

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.

`/etc/sysctl.d/*.conf`

`/run/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.d/*.conf
/run/sysctl.d/*.conf
/usr/local/lib/sysctl.d/*.conf
/usr/lib/sysctl.d/*.conf
/lib/sysctl.d/*.conf
/etc/sysctl.conf
```

SEE ALSO

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

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REPORTING BUGS

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