Software

The software is a set of programs allowing automated information processing on the computer.

The software is divided into system (General) and application (Special).

- System software operates service the computer, as well as the automation of the process of creating new programs. The system software includes operating systems and user interface; software tools; system maintenance.

- Application software is a set of programs designed to address specific tasks in a specific professional field. They are divided into specific and universal.
- Specific PC software designed to address specific user tasks and therefore has a very limited scope.

The main types of universal software, which allows different types of information are:

- text editors;
- image editor;
- spreadsheets;
- training and game programs;
- information systems;
- etc.

- **Text editors** are programs that are designed to create and manipulate textual information. The most common text editors are editors: Microsoft Word, Word Perfect, Multi Edit, WordStar, ChiWriter and others.

- **Image editors** are a program for creating and processing of graphic information. They are indispensable when presenting the results of a calculation in a graphic form that occurs in practice quite often. In addition, image editors allow you to create a wide range of different images: charts, drafts, drawings, etc. The user can create any complex graphic images, using different types of lines, shapes, contours and a different color scheme and background picture. Such opportunities have known packages PaintBrush, CorelDraw, Photoshop, Illustrator, etc.

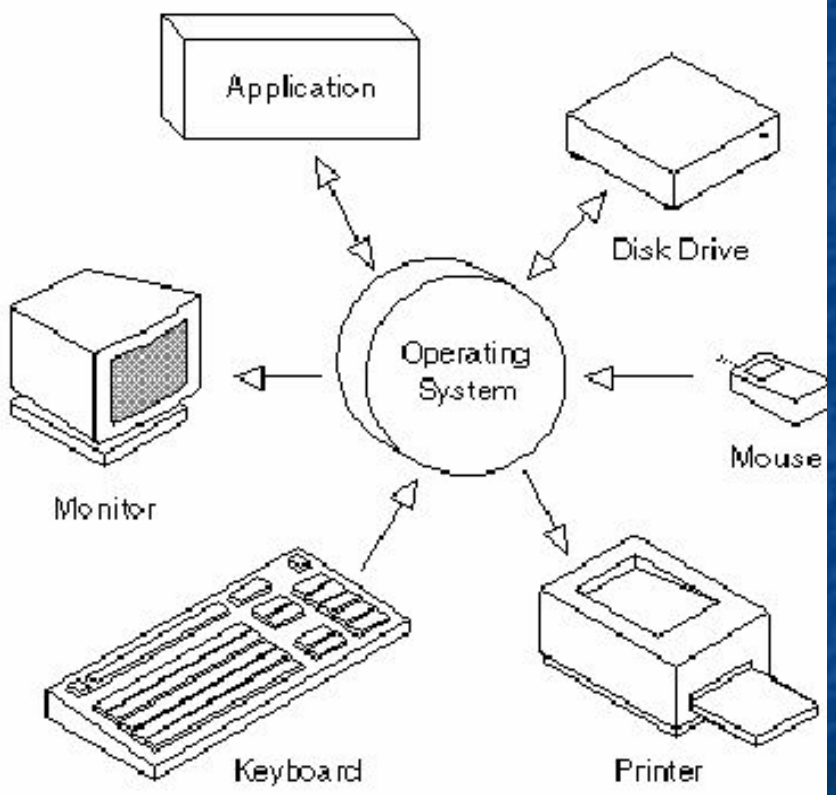
- Spreadsheet system allows you to create and manage tabular information. They are convenient when processing the results of a calculation, which is presented in tabular form and require repeated calculations.
- Gaming software is a form of exciting classes on personal computers. With game programs and started a massive dissemination of personal computers.
- Teaching programs are used for training sessions. These programs can be used at school and at home for lessons in logic, history, computer studies, Russian language, biology, geography, mathematics, physics and other academic disciplines. The computers in these lessons can be used as electronic textbooks and training equipment, laboratory stands and referral systems.

- Business programs are designed for the preparation, storage and handling of various types of service information. These programs can be used for computerization, documentation, training schedules, scheduling of watches, etc.
- Information systems are used for organization, storage and COMPUTER search a variety of information. These include databases, library information retrieval systems, sale and registration of tickets at theatres, railway and air ticket, etc.

- A special group among the application programs are software development tools. Tools are software programs and software that programmers use to create programs and automated systems. On personal computers, the most widely used programming languages are: BASIC, PASCAL, C and ASSEMBLER, which entails developing a universal programming systems. Each of them is useful for solving a particular class of tasks. In addition, the various types of COMPUTING preference will be given to specific programming languages.

Definition

- An Operating System, or OS, is low-level software that enables a user and higher-level application software to interact with a computer's hardware and the data and other programs stored on the computer.
- An OS performs basic tasks, such as recognizing input from the keyboard, sending output to the display screen, keeping track of files and directories on the disk, and controlling peripheral devices such as printers.



Other Services

- Program Execution

  OS provides an environment where the user can conveniently run programs. The user does not have to worry about memory allocation or CPU scheduling.

- I/O Operations

  Each program requires input and produces output. The OS hides some of the details of the underlying hardware for such I/O. All the user sees is that the I/O has been performed, without those details.

- Communications

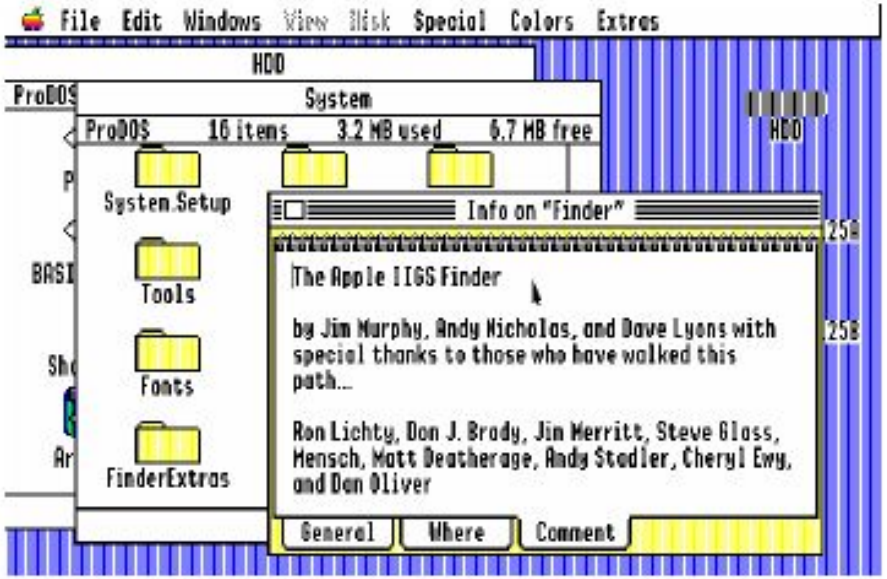
  There are instances where processes need to communicate with each other to exchange information. It may be between processes running on the same computer or running on different computers. The OS provides these services to application programs, making inter-process communication possible, and relieving the user of having to worry about how this accomplished.

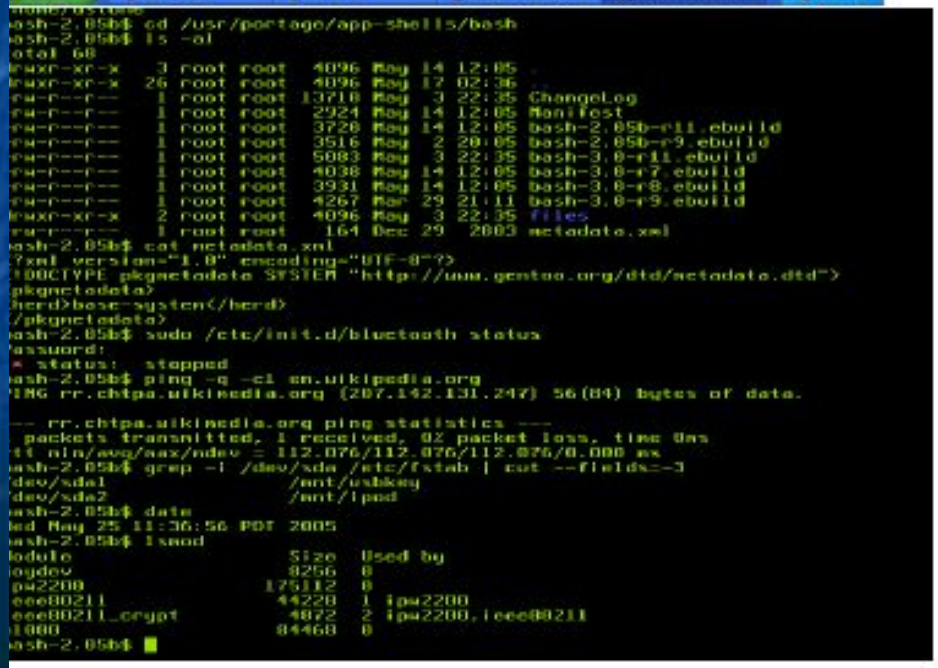
Application programs and OS

- Operating systems provide a software platform on top of which other programs, called *application programs,* can run.
- The choice of operating system, therefore, determines to a great extent the applications a user can run.
- For example, the DOS operating system contains commands such as COPY and RENAME for copying files and changing the names of files, respectively. The commands are accepted and executed by a part of the operating system.
- Similarly, the UNIX operating system has commands like CP and MV to copy and rename.

Types Of OS

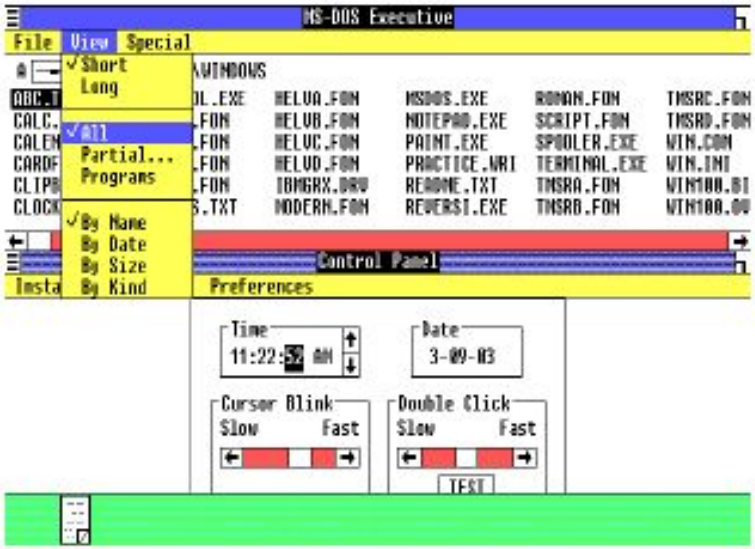
Help and Support Center
My Computer
Search
Pick a Help topic
Remote Desktop Connection
Remote Desktop Connection
Computer:
Connect
Cancel
Help
Options >>
start

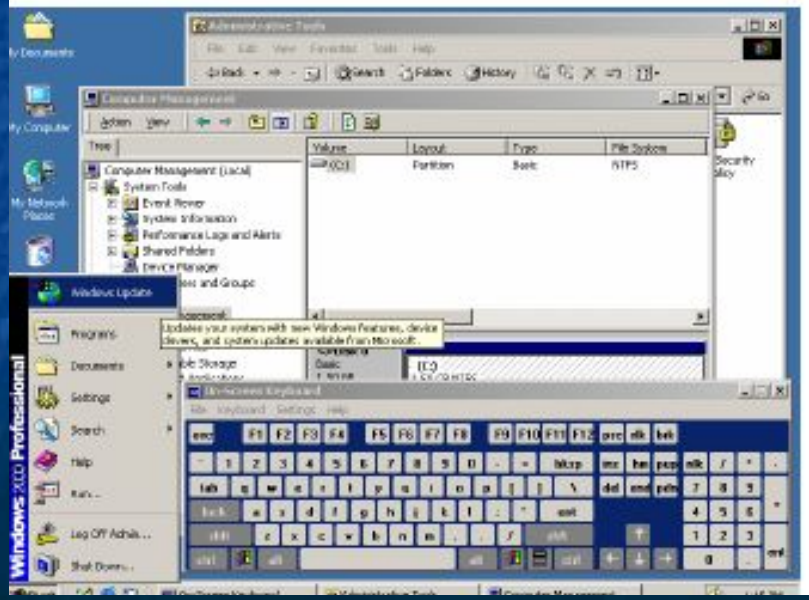

File Edit Windows View Misk Special Colors Extras
HDD
ProDOS
System
ProDOS 16 items 3.2 MB used 6.7 MB free
System.Setup
Tools
Fonts
FinderExtras
Info on "Finder"
The Apple IIGS Finder
by Jim Murphy, Andy Nicholas, and Dave Lyons with special thanks to those who have walked this path...
Ron Lichty, Don J. Brady, Jim Merritt, Steve Gloss, Mensch, Matt Deatherage, Andy Stadler, Cheryl Ewy, and Don Oliver
General
Where
Comment


ash-2.05b$ cd /usr/portage/app-shells/bash
ash-2.05b$ ls -al
total 68
drwxr-xr-x 3 root root 4096 May 14 12:05 .
drwxr-xr-x 26 root root 4096 May 17 02:36 ..
-rw-r--r-- 1 root root 13718 May 3 22:35 ChangeLog
-rw-r--r-- 1 root root 2924 May 14 12:05 Manifest
-rw-r--r-- 1 root root 3728 May 14 12:05 bash-2.05b-r11.ebuild
-rw-r--r-- 1 root root 3516 May 2 20:05 bash-2.05b-r9.ebuild
-rw-r--r-- 1 root root 5083 May 3 22:35 bash-3.0-r11.ebuild
-rw-r--r-- 1 root root 4038 May 14 12:05 bash-3.0-r7.ebuild
-rw-r--r-- 1 root root 3931 May 14 12:05 bash-3.0-r8.ebuild
-rw-r--r-- 1 root root 4267 Mar 29 21:11 bash-3.0-r9.ebuild
drwxr-xr-x 2 root root 4096 May 3 22:35 files
-rw-r--r-- 1 root root 164 Dec 29 2003 metadata.xml
ash-2.05b$ cat metadata.xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE pkgmetadata SYSTEM "http://www.gentoo.org/dtd/metadata.dtd">
<pkgmetadata>
<herd>base-system</herd>
</pkgmetadata>
ash-2.05b$ sudo /etc/init.d/bluetooth status
Password:
* status: stopped
ash-2.05b$ ping -q -c1 en.wikipedia.org
PING rr.chtpa.wikimedia.org (207.142.131.247) 56(84) bytes of data.
--- rr.chtpa.wikimedia.org ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 112.076/112.076/112.076/0.000 ms
ash-2.05b$ grep -i /dev/sda /etc/fstab | cut --fields=-3
/dev/sda1 /mnt/usbkey
/dev/sda2 /mnt/ipod
ash-2.05b$ date
Wed May 25 11:36:56 PDT 2005
ash-2.05b$ lsmod
Module Size Used by
keydev 8256 0
ipw2200 175112 0
ieee80211 44228 1 ipw2200
ieee80211_crypt 4872 2 ipw2200,ieee80211
e1000 84468 0
ash-2.05b$

Finder File Edit View Go Window Help
About This Mac
Get Mac OS X Software...
System Preferences...
Dock
Location
Recent Items
Force Quit...
Sleep
Restart
Shut Down...
Log Out...
Turn Magnification On
Turn Hiding On ⌥⌘D
Dock Preferences...
Welcome to Mac OS X

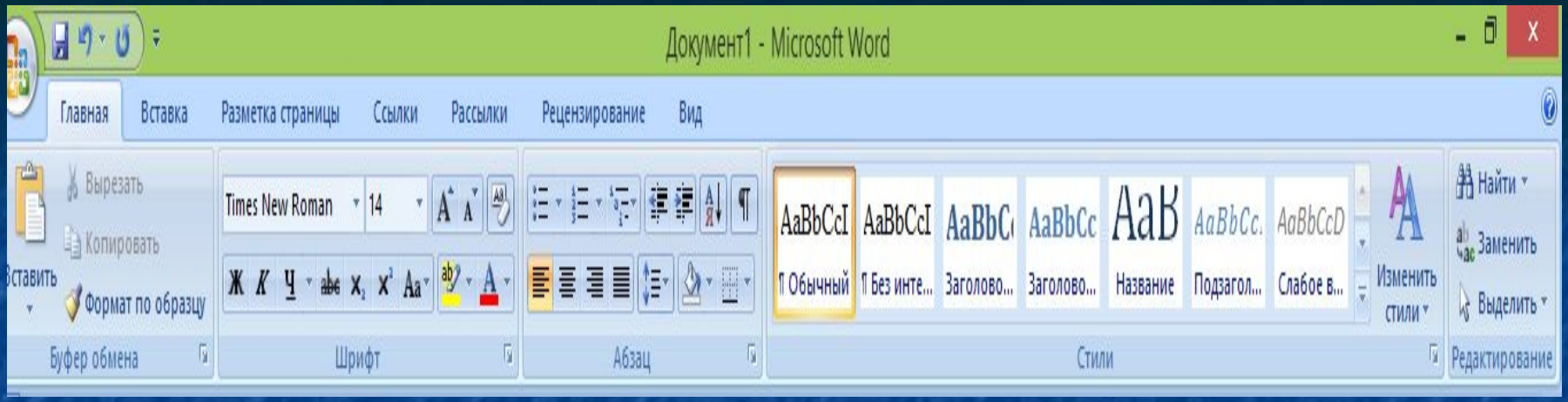
Evolution of Windows





Every OS consists at least of three obligatory parts:

- The first is the **kernel**, the command interpreter, "translator" from program language on "iron", language of machine codes.
- The second — specialized programs for management of the various devices which are a part of the computer. Such programs are called as drivers — i.e. "drivers", managing directors.
- The third part — a convenient cover with which the user communicates — the interface.



- A toolbar is a collection of the most frequently used menu commands provided by the buttons with symbols icons these commands.

- **The icon** is a small graphic image with a short inscription, which is on the screen a certain program, a window function, file, etc.

- **A shortcut** is a command file, which enables you to access any object.

- **The folder** – storage of files.

- **Clipboard** – the memory area, is intended for an exchange of text and graphic information between documents and appendices. It is an intermediate storage area for temporal storage of information.
- **The file** represents the set of uniform information which has been written down on a magnetic disk with a certain name.
- The button Start being on a taskbar, causes a main menu