NAME

lshw – list hardware

SYNOPSIS

lshw [**-version**]

lshw [**-help**]

lshw [**-X**]

lshw [[**-html**] [**-short**] [**-xml**] [**-json**] [**-businfo**]] [**-dump** *filename*] [**-class** *class...*] [**-disable** *test...*] [**-enable** *test...*] [**-sanitize**] [**-numeric**] [**-quiet**]

DESCRIPTION

lshw is a small tool to extract detailed information on the hardware configuration of the machine. It can report exact memory configuration, firmware version, mainboard configuration, CPU version and speed, cache configuration, bus speed, etc. on DMI-capable x86 or IA-64 systems and on some PowerPC machines (PowerMac G4 is known to work).

It currently supports DMI (x86 and IA-64 only), OpenFirmware device tree (PowerPC only), PCI/AGP, CPUID (x86), IDE/ATA/ATAPI, PCMCIA (only tested on x86), SCSI and USB.

-version

Displays the version of **lshw** and exits.

-help   Displays the available command line options and quits.

-X   Launch the X11 GUI (if available).

-html   Outputs the device tree as an HTML page.

-xml   Outputs the device tree as an XML tree.

-json   Outputs the device tree as a JSON object (JavaScript Object Notation).

-short   Outputs the device tree showing hardware paths, very much like the output of HP-UX's **ioscan**.

-businfo

Outputs the device list showing bus information, detailing SCSI, USB, IDE and PCI addresses.

-dump *filename*

Dump collected information into a file (SQLite database).

-class *class*

Only show the given class of hardware. *class* can be found using **lshw -short** or **lshw -businfo**.

-C *class*

Alias for **-class** *class*.

-enable *test*

-disable *test*

Enables or disables a test. *test* can be **dmi** (for DMI/SMBIOS extensions), **device-tree** (for Open-Firmware device tree), **spd** (for memory Serial Presence Detect), **memory** (for memory-size guessing heuristics), **cpuinfo** (for kernel-reported CPU detection), **cpuid** (for CPU detection), **pci** (for PCI/AGP access), **isapnp** (for ISA PnP extensions), **pcmcia** (for PCMCIA/PCCARD), **ide** (for IDE/ATAPI), **usb** (for USB devices),**scsi** (for SCSI) or **network** (for network interfaces detection).

-quiet   Don't display status.

-sanitize

Remove potentially sensitive information from output (IP addresses, serial numbers, etc.).

-numeric

        Also display numeric IDs (for PCI and USB devices).

BUGS

        lshw currently does not detect Firewire(IEEE1394) devices.

        Not all architectures supported by GNU/Linux are fully supported (e.g. CPU detection).

        "Virtual" SCSI interfaces used for SCSI emulation over IDE are not reported correctly yet.

NOTES

        lshw must be run as super user or it will only report partial information.

FILES

        /usr/local/share/pci.ids

        /usr/share/pci.ids

        /etc/pci.ids

        /usr/share/hwdata/pci.ids

            A list of all known PCI ID's (vendors, devices, classes and subclasses).

        /proc/bus/pci/*

            Used to access the configuration of installed PCI busses and devices.

        /proc/ide/*

            Used to access the configuration of installed IDE busses and devices.

        /proc/scsi/*, /dev/sg*

            Used to access the configuration of installed SCSI devices.

        /dev/cpu/*/cpuid

            Used on x86 platforms to access CPU-specific configuration.

        /proc/device-tree/*

            Used on PowerPC platforms to access OpenFirmware configuration.

        /proc/bus/usb/*

            Used to access the configuration of installed USB busses and devices.

        /sys/*   Used on 2.6 kernels to access hardware/driver configuration information.

EXAMPLES

        lshw -short

            Lists hardware in a compact format.

        lshw -class disk -class storage

            Lists all disks and storage controllers in the system.

        lshw -html -class network

            Lists all network interfaces in HTML.

        lshw -disable dmi

            Don't use DMI to detect hardware.

SEE ALSO

        */proc/***, **linuxinfo**(1), **lspci**(8), **lsusb**(8)

COPYING

        lshw is distributed under the GNU GENERAL PUBLIC LICENSE (GPL) version 2.

AUTHOR

        lshw is maintained by Lyonel Vincent <lyonel@ezix.org>.

OTHER INFO

        The webpage for **lshw** is at
       <URL:http://lshw.org/>