# THE IMPORTANCE OF SOFTWARE CERTIFICATIONS

Graphics Certifications Explained.

# **Built on Trust**

Professional workstation users have long-trusted their demanding workflows to application-certified workstation and hardware components. Software certification is a collaborative, ongoing process of driver development and rigorous testing between AMD and Independent Software Vendors (ISVs). It is designed to ensure that professional users can extract the best possible performance, stability and reliability for those missioncritical deadlines.

## The Core Process

AMD has a dedicated team of engineers that works closely with software vendors to help ensure that the new software tools they are developing work seamlessly with our hardware. AMD can also tailor its graphics drivers to support new versions of professional applications. The goal of this tight collaboration is to have graphics hardware and drivers that are fully complaint with new application versions upon release, without the need for hotfixes from either the ISV or AMD.

## **Our Rigorous Technique**

When both ISV application and driver are ready, testing can begin. AMD uses a comprehensive 'six-wave' test workflow designed to balance exceptional performance, stability, and reliability.

AMD commissions artists to create scenes typical of those used in real- world production pipelines for its team to use in manual testing, with the intention of matching today's real-world workflows. Finally, the graphics card and driver are passed to the software developer, who carries out its own exhaustive tests before the GPU can be certified for use with its applications.

For further peace of mind, AMD has also commissioned independent audits of driver quality, testing its drivers and hardware against those of other vendors, to help ensure the stability you demand.

### **Built on Experience**

With over 20 years of certification experience, the AMD labs aim to ensure a first-time-pass for all Radeon PRO professional GPUs by meeting today's modern software demands. During this initial rigorous certification process, which can last between 2 to 12 weeks, the emphasis is placed on manual reporting and error finding.

Importantly, certification covers both the graphics hardware and the professional driver that accompanies it. The ultimate goal is for AMD professional GPUs, known as Radeon<sup>™</sup> PRO, to become fully ISV certified for a range of generational graphics cards, not just the latest series.





AMD RDNA<sup>™</sup> 2 graphics processor within the high performing AMD Radeon PRO W6800.

AMDA RADEON PRO Professional Graphics for Exceptional Performance with Reliability, Stability and Software Certifications at its Core.

# **Certifications Don't Stop**

After the launch of a new graphics driver, this certification process does not stop. The AMD lab continues to work with end customers and ISVs on what then becomes a rolling certification process. The focus of this process remains firmly aimed at professional tools and professional GPUs only. This also applies to seeding ISV development teams who will often receive the professional series ahead of GPU launches, ultimately giving you the confidence to take on new workflows.

# The AMD 'Day Zero' Program

At AMD we continue to accelerate our focus on application certifications in order to improve the customer experience. Typically, ISV certifications happen when new hardware is introduced, not when new drivers are introduced. Because of our stability and predictability, all of our Radeon PRO drivers are designed to be certification ready. The "Day Zero" program means that many ISV applications are certified before we post our drivers for download. AMD releases major version updates of its drivers for its professional graphics cards quarterly, each one the product of a six-month process of development, testing and quality control. With the Day Zero initiative, users can enjoy the latest updates and performance enhancements, while also having the benefit of certification from the moment they install the drivers.

# The Latest Professionally Certified GPUs:

#### RADEON PRO W6600 GRAPHICS

THE SMALL GPU FOR COMPLEX PROJECTS 8 GB of Fast GDDR6 Memory. Four Display Outputs. 8K Support. Remote Environment<sup>1</sup> Ready. Available for Mobile Systems.

amd.com/RadeonPROW6600



#### RADEON PRO W6800 GRAPHICS

THE GPU TO CRUSH VISUALIZATION AND INTENSE RAYTRACING PROJECTS Gigantic 32 GB of GDDR6 Memory. Error Correction Code (ECC) Support. Six Display Outputs. 8K, HDR Support. Remote Environment<sup>1</sup> Ready.

➡ amd.com/RadeonPROW6800



AMDZ

Learn more about VR capabilities of Radeon PRO Graphics at amd.com/PRO-VR

#### **Created for the Professional User**

To receive the best possible user experience and ISV certified status for professional software, the GPU and driver is key.

Although in some occasions, the software is certified to the entire workstation, either desktop or mobile, instead of just the GPU. In these occasions, AMD will work closely with leading workstation vendors, including Dell, HP and Lenovo, to integrate Radeon PRO graphics into their systems, becoming the key component for helping to secure a certification.

#### **Your Professional Software**

The certified status of a GPU remains key when choosing a new GPU for your software, but you should also ensure a GPU supports the correct software language (API) for accurate viewports. Most professional software demand OpenGL®, DirectX® or Vulkan® support to correctly display the viewports and interface. In the case of CAD tools for example, some lines (particularly hidden lines) will be missing from models if the GPU does not support the correct API. The entire AMD Radeon PRO graphics series currently supports up to OpenGL 4.6, DirectX 12 Ultimate, and Vulkan 1.2 for added peace of mind.

Find the current list of certified applications at: **amd.com/Certified** 

Learn more at www.amd.com/en/technologies/remote-workstation

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