

Presentation: **Base drivers for eComStation**

Code: **ALL01**

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Base drivers for eComStation



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JFS.IFS

Improved JFS file system driver

NTFS.IFS

NTFS file system driver

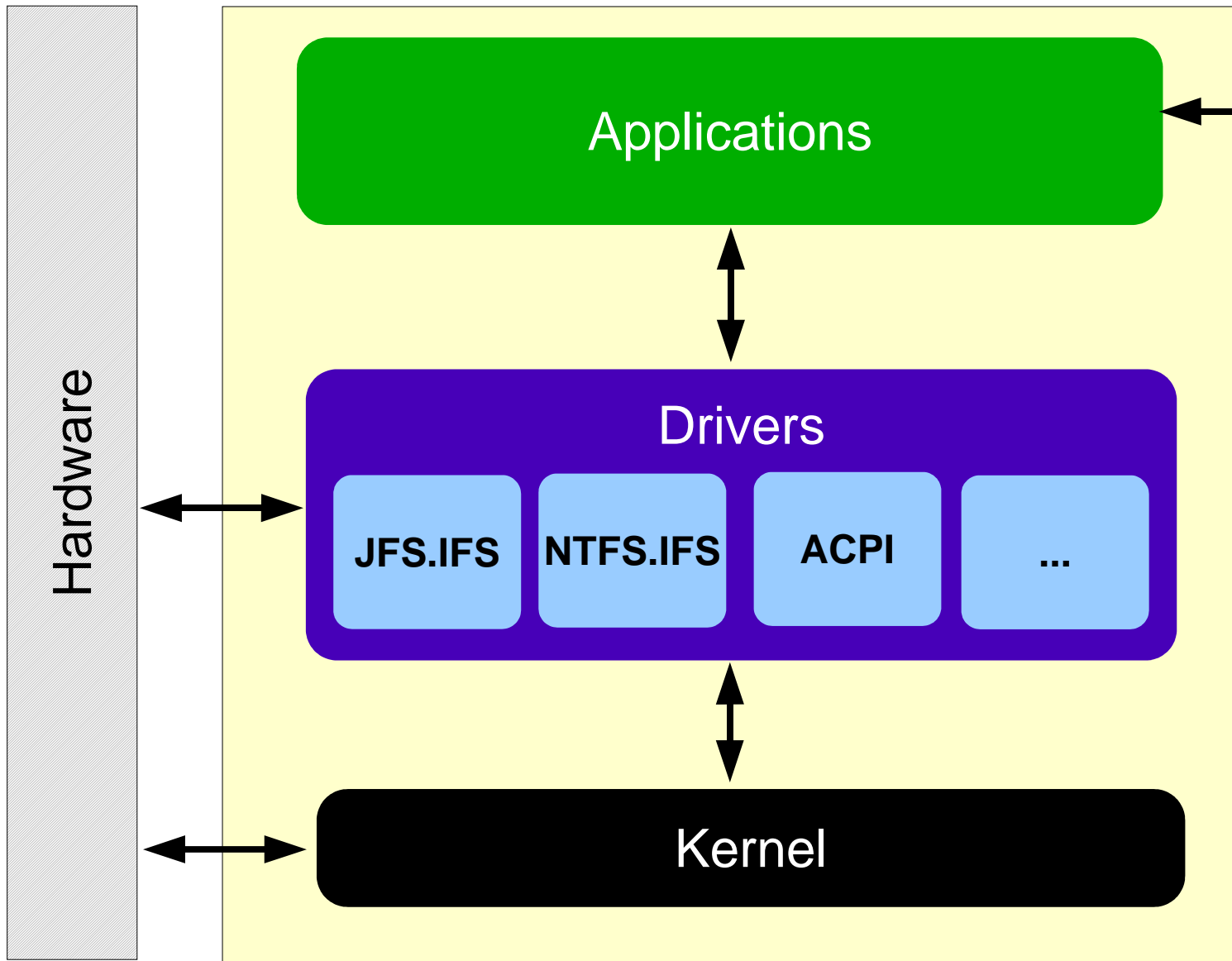
ACPI

ACPI subsystem (Power management, PnP, SMP)

?

What is your demand?

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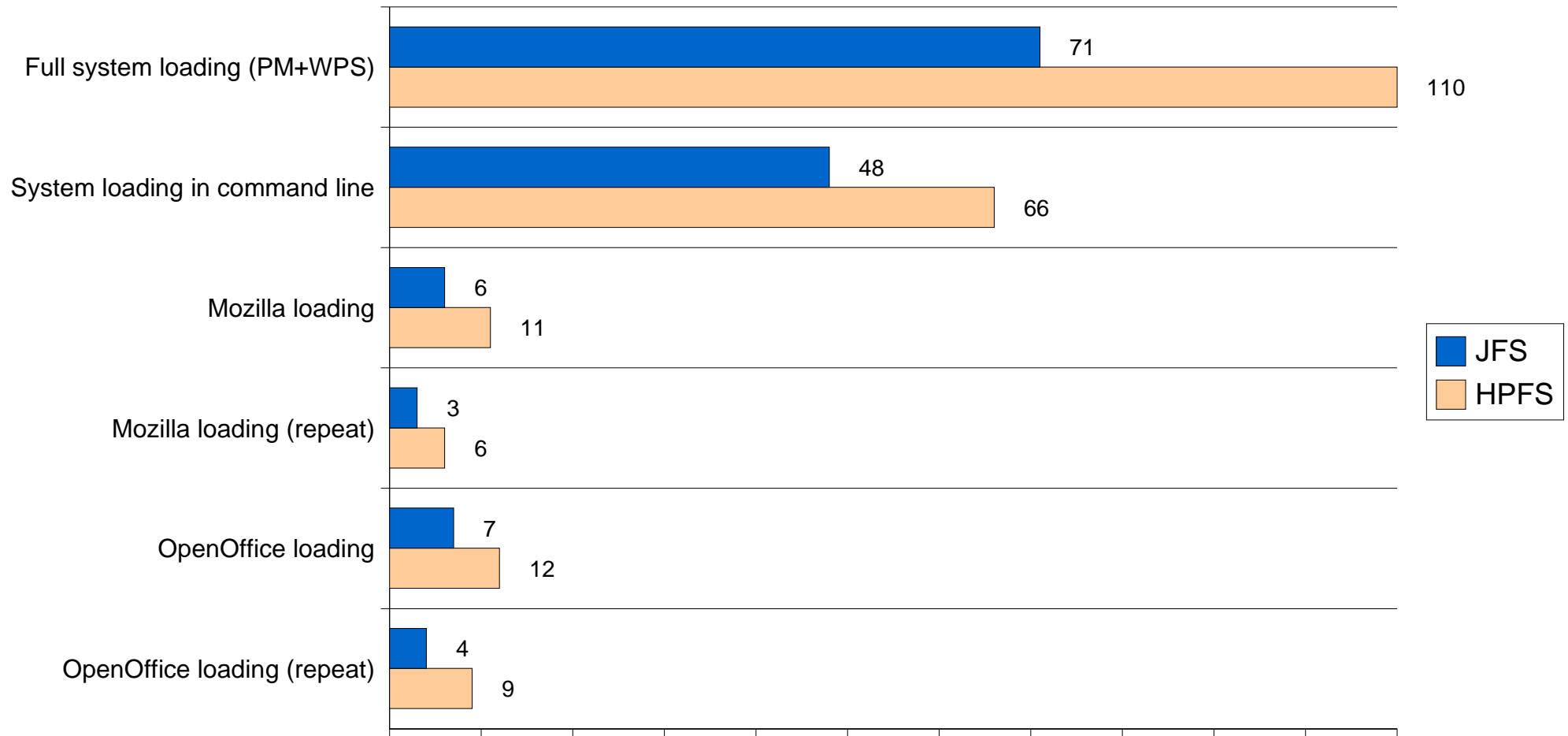


What is JFS?

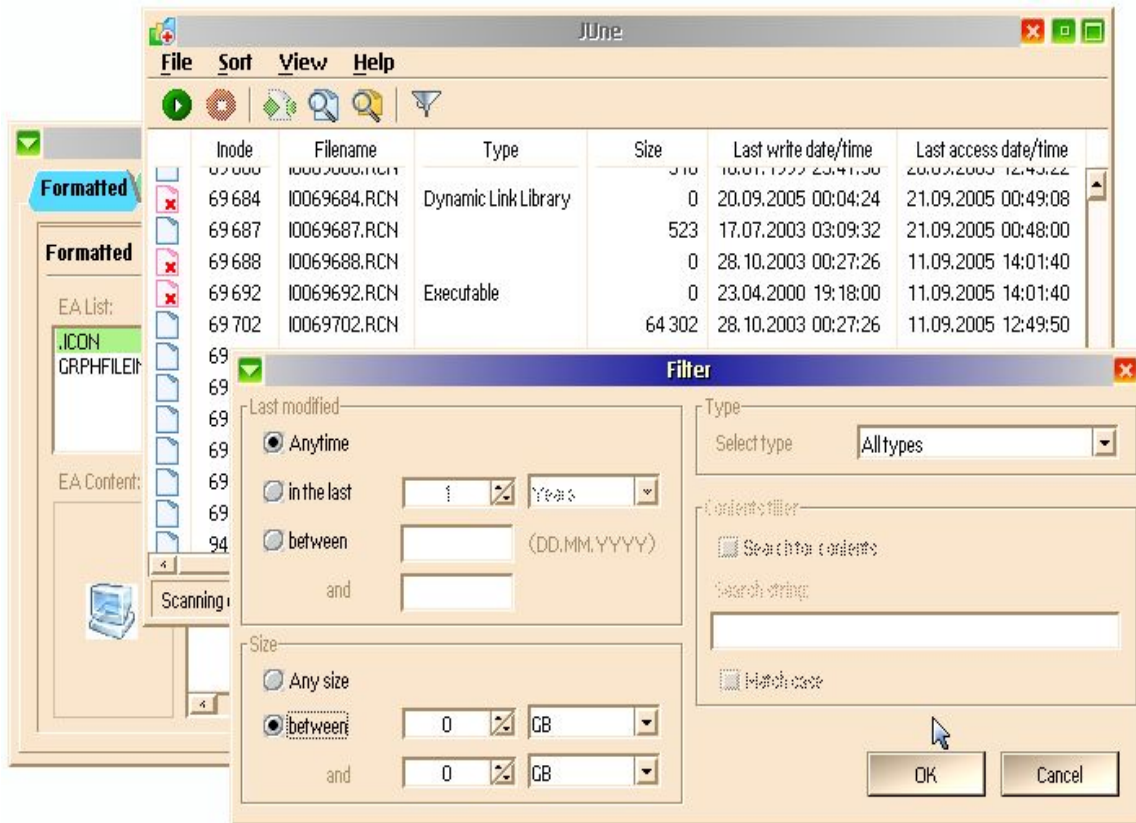
- *Filesystem* is a named set of files and directories joined by one storage structure.
- *JFS filesystem* – Journalized file system. Uses database journaling techniques to record changes sequentially in a special log.
- *JFS for OS/2* – the design goals were to use the proven JFS technology developed for 10+ years in AIX and expand in areas: Performance, Robustness, SMP support.
- Less problems with CHKDSK because of new UJFS.DLL.

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Performance comparison: JFS and HPFS filesystems (sec)



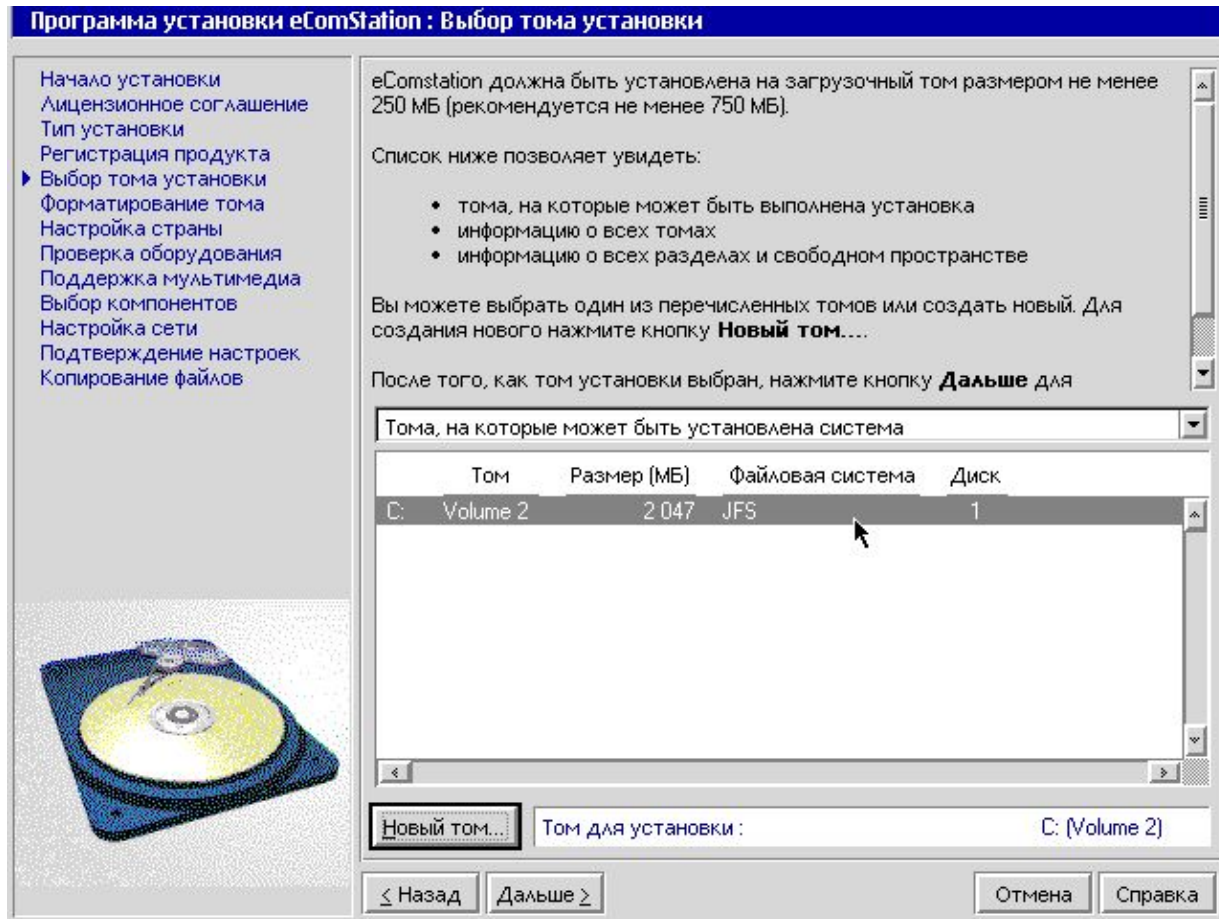
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Jrescuer/JUne

- Unerase deleted files
- Recover data from dead JFS
- Maintenance check-up
(.LONGNAME EA)

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Installation on bootable JFS

- Installation is transparent
- Usage is transparent
- Mark old CDs as «Old»

Possibilities of JFS

64-bit filesystem:

- Maximal size of JFS volume = 2,048 gigabytes
- Maximal size of file = 2,048 gigabytes
- It's ready for usage on SMP machines

ToDo:

- Increase performance (dynamic cache)
- Increase reliability
- Improve service tools

What is NTFS?

- NTFS stands for New Technology Filesystem
- W* NT, 2000, XP, W* Server 2003
- No significant advantages

Why support NTFS?

- Simplifies migration from W* to eComStation
- Comfort for devoted OS/2 users
- Aikido principle: use the strength of enemy

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NTFS.IFS

Simplifies migration from
W* to eComStation

Current version supports:

- *any NTFS version support*
- *large files (>4gb) support*
- *compression (testing)*
- *support of flash drives*
- *NTFS unerase (testing)*

Further development of NTFS.IFS

The next monster:

- WinFS stands for W* Future Storage
- WinFS = NTFS + MS SQL

NTFS.IFS ToDo:

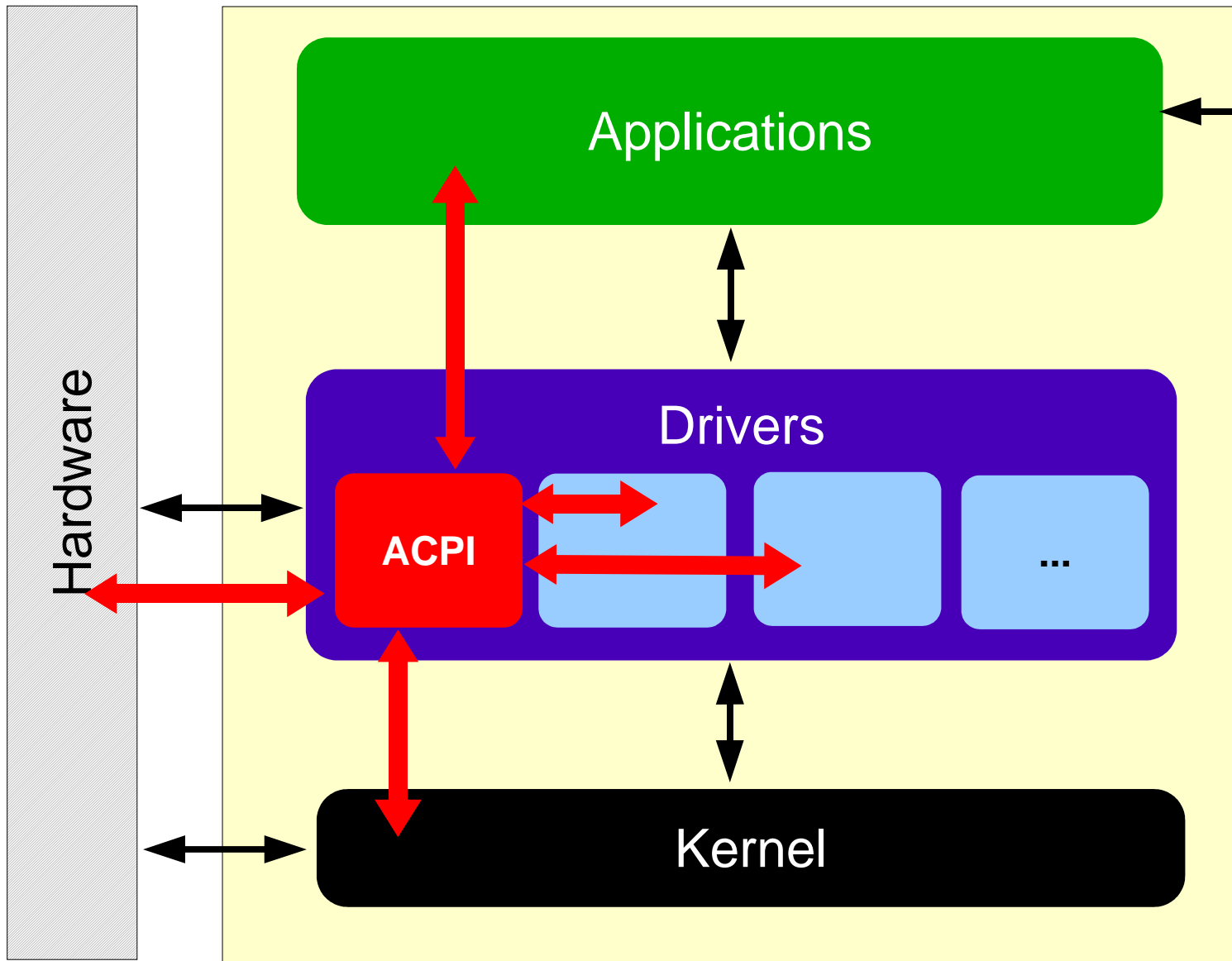
- Implement Write
- Implement boot of eComStation from NTFS
- Create maintenance tools

ACPI (Advanced Configuration and Power Interface)

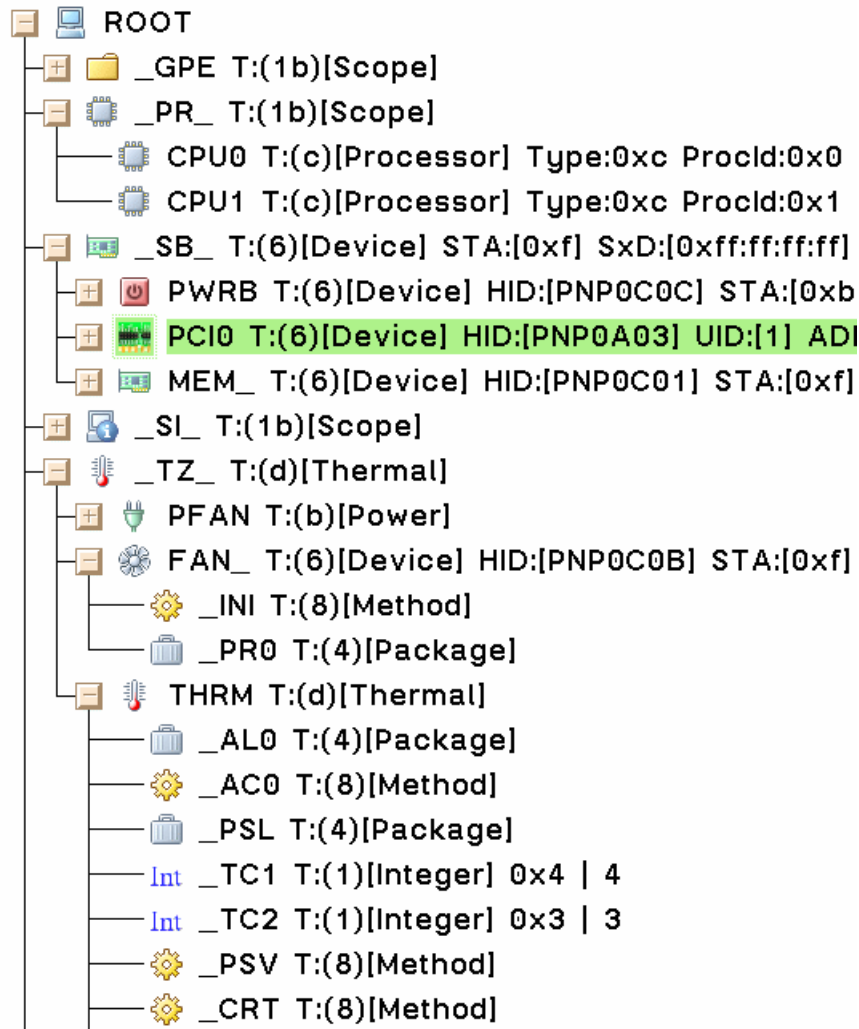
It's an open industry specification co-developed by Hewlett-Packard, Intel, Microsoft, Phoenix and Toshiba



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ACPI Virtual Machine

- Object description
- Objects, methods
- Interface to the VM

Examples:

\\PWRB_Off

\\OS



ACPI driver supports:

- Correct initialization (WakeUp)
- Throttling
- SMP (DualCore)
- PowerOff
- PMTimer
- Batteries (Samsung notebooks)



ACPI ToDo:

- Complete SMP support
- APM functionality (suspend/resume)
- Control of IRQs
- SMBus (IBM notebooks)
- Utilities



How can I contribute?

- Creation of widgets (to watch batteries)
- Help us formulate exact goals
- Developers of drivers

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