

**NAME**

sysctl – configure kernel parameters at runtime

**SYNOPSIS**

**sysctl** [*options*] [*variable*[=*value*]] [...]

**sysctl -p** [*file* or *regexp*] [...]

**DESCRIPTION**

**sysctl** is used to modify kernel parameters at runtime. The parameters available are those listed under */proc/sys/*. Procfs is required for **sysctl** support in Linux. You can use **sysctl** to both read and write sysctl data.

**PARAMETERS**

*variable*

The name of a key to read from. An example is *kernel.ostype*. The *'/'* separator is also accepted in place of a *'.'*.

*variable=value*

To set a key, use the form *variable=value* where *variable* is the key and *value* is the value to set it to. If the value contains quotes or characters which are parsed by the shell, you may need to enclose the value in double quotes.

**-n, --values**

Use this option to disable printing of the key name when printing values.

**-e, --ignore**

Use this option to ignore errors about unknown keys.

**-N, --names**

Use this option to only print the names. It may be useful with shells that have programmable completion.

**-q, --quiet**

Use this option to not display the values set to stdout.

**-w, --write**

Use this option when all arguments prescribe a key to be set.

**-p[*FILE*], --load[=*FILE*]**

Load in sysctl settings from the file specified or */etc/sysctl.conf* if none given. Specifying *-* as filename means reading data from standard input. Using this option will mean arguments to **sysctl** are files, which are read in the order they are specified. The file argument may be specified as regular expression.

**-a, --all**

Display all values currently available.

**--deprecated**

Include deprecated parameters to **--all** values listing.

**-b, --binary**

Print value without new line.

**--system**

Load settings from all system configuration files. Files are read from directories in the following list in given order from top to bottom. Once a file of a given filename is loaded, any file of the same name in subsequent directories is ignored.

*/run/sysctl.d/\*.conf*

*/etc/sysctl.d/\*.conf*

*/usr/local/lib/sysctl.d/\*.conf*

*/usr/lib/sysctl.d/\*.conf*

*/lib/sysctl.d/\*.conf*

*/etc/sysctl.conf*

- r, --pattern *pattern***  
Only apply settings that match *pattern*. The *pattern* uses extended regular expression syntax.
- A** Alias of **-a**
- d** Alias of **-h**
- f** Alias of **-p**
- X** Alias of **-a**
- o** Does nothing, exists for BSD compatibility.
- x** Does nothing, exists for BSD compatibility.
- h, --help**  
Display help text and exit.
- V, --version**  
Display version information and exit.

## EXAMPLES

```
/sbin/sysctl -a
/sbin/sysctl -n kernel.hostname
/sbin/sysctl -w kernel.domainname="example.com"
/sbin/sysctl -p/etc/sysctl.conf
/sbin/sysctl -a --pattern forward
/sbin/sysctl -a --pattern forward$
/sbin/sysctl -a --pattern 'net.ipv4.conf.(eth|wlan)0.arp'
/sbin/sysctl --system --pattern '^net.ipv6'
```

## DEPRECATED PARAMETERS

The **base\_reachable\_time** and **retrans\_time** are deprecated. The sysctl command does not allow changing values of these parameters. Users who insist to use deprecated kernel interfaces should push values to /proc file system by other means. For example:

```
echo 256 > /proc/sys/net/ipv6/neigh/eth0/base_reachable_time
```

## FILES

```
/proc/sys
/etc/sysctl.conf
```

## SEE ALSO

**sysctl.conf(5)** **regex(7)**

## AUTHOR

George Staikos <staikos@0wned.org>

## REPORTING BUGS

Please send bug reports to <procps@freelists.org>