

# Autodesk Alias 2016 Hardware Qualification

Updated June 1, 2015

## Windows

[Mac OS X](#)

### Build Information

Products	Platform	Version	Software Date	Build Number
<ul style="list-style-type: none"><li>Autodesk AutoStudio</li><li>Autodesk Alias Surface</li><li>Autodesk Alias Design</li></ul>	64-bit	2016	March 6, 2015	201503061129-441529

### Supported Operating Systems and CPU Platforms

Operating System	CPU Platform
Windows 7 SP1 (Enterprise, Ultimate or Professional) 64-bit	Intel Xeon Intel Core AMD Opteron
Windows 8.0 or 8.1 (Enterprise or Professional) 64-bit	Intel Xeon Intel Core AMD Opteron

### Important Notes

- Alias AutoStudio, Automotive, Surface and Design fully support 64-bit environments. Running the 64-bit native version requires Windows 8 or 8.1 64-bit or Windows 7 64-bit operating system.
- Certain 3rd party software may alter the processor affinity settings, affecting multi-cpu systems running Alias.exe and its spawned processes. To check the affinity setting, right-click on the Alias.exe process inside the Windows Task Manager and select Set Affinity... ensure that all available CPUs are enabled.
- Alias or its component programs may not launch successfully depending on your Windows security settings. If this occurs, you may either unblock the program via the Windows Firewall Security Alert dialog, or add it as an Exception in the Exceptions Tab in the Windows Firewall dialog box. For more information, please see the [Microsoft Update](#). Similar configurations are necessary for any third party firewall software,

### Please Read

- It may be possible to successfully use Alias for Windows with a non-qualified configuration, however, Support and Maintenance programs will be subject to the Autodesk Support services guidelines.
- The configurations shown are subject to change, and additional qualified configurations may be added after qualification testing has been carried out.
- The graphics drivers specified in this table are the drivers that were used for the qualification process. While it may be possible to use Alias for Windows successfully on earlier or later drivers, Autodesk cannot guarantee their performance.
- Autodesk will continue to explore new candidates for Alias for Windows qualification and will monitor the current configurations.

## Qualified Hardware Configurations

Systems consisting of any combination of the workstations and graphics cards listed below are supported for use with Alias. Please review all documented limitations for a given configuration, in some cases not all functionality is supported. Please consult workstation vendor for available graphics configurations.

Company	Models	Web
Hewlett Packard	<b>HP Workstations:</b> HP Z840 Workstation HP Z640 Workstation HP Z440 Workstation  <b>HP Laptops: Win8.1</b> HP 17inch ZBook G2 AMD FirePro M6100 FireGL V Driver: 14.301.1003.1006 HP 15inch ZBook G2 AMD FirePro M5100 FireGL V Driver: 14.301.1003.1006 HP 17inch ZBook G2 Quadro K5100M Driver: 333.56 HP 17inch ZBook G2 Quadro K2200M Driver: 341.22	<a href="http://www.hp.com/workstations">www.hp.com/workstations</a>
Lenovo	<b>Lenovo ThinkStations:</b> Lenovo ThinkStation P900 Lenovo ThinkStation P700 Lenovo ThinkStation P500  <b>Lenovo Laptops: Win7 and Win 8.1</b> Lenovo W550s ThinkPad NVIDIA Quadro K620M driver: 341.01	<a href="http://www.lenovo.com/thinkstation">www.lenovo.com/ thinkstation</a>

## Graphics Cards and Driver Versions

### Color coding legend

✓	Graphics card and driver combination meet all requirements for stable and acceptable performance in all functional areas of the software.
o	Graphics card and driver combination meet some but not all requirements. Limitations exist.
✘	Graphics card vendor has not provided a suitable driver for qualification. It is expected that a suitable driver will be released for use with Alias in the future.
Untested	Configuration not tested by Autodesk. Untested cards are likely to work without issue with Alias.
Pending	Certification of this card is pending or underway

NOTE: Autodesk expects cards qualified on previous versions of Alias to likely work without issues. Autodesk will continue to support those older cards which appear on previously published qualification pages should an issue be encountered.

Vendor	Model	Graphics Card	Windows 7 64 Bit	Windows 8.1 64 Bit		
<a href="#">AMD</a>		FirePro W5100 FirePro W4100	133.3523.1019	133.3523.1019		
		FirePro W2100 FirePro W5000				
		FirePro W8000 FirePro W7100			Untested	14.301.1010
	<a href="#">NVIDIA</a>				Quadro K5200 Quadro K4200	340.52
		Quadro K2200 Quadro K620				
		Quadro K2100M				
		Quadro M6000	Untested	348.07		

## Advanced Hardware Rendering Features in Alias

Using the advanced capabilities of modern graphics hardware it is possible to produce higher levels of realism when using the Hardware Shade functionality within Alias. These features enable more accurate reflection mapping and other effects in hardware. In order to achieve these results in hardware your graphics card and driver combination must fully support the OpenGL Shading Language (GLSL) which is part of the OpenGL 2.0 specification. The following table lists features that require GLSL support. In most cases Alias detects incompatible hardware and will not expose these advanced features.

Per-Pixel Shading Mode must be selected inside the Hardware Shade options in order to see the advanced shading capabilities.

Alias AutoStudio/Automotive/Surface/Design 2016 Hardware Shade Functionality	OpenGL 2.0/GLSL Driver Support Required
Software Ant-Alias	No
Self Shadows	No
Shader Glow	No
Displacement Mapping	No
Planar/Camera Projection Mapping (Color, Transparency)	No
Depth of Field	No
Ambient Occlusion Calculation and Display	No
Cube Map Reflections	No
Image Based Lighting	Yes
Blinn Shading	Yes
Bump/Specular Mapping	Yes
All Projection Types (Color, Bump, Transparency, Specularity)	Yes
Linear/Spot Lights	Yes
Advanced Virtual Ground Plane Reflection Control	Yes
Advanced Virtual Ground Plane Shadow Control	Yes
Shading Maps	Yes
Environment Reflections	Yes

# Wire File Compatibility Chart

## Alias AutoStudio/Automotive/Surface/Design

Supported File Formats			
Format	Read	Write	Notes
Wire	✓	✓	As of version StudioTools 10.0, wire files are backward and forward compatible with newer versions of StudioTools (now Alias). StudioTools 10.0 and later will read wire files written by prior versions, however, prior versions cannot read v10.0 or later wire files. We have provided the from100to97.exe translator that will convert v10.0 and later wire files to v9.7.x wire files
Autodesk Inventor	✓	✗	
FBX	✓	✓	
IGES	✓	✓	
STEP	✓	✓	
DXF/DWG	✓	✓	
DWF		✓	
DES	✓	✓	
CATIA-CAI	✓	✓	
CATIA v4	✓	✓	
CATIA v5	✓	✓	V5 R10 to R23 read/write supported
Siemens NX3–NX8	✓	✓	
JT	✓	✓	
PTC Granite	✓	✓	V1 toV8 read/write supported
OBJ	✓	✓	
VDAFS	✓	✓	
VDAIS	✓	✓	
JAMAIS	✓	✓	
C4	✓	✓	
Illustrator	✓	✓	pre v9.0 .ai files can be imported into Alias. When exporting files from Adobe Illustrator be sure to export v8.0 files. Alias Shape curves can only be exported as Illustrator bezier curves through the Print interface. It is possible to export to PostScript format which will flatten all geometry as linear curves
EPS	✓	✗	
ProE Render	✓	✗	
STL	✓	✓	Binary and ASCII formats supported
EDF	✓	✓	New support starting in Alias Automotive 2014 and Alias Surface 2014
SOLIDWORKS	✓	✗	.sldprt read supported if SolidWorks is installed and running

## Maya

- Maya's studioImport.mll plug-in will read Alias .wire files
- Maya's MayaToAlias.mll plug-in will write Alias .wire files

## Stereo3D Viewing Capable Graphics Cards

- Alias has been tested with CrystalEyes glasses from [StereoGraphics Corporation](#).
- Running at resolutions higher than 1600x1200 may result in a reduction in overall draw speed and is done at the users own risk.

## Anti-Aliasing

Anti-Aliased display in Alias can be achieved using one of the following methods:

Anti-Aliasing Controls and Settings		
<b>Full Scene Anti-Aliasing (FSAA), Driver Controlled</b>	Graphics driver Anti-Aliasing control is set to override any application settings. The entire Alias window is anti-aliased. There is no distinction between an OpenGL viewport and rest of the application.	<b>Benefit:</b> Amount of oversampling only limited by card resources and graphics memory resulting in extremely smooth shading. Anti-aliased display is persistent <b>Drawback:</b> It is not possible to toggle anti-aliased display. Can cause noticeable degradation in interactive performance.
<b>Full Scene Anti-Aliasing (FSAA), Application Controlled</b>	Set Anti-Aliasing control to 'Application Controlled' in the Graphics Driver Control Panel, and in Alias, set 'Hardware Anti-Alias' to 4x or 8x in the Shaded Anti-Alias Options window (WindowDisplay>Anti-Alias>Shaded Anti-Alias [ ]). This allows for Alias to use 4x or 8x Full Scene Anti-Aliasing, respectively, from the graphics card. Only modeling windows receive the anti-Aliasing visual and can be toggled ON and OFF.	<b>Benefit:</b> Only modeling windows receive the Anti-Aliased display resulting in less visual artifacting. Can be toggled ON and OFF. Anti-aliased display is persistent <b>Drawback:</b> Can cause mild degradation in interactive performance.
<b>Camera based Anti-Aliasing</b>	Anti-Aliasing is controlled entirely from within the Window Display->Shaded Anti-Alias.... Software Anti-Alias options and is only applied when Hardware Shade or Diagnostic Shade is enabled. The results are additive to any existing FSAA if enabled in graphics driver.	<b>Benefit:</b> Not dependent on graphics card and can easily be controlled within Alias without restarting. Various quality settings can easily be specified for very high quality smoothing <b>Drawback:</b> Anti-Aliasing is only active during idle camera positions. It is disabled during camera moves and animation (playblasts do receive Anti-Aliasing). Expect delays when used in conjunction with other Hardware Shade effects.

## Tablet Support

Alias has been tested and confirmed to work with the Wacom Intuos series of tablets (see driver level below)

**Active Tablet Displays:** Alias has been tested and confirmed to work with the [Wacom Cintiq 18SX](#) and [Cintiq 21UX](#) Active tablets. A DVI compatible graphics card is required to use the Cintiq series of tablets.

**Note Regarding Dual Monitor Configurations:** Dual monitor configurations may cause incorrect cursor behavior when spanning multiple monitors. Autodesk is currently investigating this problem with Wacom. At this time there is no solution. Refer to [Dual Monitor Support](#) below for more information on running Alias with dual monitors.

### Tablet Driver Notes

Recommended Wacom Drivers:

[Wacom Driver: 6.1.0-6 \(RC\)](#)

[Wacom Driver: 6.1.2-5 or later](#)

<b>Limitation</b>	Microsoft Windows Flicks interfering with tablet input when running Windows 7
<b>Solution/ Workaround</b>	Disable Flicks or install earlier 6.1.0-6 Wacom driver which does not utilize Windows Flicks feature
<b>Limitation</b>	Intermittent problems with cursor offset after changing Wacom tablet properties
<b>Solution/ Workaround</b>	Solved by minimizing and restoring the Alias main window.
<b>Limitation</b>	5 button mouse cursor not in sync with paint stroke after initial driver installation with Intuos2
<b>Solution/ Workaround</b>	Reinstall tablet driver.

## Dual Monitor Support

If your graphics card supports dual monitor outputs please read the following if you are considering using Alias with multiple displays. There are two configurations which will affect Alias performance with dual display output. Not all graphics cards support both configurations.

- Previous limitations of Alias running on the secondary display have been improved as of version 2012. We no longer restrict the use of Alias on the primary monitor.

### Dual Mode One: Dualview

In this mode each monitor is running a separate display running at a resolution which is unique to each monitor. For example, you can have both monitors set to a resolution of 1280x1024, 1600x1200 etc.

### Display Mode Two: Horizontal Span

In this mode the graphics driver interprets the two displays as one virtual desktop, so if you run a single monitor at 1280x1024 then the display resolution in a spanned mode would be 2560x1024.

### Limitations

When using Studio with two displays, where one display is the Wacom Cintiq, you cannot run in a spanned mode. To configure your system to use the Wacom Cintiq in a dual monitor configuration follow these steps:

- Uninstall the Wacom display driver (if you were previously using a regular Wacom tablet)
- Connect the Wacom Cintiq to either the first or second graphics port
- Open the Display Properties, select the Wacom display and set it as the primary monitor.
- Install the Wacom display driver

- Open Settings>Control Panel>Wacom Tablet Properties and select Calibrate to align the tablet to the Cintiq display.

Note: When using a 'spanned' desktop without the Cintiq, Alias runs properly on both displays.



# Mac OSX

[Windows](#)

## Build Information

Products	Platform	Version	Software Date	Build Number
<ul style="list-style-type: none"><li>Autodesk AutoStudio</li><li>Autodesk Alias Automotive</li><li>Autodesk Alias Surface</li><li>Autodesk Alias Design</li></ul>	64-bit	2016	March 10, 2015	201503101422-441609

## Please Read

- It may be possible to successfully use Alias for Mac OS X with a non-qualified configuration, however, Support and Maintenance programs will be subject to the Autodesk Support services guidelines.
- The configurations shown are subject to change, and additional qualified configurations may be added after qualification testing has been carried out.
- All systems were tested with the latest available version of Mac OS X. We encourage customers to remain current with updates from Apple.
- Autodesk will continue to explore new candidates for Alias for Windows qualification and will monitor the current configurations.

## Qualified Hardware Configurations

### Color coding legend

✓	Graphics card and driver combination meet all requirements for stable and acceptable performance in all functional areas of the software.
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✘	Graphics card vendor has not provided a suitable driver for qualification. It is expected that a suitable driver will be released for use with Alias in the future.
Untested	Configuration not tested by Autodesk. Untested cards are likely to work without issue with Alias.
Pending	Certification of this card is pending or underway

Systems consisting of any combination of the workstations and graphics drivers listed below have been certified for use by Autodesk and are fully supported for use with Alias. Please review all documented limitations for a given configuration, in some cases not all functionality is supported.

System	Vendor	Graphics Card	Supported
MacBook Pro	<a href="#">AMD</a>	Radeon HD 6490M	✓
		Radeon HD 6750M	✓
		Radeon HD 6770M	✓
	<a href="#">NVIDIA</a>	GeForce 9400M	✓
		GeForce 9600M GT	✓
		GeForce GT 330M	✓
		GeForce GT 650M	✓
MacPro	<a href="#">AMD</a>	Radeon HD 2600	Untested
		Radeon HD 4870	Untested
		Radeon HD 5770	✓
		Radeon HD 5870	✓
		Radeon X1900 XT	Untested
	<a href="#">NVIDIA</a>	GeForce 7300 GT	Untested
		GeForce 8800 GT	Untested
		GeForce GT 120	Untested
		Quadro FX 4500	✓
		Quadro FX 4800	✓
		Quadro FX 5600	✓

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Per-Pixel Shading Mode must be selected inside the Hardware Shade options in order to see the advanced shading capabilities.

Alias 2013 Hardware Shade Functionality	OpenGL 2.0/GLSL Driver Support Required
Self Shadows	No
Shader Glow	No
Displacement Mapping	No
Planar/Camera Projection Mapping (Color, Transparency)	No
Depth of Field	No
Ambient Occlusion Calculation and Display	No
Cube Map Reflections	No
Image Based Lighting	Yes
Blinn Shading	Yes
Bump/Specular Mapping	Yes
All Projection Types (Color, Bump, Transparency, Specularity)	Yes
Linear/Spot Lights	Yes
Advanced Virtual Ground Plane Reflection Control	Yes
Advanced Virtual Ground Plane Shadow Control	Yes
Shading Maps	Yes
Environment Reflections	Yes

## Wire file Compatibility Chart

### Supported File Formats (not all formats available on Mac OS X)

Format	Read	Write	Notes
Wire	✓	✓	As of version 10.0 Alias (StudioTools) wirefiles are backward and forward compatible with newer versions of Alias. StudioTools 10.0 and later will read wirefiles written by prior versions, however, prior versions will not be able to read v10.0 or later wirefiles. We have provided the from100to97.exetranslator that will convert 10.0 and later wirefiles to v9.7.x wirefiles
Autodesk Inventor	✗	✗	
FBX	✓	✓	
IGES	✓	✓	
STEP	✓	✓	
DXF/DWG	✓	✓	
DES	✓	✓	
CATIA-CAI	✗	✗	
CATIA v4	✗	✗	
CATIA v5	✗	✗	
Siemens NX3–NX8	✗	✗	
PTC Granite	✗	✗	
OBJ	✓	✓	
VDAFS	✓	✓	
VDAIS	✓	✓	
JT	✗	✗	
JAMAIS	✓	✓	
C4	✓	✓	
Illustrator	✓	✗	
EPS	✓	✗	
ProE Render	✓	✗	
STL	✓	✓	Binary and ASCII formats supported.
EDF	✓	✓	New support starting in Automotive 2013

## Anti-Aliasing

Anti-Aliased display in Alias can be achieved using one of the following methods:

Anti-Aliasing Controls and Settings		
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<b>Full Scene Anti-Aliasing (FSAA), Application Controlled</b>	Hardware anti-aliasing is not supported in Alias on Mac OSX	
<b>Camera based Anti-Aliasing</b>	Anti-Aliasing is controlled entirely from within the Window Display->Shaded Anti-Alias.... Software Anti-Alias options and is only applied when Hardware Shade or Diagnostic Shade is enabled. The results are additive to any existing FSAA if enabled in graphics driver.	<b>Benefit:</b> Not dependent on graphics card and can easily be controlled within Alias without restarting. Various quality settings can easily be specified for very high quality smoothing <b>Drawback:</b> Anti-Aliasing is only active during idle camera positions. It is disabled during camera moves and animation (playblasts do receive Anti-Aliasing). Expect delays when used in conjunction with other Hardware Shade effects.

## Tablet Support

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### Tablet Drive Notes/Limitations

[Wacom Driver: 6.1.2-5](#)

<b>Limitation</b>	Intermittent problems with cursor offset after changing Wacom tablet properties
<b>Solution/Workaround</b>	Solved by minimizing and restoring the Alias main window.
<b>Limitation</b>	5 button mouse cursor not in sync with paint stroke after initial driver installation with Intuos2
<b>Solution/Workaround</b>	Reinstall tablet driver.