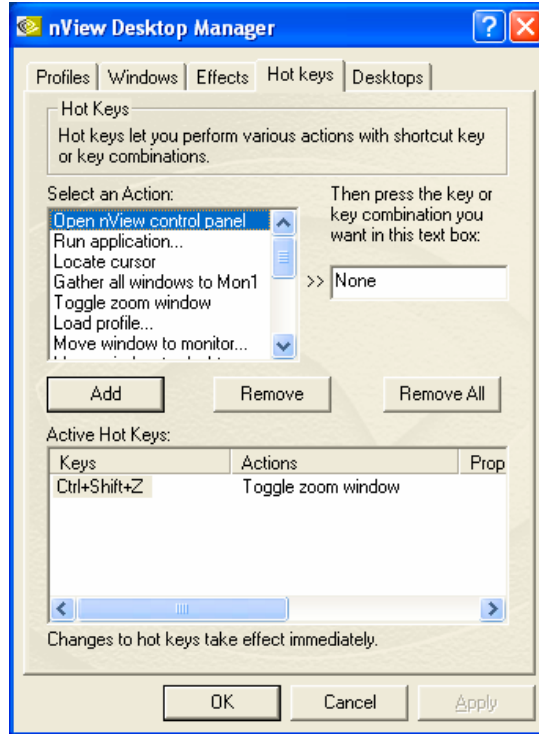


Figure 24. nView Desktop Manager Hot keys Tab



Desktops Tab

nView's robust Desktop Manager is the most advanced multi-desktop software available, plugging directly into Windows Explorer, allowing users to visualize and customize each individual desktop through a familiar interface. nView supports up to 32 individual desktops that are integrated with the window and application management functionality of nView. Each desktop is fully customizable to allow users to assign desktop names, customize desktop backgrounds, and even assign application-availability on each desktop.

To add a new desktop, select **Add** and assign a name to that desktop. Notice then the options for **Activate**, **Rename**, **Remove**, and **Wallpaper** are now active and users are allowed to configure these settings:

- **Add** – allows users to add a new desktop
- **Activate** – will change the active desktop to the highlighted desktop
- **Rename** – allows users to change the name of the highlighted desktop
- **Remove** – deletes the highlighted desktop
- **Wallpaper** – launches the **Display Properties>Wallpaper** tab to allow users to select a unique wallpaper for the highlighted desktop

In the **Desktop Management User Interface** section, users can turn off the QuickTweak taskbar icon by selecting **Show taskbar status icon**.

The Desktops Tab allows users to change desktops using the Activate button. However, there are quicker ways to switch between desktops. The following is a list of ways to switch between desktops:

- From the **Desktop Manager>Desktops** control panel
- Binding a **Hot Key** to switch desktops
- Right mouse clicking on the **QuickTweak** icon and selecting **Desktop Manager>nView Desktops>[Desktop name]**
- Right mouse clicking on the desktop and selecting **nView Desktops>[Desktop name]**

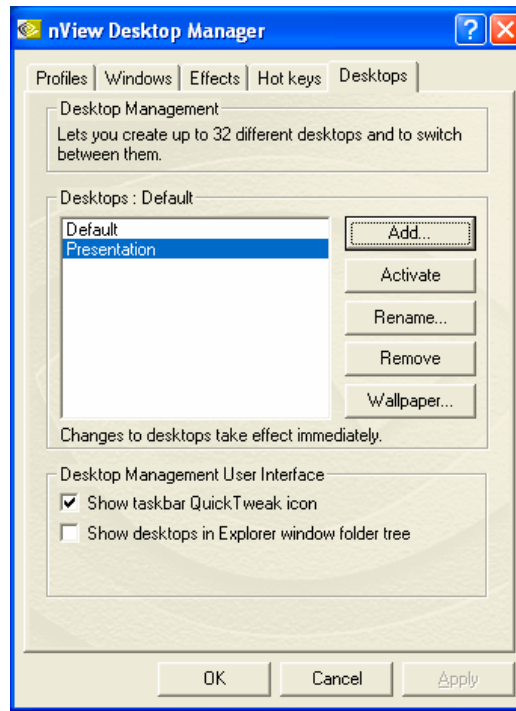


Figure 25. **nView Desktop Manager Desktops Tab**



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Another powerful feature users can enable from the Desktops Tab is to **Show desktops in Explorer window folder tree**. nView requires a logoff (not a reboot) to enable this feature. Once logged back on, there will be a new icon on the desktop, labeled **Desktop Explorer**. Double right mouse click to open the nView enhanced Windows Explorer. It is recommended that the user click the **Folder** button to manage the desktops more efficiently.

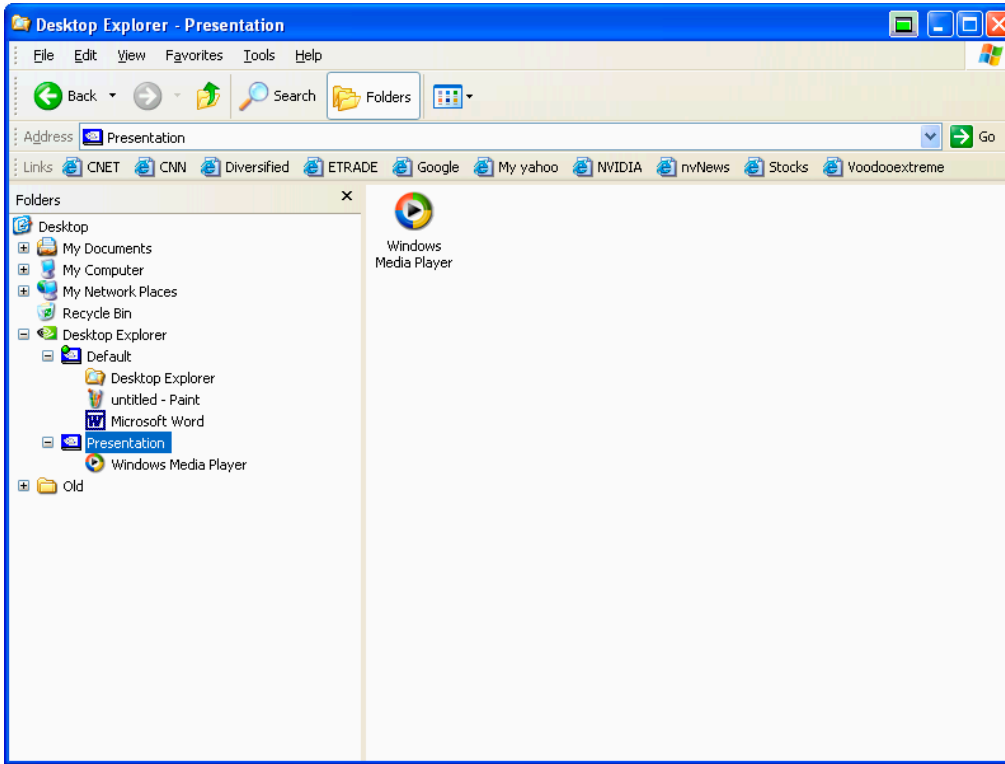


Figure 26. Internet Explorer Application Extensions

In the main window, all of the current nView Desktops are shown. Right mouse clicking on each desktop will load the **Desktops Properties** for that desktop, allowing users to edit that desktop's settings.

In the Folders view users can expand a desktop to see all applications open on that current desktop through standard Windows Explorer controls. Left mouse clicking on a desktop will change the main view to list all applications currently available on that desktop. Users can also control each application's individual settings by right mouse clicking on each application. These settings include:

- **Send to** – allows users to send an application to an existing or new desktop



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- **Add to** – allows users to send a new instance of that application to an existing or new desktop
- **Visible on all desktops** – allows users to make that application visible on all desktops. This feature is particularly useful with applications – like email software – that users want to always see.

Internet Explorer Application Specific Extensions

nView enables advanced Web browsing with Internet Explorer® (IE) application extensions. nView keeps an existing “master” window open on one display, while users double right-mouse click on hyperlinks to open client Internet Explorer browser windows on a second display.

The IE setting is also added to the system menu extensions, allowing users to choose which monitor the child IE window should launch. To access this feature, right click on the system menu and select **nView Extensions>Open link on monitor>[Select monitor]**.

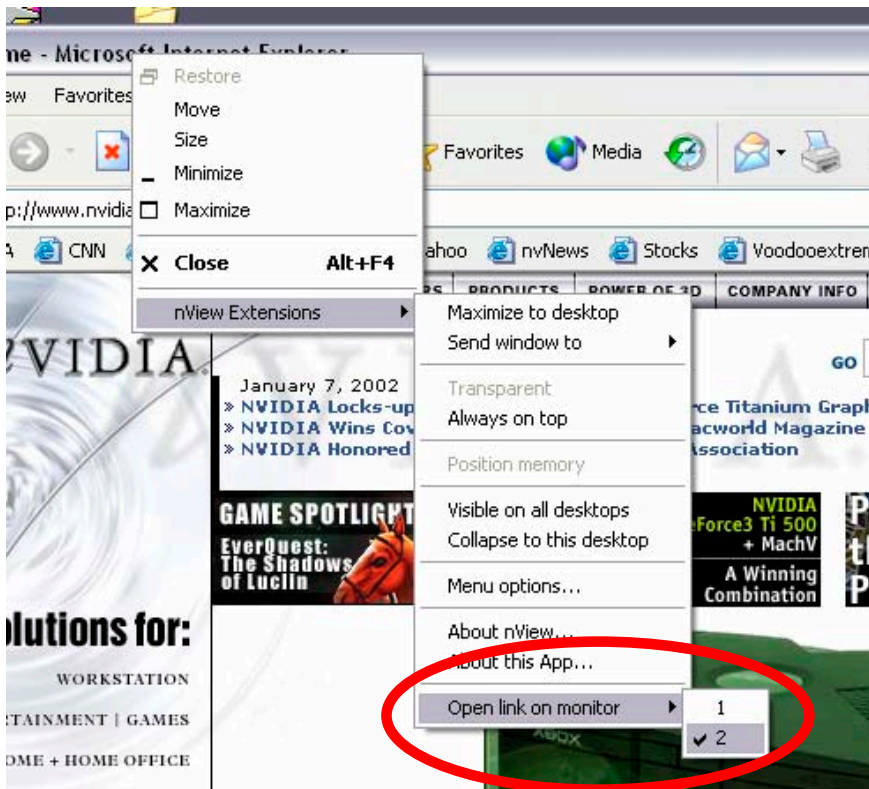


Figure 27. Internet Explorer Application Extensions



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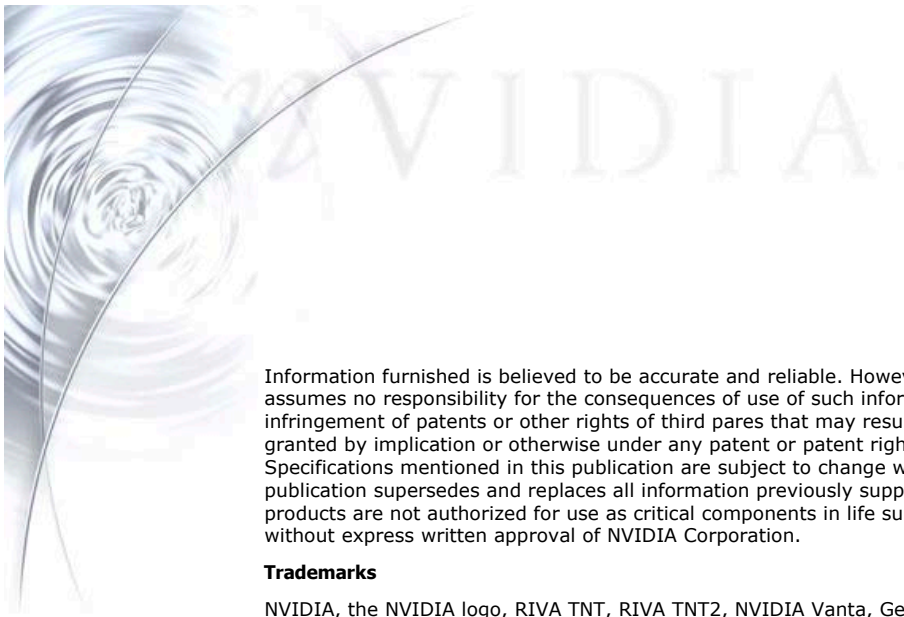
This feature is extremely useful when a search engine is used to look for a particular Web page. After entering the search parameters, end users can open the hyperlinks on the second display, while maintaining the original “master” window on the first display.

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