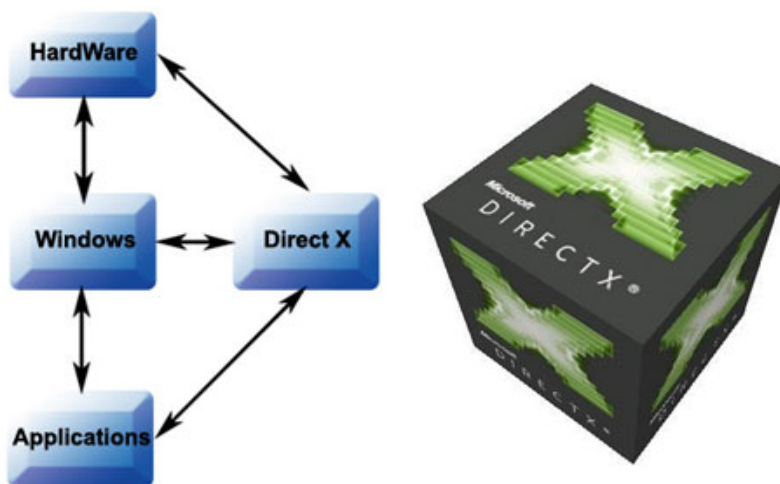


What is DirectX and why is it so important?

DirectX is one of the new features that Microsoft mentioned in the Windows 10 version. Gamers (game players) will know this immediately, but they do not realize the importance of the update. So what is DirectX and why is it so important? The answer will be in TipsMake's article below.

DirectX is the name Microsoft uses to describe a series of application programming interfaces (APIs) that Direct X uses for multimedia and video applications. Thanks to Direct X, the Windows platform dominates games today.



What is DirectX and why is it so important?

In **Windows 95 Service Release 2** , **playing games on a computer** is truly a difficult challenge related to DOS and boot disk. To give the game direct access to the system hardware, the user must first boot into DOS and use special parameters in the **config.sys** and **autoexec.bat** files .

This allows the user to give the game permission to access and use more memory, sound card, mouse, etc. This makes users feel frustrated when trying to run games because they have to face many troubles.

Learn DirectX

Microsoft quickly realized that in order for the Windows operating system to become popular with gamers, it had to give developers a way for their products to access Windows' hardware resources, just like DOS. .



What is DirectX and why is it so important?

The first version of **DirectX** was released for Windows 95, and NT 4.9, as version **2.0a** , in June 1996. DirectX was slow to be accepted by users at first, but it's fair to say that when it launched DirectX 9.0c changed gaming technology forever, and it was difficult to find a game worth playing on Windows that didn't use DirectX 9.0c at the time.

Over time, DirectX has been increasingly developed and improved. Although you can take advantage of each version, this depends entirely on the system components, especially whether the graphics card supports it or not.

Although DirectX is a 'bargain' for gamers, if the hardware is too outdated, it is possible that the computer will not be able to take advantage of the new improvements of the updates.

In case the user wants to install DirectX, but cannot install directx for many different reasons, you need to carefully research and use measures to help fix the error of not being able to install directx to play games and record screen videos better. .

Why is DirectX 12 important?

The reason is quite clear why DirectX 12 is so important, Microsoft's goal is to improve the version significantly compared to the previous version.

As for Xbox One, it will most likely rely on rendering options, paving the way for better visuals and effects. Users are also hoping that DirectX 12 will produce similar frame counts - PS4 as it allows it's easier for developers to access Xbox One's superfast ESRAM.

Finally, DirectX 12 will give Xbox One a faster console and pave the way for 4K video. On computers, the advantages of DirectX 12 are more clearly visible.

Backward compatibility

One of the features that makes gamers 'satisfied' the most is that DirectX 12 will be backward compatible with DirectX 11 hardware. This basically means that if your graphics card is not 'old' by 2 years, you There will be no need to upgrade.



Of course there are also parts of the DirectX 12 API that will not be available with older hardware that is not compatible with DirectX 12. But if the graphics card supports DirectX 11, it will take advantage of most of the new features that DirectX 12 bring.

Good news for laptop users

Microsoft promises that DirectX 12 will run well on low-end systems, meaning on laptops and tablets. Both types of computers are known to run games worse. Gamers often do not tend to buy laptops to play games, and often they will buy desktop computers that can support and install the necessary components to play games at higher frame rates.



What is DirectX and why is it so important?

At least DirectX 12 will make gaming on low-end systems 'acceptable'. There are very few laptops and tablets sold on the market to serve the purpose of prioritizing gaming, but at least you can go on vacation or work and still enjoy games on your laptop.

To check what DirectX version your device is using, you can refer to how to **check the DirectX version** here.

New Multi-adapter feature

DirectX 12 operates at a low level, meaning it has access to better hardware options than previous versions. Among them, multi-adapter is probably the most useful feature. Simply, multi-adapter allows developers to split processing tasks between the main GPU and the CPU's integrated graphics.

This means that when using a multi-adapter skillfully, the expensive graphics card will be responsible for performing the 'heavy' tasks, the light tasks will be left to the CPU graphics card.

According to Microsoft, this can increase performance by 10%.

4K resolution

It's clear that gaming at 4K resolution is the future (and maybe 6K or 8K in the near future). Content producers and game developers are gradually moving towards that goal.

Although 4K gaming won't take off in a big way right away, we should consider mass adoption in the next year or maybe a few years. However, DirectX 12 will certainly boost that adoption, because it reduces GPU consumption significantly.

Clearly, DirectX 12 will bring the most performance benefits and improve the computer gaming experience for Windows 10 gamers. And of course there will be other benefits related to better video performance, especially when users scale up to 4K.

For Xbox One, there will certainly be comprehensive improvements to the console, rendering quality and frame rate, which will give gamers completely new experiences.

Above is everything about what DirectX is and why it is so important that TipsMake has just introduced to you. If you have any questions or concerns you want answered, you can leave them in the comments section below the article, Taimienphi will answer your questions as soon as possible.

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