

Teaching Myself DirectX

The Device

A device is used to create resources and to enumerate the capabilities of a display adapter. A Direct3D device allocates and destroys objects, **renders primitives**, and **communicates with a graphics driver and the hardware**. In Direct3D 11, a device is separated into a device object for creating resources and a device-context object, which performs rendering. A device is represented with an [**ID3D11Device**](https://docs.microsoft.com/en-us/windows/desktop/api/D3D11/nn-d3d11-id3d11device) interface.

**Each application must have at least one device.**

[**D3D11CreateDevice**](https://docs.microsoft.com/en-us/windows/desktop/api/D3D11/nf-d3d11-d3d11createdevice) or [**D3D11CreateDeviceAndSwapChain**](https://docs.microsoft.com/en-us/windows/desktop/api/D3D11/nf-d3d11-d3d11createdeviceandswapchain) can be used to create a device.