

What is the difference between Windows CE, Pocket PC and Windows Mobile?

What is Windows CE?

Windows CE (also known officially as **Windows Embedded Compact** or **Windows Embedded CE** and sometimes abbreviated **WinCE**) is an open, scalable, 32-bit, real-time operating system that can be embedded to build small footprint devices, such as Smart Phones, PDA, and Rugged Terminals.

Windows CE is a distinctly different operating system and not just a trimmed-down version of desktop Windows. It is not to be confused with Windows XP Embedded which is NT-based. Windows CE is supported on Intel x86 and compatibles, MIPS, ARM processors.

Windows CE is optimized for devices that have minimal storage. Devices are often configured without disk storage, and may be configured as a "closed" system that does not allow for end-user extension (for instance, it can be burned into ROM).

What is the relationship between Windows CE, Pocket PC and Windows Mobile?

Often Windows CE, Windows Mobile, and Pocket PC are used interchangeably - in part due to their common origin. This practice is not entirely accurate. Windows CE is a modular/componentized operating system that serves as the foundation of several classes of devices. Some of these modules provide subsets of other components' features, others which are separate and others which add additional features to another component.

One can buy a kit (the Platform Builder) which contains all these components and the tools with which to develop a custom platform. Applications such as Excel Mobile/Pocket Excel are not part of this kit. The older Handheld PC version of Pocket Word and several other older applications are included as samples.

Windows Mobile is best described as a subset of platforms based on a Windows CE underpinning. Currently, Pocket PC (now called Windows Mobile Classic), SmartPhone (Windows Mobile Standard), and PocketPC Phone Edition (Windows Mobile Professional) are the three main platforms under the Windows Mobile umbrella. Each platform utilizes different components of Windows CE, as well as supplemental features and applications suited for their respective devices.

Pocket PC and Windows Mobile is a Microsoft-defined custom platform for general PDA use, and consists of a Microsoft-defined set of minimum profiles (Professional Edition, Premium Edition) of software and hardware that is supported. The rules for manufacturing a Pocket PC device are stricter than those for producing a custom Windows CE-based platform. The defining characteristics of the Pocket PC are the digitizer as the primary human interface device and its extremely portable size.

The **SmartPhone** platform is a feature rich OS and interface for cellular phone handsets. SmartPhone offers productivity features to business users, such as email, as well as multimedia capabilities for consumers. The SmartPhone interface relies heavily on joystick navigation and PhonePad input. Devices running SmartPhone do not include a touchscreen interface. SmartPhone devices generally resemble other cellular handset form factors, whereas most Phone Edition devices use a PDA form factor with a larger display.

The following table presents the naming conventions for Pocket PC, Pocket PC Phone Edition and Smartphone.

	Pocket PC 2000	Pocket PC 2002	Windows Mobile 2003	Windows Mobile 2003 SE	Windows Mobile 5.0	Windows Mobile 6	Windows Mobile 6.1	Windows Mobile 6.5
Pocket PC (Without Mobile Phone)	Pocket PC 2000	Pocket PC 2002	Windows Mobile 2003 for Pocket PC	N/A	Windows Mobile 5.0 for Pocket PC	Windows Mobile 6 Classic	Windows Mobile 6.1 Classic	N/A
Pocket PC Phone Edition (With Mobile Phone)	Pocket PC 2000 Phone Edition	Pocket PC 2002 Phone Edition	Windows Mobile 2003 for Pocket PC Phone Edition	Windows Mobile 2003 SE for Pocket PC Phone Edition	Windows Mobile 5.0 for Pocket PC Phone Edition	Windows Mobile 6 Professional	Windows Mobile 6.1 Professional	Windows Mobile 6.5 Professional
Smartphone (Without Touch Screen BUT with Mobile Phone)	N/A	Smartphone 2002	Windows Mobile 2003 for Smartphone	Windows Mobile 2003 SE for Smartphone	Windows Mobile 5.0 for Smartphone	Windows Mobile 6 Standard	Windows Mobile 6.1 Standard	Windows Mobile 6.5 Standard
Built on Windows CE version		CE 3.0	CE 4.1	CE 4.2	CE 5.0	CE 5.2	CE 5.2	CE 5.2