



NVAPI SDK – Public for Driver Release 495

Release Notes

Document History

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Version	Date	Authors	Description of Change
01	10/21/2021	CC	Initial release

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NVAPI Release Notes

Introduction

NVAPI is NVIDIA's core software development kit that allows direct access to NVIDIA GPUs and drivers on all windows platforms. NVAPI provides support for categories of operations that range beyond the scope of those found in familiar graphics APIs such as DirectX and OpenGL.

The following files are provided by NVIDIA:

- ▶ nvapi.h
- ▶ nvapi_lite_common.h
- ▶ nvapi_lite_d3dext.h
- ▶ nvapi_lite_salend.h
- ▶ nvapi_lite_salstart.h
- ▶ nvapi_lite_sli.h
- ▶ nvapi_lite_stereo.h
- ▶ nvapi_lite_surround.h
- ▶ NvApiDriverSettings.c
- ▶ NvApiDriverSettings.h
- ▶ nvHLSLExtns.h
- ▶ nvHLSLExtnsInternal.h
- ▶ nvShaderExtnEnums.h
- ▶ \x86\nvapi.lib
- ▶ \amd64\nvapi64.lib
- ▶ \doc\NVAPI_Reference_Developer.chm
- ▶ \doc\NVAPI SDKs Samples and Tools License Agreement (Public).pdf

These release notes describe the changes made in the NVAPI NDA SDK for the Release 495 driver.

Changes in NVAPI for Driver Release 495

New/Updated Functions

- ▶ Added `NvAPI_GPU_GetArchInfo`
- ▶ Added `NvAPI_DISP_GetNvManagedDedicatedDisplays`
- ▶ Added `NvAPI_DISP_AcquireDedicatedDisplay`
- ▶ Added `NvAPI_DISP_ReleaseDedicatedDisplay`

TCC Support added to the following functions:

- ▶ N/A

New/Updated Structures

- ▶ Added `NV_LICENSE_EXPIRY_DETAILS`
- ▶ Added `NV_LICENSE_FEATURE_DETAILS_V4`
- ▶ Added `NV_LICENSABLE_FEATURES_V4`
- ▶ Added `NV_MANAGED_DEDICATED_DISPLAY_INFO_V1`
- ▶ Added `NV_MONITOR_CAPS_GENERIC`
- ▶ Added caps to `NV_MONITOR_CAPABILITIES_V1`

New Enums

- ▶ N/A

New Unions

- ▶ None

New Defines

- ▶ None

New Errors

- ▶ None

Deprecated NVAPI Functions

The following functions are deprecated:

Deprecated	Replaced By
N/A	N/A

The following enum values are deprecated:

Deprecated	Replaced By
N/A	N/A

NVAPIDriverSettings Additions/Removals

- Added PS_SHADERDISKCACHE_MAX_SIZE setting

HLSL Extension Additions/Changes

- None

NVAPI Security Information

User administrator privilege is required to access certain driver features, as per NVIDIA's overall security vision. This helps mitigate the impact of malware.

Each API that requires the administrator access, will return NVAPI_INVALID_USER_PRIVILEGE error, when run with standard user privilege. The application will require Administrator privileges to access this API, which can be elevated to a higher permission level by selecting "Run as Administrator" in Admin approval mode.

About the Sample Code

Sample code is provided with the SDK package that demonstrates the following features:

- ▶ Custom Timing
- ▶ Display Color Control
- ▶ Display Configuration
- ▶ I2C
- ▶ QSYNC Event Registration
- ▶ Sync_Configuration

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