



NVWMI - VERSION 2.20

RN-06819-220-v01 | February 2015

Release Notes



DOCUMENT CHANGE HISTORY

RN-06819-220-v01

Version	Date	Description of Change
01	2/25/2014	Initial release for version 2.20

NVWMI RELEASE NOTES

INTRODUCTION

NVIDIA Enterprise Management Toolkit (NVWMI) is a WMI based interface to the NVIDIA graphics driver available on NVIDIA NVS and NVIDIA Quadro products. It allows end-users and IT Managers to configure and monitor various graphics and display features as well as NVIDIA software components through WMI. NVWMI hooks into any WMI-compatible applications.

These release notes describe the changes made in the NvWMI SDK.

- ▶ [Provided Files](#)
- ▶ [Supported Operating Systems](#)
- ▶ [Driver Compatibility](#)
- ▶ [Changes and New Features In NvWMI 2.20](#)

PROVIDED FILES

The following files are provided by NVIDIA:

- ▶ nvWmi.mof
- ▶ nvWmi.chm
- ▶ NVWMI_SDK_License_Agreement.pdf
- ▶ Samples folder with the following files:
 - **Cpp**
 - DisplayProfile.cpp
 - Gpu.cpp
 - GpuPerfCounters.cpp
 - System.cpp
 - **CSharp**
 - DisplayProfile.cs
 - Gpu.cs
 - GpuPerfCounters.cs
 - System.cs
 - **PowerShell**

3DProfile.ps1	ManageOverlaps.ps1
3DSetting.ps1	ManageProfiles.ps1
Board.ps1	nViewProfiles.ps1
Display.ps1	setMode.ps1
Gpu.ps1	Sync.ps1
Manage3DProfiles.ps1	System.ps1
ManageGrids.ps1	

SUPPORTED OPERATING SYSTEMS

NvWMI supports the following Microsoft® operating systems:

- ▶ Both 32-bit and 64-bit versions of Windows 7, Windows 8, and Windows 8.1.

DRIVER COMPATIBILITY

NVWMI versions have inter-dependencies with the NVIDIA Display Driver Package versions.

It is strongly recommended that customers follow the table below to choose a supported combination of NVWMI & NVIDIA Display Driver to guarantee functionality of all the NVWMI features of a specific version.

NVWMI Version	Driver Release	Minimum Recommend Driver Version	Minimum nView Desktop Manager Version
2.20	Release 346	340.52	141.24
2.19	Release 343	340.52	141.24
2.18	Release 340	340.52	141.24
2.17	Release 337	337.50	141.24
2.16	Release 331	331.65	140.84
2.15	Release 331	331.65	140.84
2.14	Release 325	320.86	140.75
2.12	Release 319	320.86	140.75
2.10	Release 313	314.07	
2.09	Release 310	310.90	
2.07	Release 304	305.93	
2.06	Release 304	305.93	
2.04	Release 295	295.73	
2.02	Release 285	285.58	
2.00	Release 275	275.36	

If NVWMI gets installed on an earlier NVIDIA Driver Package than the minimal recommended driver version, there is a possibility that some of the NVWMI features/commands may not function and return a message indicating that the function is unsupported.

CHANGES AND NEW FEATURES IN NVWMI 2.20

New features added in NvWMI since version 2.18:

Highlights

- ▶ Added ability to change logging verbosity and other log settings
- ▶ Added logTypes and logFilter properties to System class
- ▶ Improved fake display EDID functionality
- ▶ Added ability to fake EDID on a specific port
- ▶ Added ability to query the display's current timing
- ▶ Added more user friendly IDs for all the classes
- ▶ Added display connector type info
- ▶ Added ability to report GPU architecture ID and name
- ▶ Deprecated "handle" property in several classes

Details

Methods

- ▶ **Display::getCurrentTiming** - This method returns a string with current display timing parameters.
- ▶ **Gpu::fakeEDIDOnPort** - This method fakes the EDID on a specified GPU port.
- ▶ **System::setLogState** - This method changes logging verbosity and other logging settings.

Properties

Implemented the following new Properties:

- ▶ **Display::displayConnectorType**
- ▶ **Gpu::nvapiId**
- ▶ **Gpu::archId** - This property contains a numerical ID of the GPU architecture.
- ▶ **Gpu::archName** - This property contains a string with the GPU architecture name (e.g. "Kepler", "Maxwell" etc.)
- ▶ **System::logTypes** - This property is a bitmap - see **System::setLogState** for details.
- ▶ **System::logFilter** - This property is a bitmask.

Improved the following Properties by using more user-friendly names:

- ▶ `SyncTopology::id`
- ▶ `SyncDelay::id`
- ▶ `Sync::id`
- ▶ `Gpu::id`
- ▶ `Board::id`
- ▶ `DisplayGrid::id`

Deprecated the following Property:

- ▶ `handle` property in several classes. While `handle` is still available, `id` (WMI-only object identifier) is recommended for scripting and interactive commands and `nvapiId` for interfacing with NVAPI.

Notice

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS, AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY, OR OTHERWISE WITH RESPECT TO THE MATERIALS, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF NONINFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE.

Information furnished is believed to be accurate and reliable. However, NVIDIA Corporation assumes no responsibility for the consequences of use of such information or for any infringement of patents or other rights of third parties that may result from its use. No license is granted by implication of otherwise under any patent rights of NVIDIA Corporation. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all other information previously supplied. NVIDIA Corporation products are not authorized as critical components in life support devices or systems without express written approval of NVIDIA Corporation.

HDMI

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

ROVI Compliance Statement

NVIDIA Products that support Rovi Corporation's Revision 7.1.L1 Anti-Copy Process (ACP) encoding technology can only be sold or distributed to buyers with a valid and existing authorization from ROVI to purchase and incorporate the device into buyer's products.

This device is protected by U.S. patent numbers 6,516,132; 5,583,936; 6,836,549; 7,050,698; and 7,492,896 and other intellectual property rights. The use of ROVI Corporation's copy protection technology in the device must be authorized by ROVI Corporation and is intended for home and other limited pay-per-view uses only, unless otherwise authorized in writing by ROVI Corporation. Reverse engineering or disassembly is prohibited.

OpenCL

OpenCL is a trademark of Apple Inc. used under license to the Khronos Group Inc.

Trademarks

NVIDIA, the NVIDIA logo, and <add all the other product names listed in this document> are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. Other company and product names may be trademarks of the respective companies with which they are associated.

Copyright

© 2015 NVIDIA Corporation. All rights reserved.