Windows 10 offers many improvements over Windows 7 and numerous important enhancements and functional improvements over Windows 8.1.

Windows 10 editions

Edition	Consumer	Availability
Windows 10 Home	Individual/home use	Everybody
Windows 10 Pro	organizations, advanced users	Everybody
Windows 10 Enterprise	Large enterprises	Only available to Volume Licensing customers
Windows 10 Enterprise LTSB	Large enterprises	Only available to Volume Licensing customers
Windows 10 Education	School staff, administrators, teachers, and students	Only available through academic Volume Licensing
Windows 10 Mobile	Users of smaller, mobile, touch-centric devices such as smartphones and small tablets	Everybody
Windows 10 Mobile Enterprise	Business customers on smartphones and small tablets	Only available through Volume Licensing

In order to choose the most suitable edition of Windows for your organization or company you first need to be familiar with the various edition offered by Microsoft.

Windows 10 Home

Windows 10 Home is the consumer-oriented desktop edition of Windows 10. It offers the familiar Windows experience for PCs, tablets, and the new hybrid laptop/tablets.

Windows 10 Pro

Windows 10 Pro builds on the features of Windows 10 Home, with many extra features to meet the needs of small and medium-sized businesses. Windows 10 Pro is also suitable for advanced consumers who are looking for features such as BitLocker and virtualization.

Windows 10 Enterprise

Windows 10 Enterprise builds on the features of Windows 10 Pro, with additional features that meet the needs of large enterprises. Windows 10 Enterprise is available to Volume Licensing customers only.

The 32-bit vs. 64-bit editions of Windows 10

All desktop editions of Windows 10—Windows 10 Home, Windows 10 Pro, Windows 10 Enterprise, and Windows 10 Education—are available in both 32-bit and 64-bit versions. The features of the 64-bit versions are similar to those of the 32-bit versions, but offer several advantages, including:

- Improved performance. The 64-bit processors can process more data for each clock cycle, enabling you to scale your apps to run faster or support more users. However, to benefit from this improved processor capacity, you must install a 64-bit edition of the operating system.
- Enhanced memory. A 64-bit operating system can make more efficient use of random access memory (RAM). It can address memory above 4 gigabytes (GB). This is different from all 32-bit operating systems, including all 32-bit editions of Windows 10, which are limited to 4 GB of addressable memory.
- Improved security. The architecture of 64-bit processors enables a more secure operating system environment through kernel patch protection, mandatory kernel-mode driver signing, and Data Execution Prevention (DEP).
- Support for the Client Hyper-V feature. This feature is only available in the 64-bit versions of Windows 10, except Windows 10 Home. Client Hyper-V requires a 64-bit processor architecture that supports second-level address translation.

- **Note:** The 64-bit editions of Windows 10 do not support the 16-bit Windows on Win32 (WOW) environment. If your organization requires earlier versions of 16-bit apps, they will not run natively in Windows 10. One solution is to run the app within a virtual environment by using Client Hyper-V.

Choosing between 32-bit and 64-bit editions for installation

In most cases, a computer will run the edition of Windows 10 that corresponds to its processor architecture. A computer with a 32-bit processor will run the 32-bit edition of Windows 10, and a computer with a 64-bit processor will run the 64-bit edition of Windows 10. You can use the following list to determine which edition of Windows 10 you should install on a computer:

- You can install 64-bit editions of Windows 10 only on computers with 64-bit processor architecture.
- You can install 32-bit editions of Windows 10 on computers with 32-bit or 64-bit processor architecture. When you install a 32-bit edition of Windows 10 on a 64-bit processor

architecture, the operating system does not take advantage of any 64-bit processor architecture features or functionality.

No 32-bit drivers will work in 64-bit editions of Windows 10. If you have hardware for which only 32-bit drivers are available, you must use a 32-bit edition of Windows 10, regardless of
• the computer's processor architecture.

You can install 32-bit editions of Windows 10 on 64-bit architecture computers to support earlier versions of apps or for testing purposes.

Requirements for installing Windows 10

Minimum recommended hardware:
- Processor: 1 GHz or faster processor or SOC
- RAM: 1 GB for 32-bit or 2 GB for 64-bit
- Hard disk space: 16 GB for 32-bit or 20 GB for 64-bit
- Graphics card: DirectX 9 or newer with WDDM 1.0 driver
- Display: 800 x 600

Windows 10 is capable of running on similar hardware to the hardware that Windows 7 can run on. Many computers today easily meet the minimum hardware requirements for Windows 10.

Device drivers

Finding device drivers for Windows 10 for all your legacy hardware might be problematic. Many companies producing hardware have their drivers tested and certified at the Windows Hardware Quality Labs. However, you might not be able to find a built-in driver for a specific piece of

hardware. The best way to find drivers for legacy hardware is to search the manufacturer's website.

ACT

The Application Compatibility Toolkit (ACT) is a graphical tool that can evaluate and mitigate app compatibility issues before deploying a new version of Windows. ACT requires access to a database. The database must be Microsoft SQL Server 2008 (or SQL Server 2008 Express) or a later version. You can install SQL Server or use an existing installation

MAP

The Microsoft Assessment and Planning Toolkit (MAP) is a solution accelerator that analyzes the inventory of an organization's workstation (and server) infrastructure, performs an assessment, and then creates reports that you can use for upgrade and migration plans. MAP is available for Windows 10, Windows 8.1, Windows Server 2016, Windows Server 2012 R2, and for other products, such as SQL Server 2014 and Hyper-V. Use MAP to perform the following tasks:

- Inventory your organization's IT infrastructure. Based on the inventory, MAP displays a detailed report about which machines are capable of running Windows 10, which machines are capable of running Windows 10 with minimum system requirements, and which machines are not capable of running Windows 10. MAP also recommends specific upgrades that ensure computers are capable of running Windows 10.
- Generate a report or proposal based on the Windows 10 Readiness Assessment. The report or proposal is a document that contains an Executive Overview, Assessment Results, Next Steps, and a worksheet summarizing Windows 10 readiness for computers that are running Windows 10.

Reference Links: For more information, refer to: "Microsoft Assessment and Planning (MAP) Toolkit" at: https://aka.ms/anwv94