



# NVAPI SDK - PUBLIC FOR DRIVER RELEASE 396

RN-06118-396-v01 | April 2018

## Release Notes



## DOCUMENT CHANGE HISTORY

RN-06118-396-v01

Version	Date	Authors	Description of Change
01	04/05/2018	AP/CC	Initial release

# 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. These release notes describe the changes made in the NVAPI public SDK for the Release 396 driver. The following are the provided files:

- ▶ 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
- ▶ nvapi.lib
- ▶ nvapi64.lib
- ▶ NVAPI\_Reference\_Developer.chm
- ▶ NVAPI SDKs Samples and Tools License Agreement (Public).pdf

## CHANGES IN NVAPI FOR DRIVER RELEASE 396

### Functions

- ▶ `NvAPI_D3D11_SetNvShaderExtnSlotLocalThread`
- ▶ `NvAPI_D3D_InitializeSMPAssist`
- ▶ `NvAPI_D3D_QuerySMPAssistSupport`

**TCC support added to the following functions:**

- ▶ N/A

### Structures

- ▶ `NV_GSYNC_CAPABILITIES_V2`
- ▶ `NV_MRS_CUSTOM_CONFIG_V1`
- ▶ `NV_MRS_INSTANCED_STEREO_CONFIG_V1`
- ▶ `NV_LMS_CUSTOM_CONFIG_V1`
- ▶ `NV_LMS_INSTANCED_STEREO_CONFIG_V1`
- ▶ `NV_CUSTOM_RECTS_V1`
- ▶ `NV_SMP_ASSIST_ENABLE_PARAMS_V1`
- ▶ `NV_SMP_ASSIST_DISABLE_PARAMS_V1`
- ▶ `NV_SMP_ASSIST_FASTGSCBDATA_V1`
- ▶ `NV_SMP_ASSIST_FASTGSCBDATA_MRS_INSTANCED_STEREO_V1`
- ▶ `NV_SMP_ASSIST_REMAPCBDATA_V1`
- ▶ `NV_SMP_ASSIST_GET_CONSTANTS_V3`
- ▶ `NV_SMP_ASSIST_SETUP_PARAMS_V1`
- ▶ `NV_SMP_ASSIST_UPDATE_INSTANCEDSTEREO_DATA_PARAMS_V1`
- ▶ `NV_SMP_ASSIST_INITIALIZE_PARAMS_V1`
- ▶ `NV_QUERY_SMP_ASSIST_SUPPORT_PARAMS_V1`

### Enums

- ▶ `NVAPI_GPU_CONNECTOR_USB_C` added to `NV_GPU_CONNECTOR_TYPE`
- ▶ `NV_COMPUTE_SHADER_DERIVATIVES`
- ▶ `NVAPI_D3D_CONTEXT_NOT_FOUND` added to `NvAPI_Status`
- ▶ `NVAPI_D3D_SRH_SLI_RESPECT_DRIVER_INTERFRAME_CONTENT_SYNC` added to `NVAPI_D3D_SETRESOURCEHINT_SLI`
- ▶ `NV_PACKED_EYE_INDEX_SEMANTIC` added to `NV_CUSTOM_SEMANTIC_TYPE`
- ▶ `NV_SMP_ASSIST_TYPE`
- ▶ `NV_SMP_ASSIST_LEVEL`

- ▶ NV\_MRS\_CONFIG
- ▶ NV\_LMS\_CONFIG
- ▶ NV\_SMP\_ASSIST\_EYE\_INDEX
- ▶ NVAPI\_STEREO\_VERSION\_MISMATCH added to NvAPI\_Status

## Deprecated NVAPI Functions

The following functions will be deprecated in coming releases:

Deprecated	Replaced By
None	N/A

## NVAPIDriverSettings Additions/Removals

- ▶ OGL\_SLI\_MULTICAST\_ALLOW\_MOSAIC added to EValues\_OGL\_SLI\_MULTICAST
- ▶ PS\_FRAMERATE\_LIMITER\_FRL2 removed from EValues\_PS\_FRAMERATE\_LIMITER
- ▶ SHIM\_RENDERING\_OPTIONS\_EXPLICIT\_ADAPTER\_OPTED\_BY\_APP added to EValues\_SHIM\_RENDERING\_OPTIONS
- ▶ WKS\_API\_STEREO\_MODE\_DP\_INBAND added to EValues\_WKS\_API\_STEREO\_MODE

## HLSL Extension Additions

- ▶ None

## 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
- ▶ Quadro Sync\_Configuration

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