



NVAPI Open Source SDK for Driver Release 550

Release Notes

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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
- > \docs\NVAPI_Reference_Developer.chm
- > \docs\NVAPI_SDKs_Samples_and_Tools_License_Agreement(Public).pdf

These release notes describe the changes made in the NVAPI SDK for this release.

Changes in NVAPI for Driver Release 550

New Functions

- > Added `NvAPI_GPU_GetGspFeatures`
- > Added `NvAPI_DISP_GetNvManagedDedicatedDisplayMetadata`
- > Added `NvAPI_DISP_SetNvManagedDedicatedDisplayMetadata`
- > Added `NvAPI_D3D12_SetCreateCommandQueueLowLatencyHint`

New/Updated Structures

- > Added `NV_GPU_GSP_INFO_V1`
- > Added `NV_MANAGED_DEDICATED_DISPLAY_METADATA_V1`

New/Updated Enums

- > Added `NVAPI_INVALID_OUTPUT_WIRE_FORMAT` to `NvAPI_Status`

New/Updated Unions

- > None

New Macros

- > Added `NVAPI_GPU_MAX_BUILD_VERSION_LENGTH`

New Errors

- > None

TCC Support

- > None

Deprecated NVAPI Functions

- > None

NVAPIDriverSettings Additions/Removals

- > Removed enum value PS_SHADERDISKCACHE_FLAGS_BACKEND_SQLITE from EValues_PS_SHADERDISKCACHE_FLAGS

HLSL Extension Additions/Removals

- > None

NVAPI Security Information

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

Each API requiring administrator access, will return a 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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