NOKIA Developer

Symbian OS

Symbian OS - Português
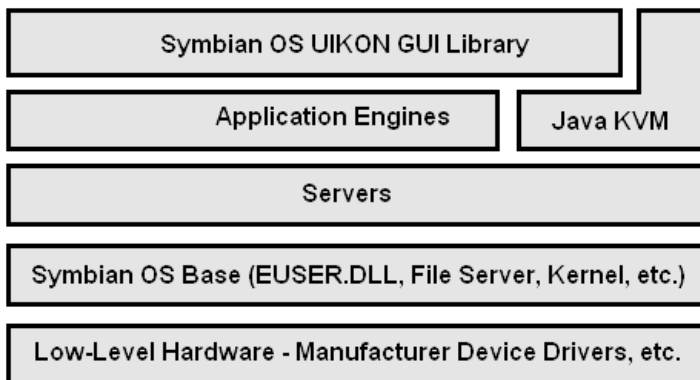
Операционная система Symbian OS

Symbian is an open source operating system currently (2011) used in Nokia Mobile Devices. The underlying OS was historically created by Symbian Ltd and licensed by Nokia and other phone manufacturers, who layered UI platforms over the top (Nokia S60, NTT DoCoMo's MOAP and UIQ Technology. In late 2008 Nokia purchased Symbian Ltd, and created the (independent) Symbian Foundation to open source and manage the software. For more information see the wikipedia entries Symbian_Ltd. and Symbian_Foundation

Key design features

- **Performance** – Symbian OS is designed to make minimal demands on batteries and to have low memory.
- **Multitasking** – telephony and universal messaging are fundamental components. All applications are designed to work seamlessly in parallel.
- **Standards** – the use of technologies based on agreed-upon standards is a basic principle of Symbian OS, ensuring that applications are robust, portable, and interoperable
- **Object-oriented** software architecture.
- **Memory management optimized** for embedded software environment.
- Runtime **memory requirements are minimized** – very small executable sizes and ROM-based code that executes in place.
- **Security** mechanisms for enabling secure communications and safe data storage.
- Application support for **international environment** with built-in Unicode character sets.
- A rich and varied API allowing access to **reusable components** in developer applications.

Symbian OS generic technology structure

The system kernel, file Server, memory management and device drivers are located in the "Base" Operating System layer. Symbian uses microkernel approach. The kernel manages system resources such as memory and is responsible for time-slicing the applications and system tasks. Device drivers provide the control and interface to specific items of hardware—the keyboard, display, infrared port and so on.

The upper layers of the system provide communication and extensive computing services, such as TCP/IP, IMAP4, SMS and database management. Symbian OS components provide data management, communications, graphics, multimedia, security, personal information management (PIM) application engines, messaging engine, Bluetooth, browser engines and support for data synchronization and internationalization.

History

- **Psion** founded by *David Potter* inn 1980 launched the *Psion Organizer*, the world's first volume-produced handheld computer in 1984.
- In 1991, Psion introduces the **EPOC OS** (*Electronic Piece Of Cheese*, according to the legend).
- In 1997, Psion Series 5 - the first **EPOC32** (32-bit) palmtop.
- June 1998 - Symbêan is established as a private independent company and is owned by Ericsson, Nokia, Motorola and Psion. From this point onwards has EPOC OS been called **Symbian OS**.
- 2000

- September - Symbian ships **Version 6** of its software platform to licensees.
- November - The world's **first Symbian OS phone, the Ericsson R380 Smartphone**, ships.
- 2001
  - June - The world's **first <u>open</u> Symbian OS phone** became available - the **Nokia 9210 Communicator**.
  - November
    - Nokia introduces the **S60** - a licensable UI for Symbian**.**
    - The **first 2.5G Symbian OS phone, the Nokia 7650**, is announced. The 7650 is the first mass-market Symbian phone and it is based on the Nokia S60 reference design.
- 2002
  - February - Symbian announces **UIQ** user interface application for Symbian OS.
  - October - Samsung licenses Symbian OS for smartphones. **World's top five mobile phone manufacturers now Symbian OS licensees**.
  - December - Fujitsu has completed development of a **Symbian OS smartphone for NTT DoCoMo's FOMA 3G network - The F2051**.
- 2003
  - April - Symbian launches **Symbian OS v7.0s** at Exposium03.
  - October - Nokia announces the first "Media" phone, the TV-enabled **7700, based on the new "Series 90"**.
- 2004
  - February - **Symbian OS v8.0** is announced.
  - March - **Symbian leads smartphone market**.
- February 2005 - **Symbian OS v9** is announced.
- 2006
  - May - **100th commercial phone model ships**.
  - November - **100 million Symbian smartphones shipped**.

Internal Links

- S60 phones

External Links

- Symbian⧉ - Official web-site
- The Symbian Investor⧉
- A very old but nice article Dated: 04-05-2005⧉