

compare the lookup string against. Multiple match lines are specified in consecutive lines. Every match line is compared individually, and they are combined by OR. Every match line must start at the first character of the line.

Match patterns consist of literal characters, and shell-style wildcards:

? Asterisk "*" matches any number of characters

? Question mark "?" matches a single character

? Character list "[chars]" matches one of the characters chars listed between "[" and "]". A range may be specified as with a dash as "[first-last]". The match may be inverted with a caret "[^...]".

The match lines are followed by one or more key-value pair lines, which are recognized by a leading space character. The key name and value are separated by "=". An empty line signifies the end of a record. Lines beginning with "#" are ignored.

In case multiple records match a given lookup string, the key-value pairs from all records are combined. If a key is specified multiple times, the value from the record with the highest priority is used (each key can have only a single value). The priority is higher when the record is in a file that sorts later lexicographically, and in case of records in the same file, later records have higher priority.

The content of all hwdb files is read by systemd-hwdb(8) and compiled to a binary database located at /etc/udev/hwdb.bin, or alternatively /lib/udev/hwdb.bin if you want ship the compiled database in an immutable image. During runtime, only the binary database is used.

EXAMPLES

Example 1. General syntax of hwdb files

```
# /lib/udev/hwdb.d/example.hwdb
```

```
# Comments can be placed before any records. This is a good spot
```

to describe what that file is used for, what kind of properties

it defines, and the ordering convention.

A record with three matches and one property

mouse*:name:*Trackball*.*

mouse*:name:*trackball*.*

mouse*:name:*TrackBall*.*

ID_INPUT_TRACKBALL=1

The rule above could be also be written in a form that

matches Tb, tb, TB, tB:

mouse*:name:*[tT]rack[bB]all*.*

ID_INPUT_TRACKBALL=1

A record with a single match and five properties

mouse:usb:v046dp4041:name:Logitech MX Master:.*

MOUSE_DPI=1000@166

MOUSE_WHEEL_CLICK_ANGLE=15

MOUSE_WHEEL_CLICK_ANGLE_HORIZONTAL=26

MOUSE_WHEEL_CLICK_COUNT=24

MOUSE_WHEEL_CLICK_COUNT_HORIZONTAL=14

Example 2. Overriding of properties

/lib/udev/hwdb.d/60-keyboard.hwdb

evdev:atkbd:dmi:bvn*:bvr*:bd*:svnAcer*:pn*.*

KEYBOARD_KEY_a1=help

KEYBOARD_KEY_a2=setup

KEYBOARD_KEY_a3=battery

Match vendor name "Acer" and any product name starting with "X123"

evdev:atkbd:dmi:bvn*:bvr*:bd*:svnAcer:pnX123*.*

KEYBOARD_KEY_a2=wlan

```
# /etc/udev/hwdb.d/70-keyboard.hwdb
# disable wlan key on all at keyboards
evdev:atkbd:*
KEYBOARD_KEY_a2=reserved
PROPERTY_WITH_SPACES=some string
```

If the hwdb consists of those two files, a keyboard with the lookup string "evdev:atkbd:dmi:bnvAcer:bdXXXXX:bd08/05/2010:svnAcer:pnX123" will match all three records, and end up with the following properties:

```
KEYBOARD_KEY_a1=help
KEYBOARD_KEY_a2=reserved
KEYBOARD_KEY_a3=battery
PROPERTY_WITH_SPACES=some string
```

SEE ALSO

[systemd-hwdb\(8\)](#)

[systemd 249](#)

[HWDB\(7\)](#)