

NAME

timedatectl – Control the system time and date

SYNOPSIS

timedatectl [OPTIONS...] {COMMAND}

DESCRIPTION

timedatectl may be used to query and change the system clock and its settings, and enable or disable time synchronization services.

Use **systemd-firstboot**(1) to initialize the system time zone for mounted (but not booted) system images.

timedatectl may be used to show the current status of time synchronization services, for example **systemd-timesyncd.service**(8).

COMMANDS

The following commands are understood:

status

Show current settings of the system clock and RTC, including whether network time synchronization is active. If no command is specified, this is the implied default.

show

Show the same information as **status**, but in machine readable form. This command is intended to be used whenever computer-parsable output is required. Use **status** if you are looking for formatted human-readable output.

By default, empty properties are suppressed. Use **--all** to show those too. To select specific properties to show, use **--property=**.

set-time [TIME]

Set the system clock to the specified time. This will also update the RTC time accordingly. The time may be specified in the format "2012-10-30 18:17:16".

set-timezone [TIMEZONE]

Set the system time zone to the specified value. Available timezones can be listed with **list-timezones**. If the RTC is configured to be in the local time, this will also update the RTC time. This call will alter the `/etc/localtime` symlink. See **localtime**(5) for more information.

list-timezones

List available time zones, one per line. Entries from the list can be set as the system timezone with **set-timezone**.

set-local-rtc [BOOL]

Takes a boolean argument. If "0", the system is configured to maintain the RTC in universal time. If "1", it will maintain the RTC in local time instead. Note that maintaining the RTC in the local timezone is not fully supported and will create various problems with time zone changes and daylight saving adjustments. If at all possible, keep the RTC in UTC mode. Note that invoking this will also synchronize the RTC from the system clock, unless **--adjust-system-clock** is passed (see above). This command will change the 3rd line of `/etc/adjtime`, as documented in **hwclock**(8).

set-ntp [BOOL]

Takes a boolean argument. Controls whether network time synchronization is active and enabled (if available). If the argument is true, this enables and starts the first existing network synchronization service. If the argument is false, then this disables and stops the known network synchronization services. The way that the list of services is built is described below.

systemd-timesyncd Commands

The following commands are specific to **systemd-timesyncd.service**(8).

timesync-status

Show current status of **systemd-timesyncd.service**(8). If **--monitor** is specified, then this will monitor the status updates.

show-timesync

Show the same information as **timesync-status**, but in machine readable form. This command is intended to be used whenever computer-parsable output is required. Use **timesync-status** if you are looking for formatted human-readable output.

By default, empty properties are suppressed. Use **--all** to show those too. To select specific properties to show, use **--property=**.

ntp-servers *INTERFACE SERVER...*

Set the interface specific NTP servers. This command can be used only when the interface is managed by **systemd-networkd**.

revert *INTERFACE*

Revert the interface specific NTP servers. This command can be used only when the interface is managed by **systemd-networkd**.

OPTIONS

The following options are understood:

--no-ask-password

Do not query the user for authentication for privileged operations.

--adjust-system-clock

If **set-local-rtc** is invoked and this option is passed, the system clock is synchronized from the RTC again, taking the new setting into account. Otherwise, the RTC is synchronized from the system clock.

--monitor

If **timesync-status** is invoked and this option is passed, then **timedatectl** monitors the status of **systemd-timesyncd.service(8)** and updates the outputs. Use Ctrl+C to terminate the monitoring.

-a, --all

When showing properties of **systemd-timesyncd.service(8)**, show all properties regardless of whether they are set or not.

-p, --property=

When showing properties of **systemd-timesyncd.service(8)**, limit display to certain properties as specified as argument. If not specified, all set properties are shown. The argument should be a property name, such as "ServerName". If specified more than once, all properties with the specified names are shown.

--value

When printing properties with **show-timesync**, only print the value, and skip the property name and "=".

-H, --host=

Execute the operation remotely. Specify a hostname, or a username and hostname separated by "@", to connect to. The hostname may optionally be suffixed by a port ssh is listening on, separated by ":", and then a container name, separated by "/", which connects directly to a specific container on the specified host. This will use SSH to talk to the remote machine manager instance. Container names may be enumerated with **machinectl -H HOST**. Put IPv6 addresses in brackets.

-M, --machine=

Execute operation on a local container. Specify a container name to connect to.

-h, --help

Print a short help text and exit.

--version

Print a short version string and exit.

--no-pager

Do not pipe output into a pager.

EXIT STATUS

On success, 0 is returned, a non-zero failure code otherwise.

ENVIRONMENT***\$SYSTEMD_PAGER***

Pager to use when **--no-pager** is not given; overrides *\$PAGER*. If neither *\$SYSTEMD_PAGER* nor *\$PAGER* are set, a set of well-known pager implementations are tried in turn, including **less(1)** and **more(1)**, until one is found. If no pager implementation is discovered no pager is invoked. Setting this environment variable to an empty string or the value "cat" is equivalent to passing **--no-pager**.

\$SYSTEMD_LESS

Override the options passed to **less** (by default "FRSXMK").

Users might want to change two options in particular:

K

This option instructs the pager to exit immediately when Ctrl+C is pressed. To allow **less** to handle Ctrl+C itself to switch back to the pager command prompt, unset this option.

If the value of *\$SYSTEMD_LESS* does not include "K", and the pager that is invoked is **less**, Ctrl+C will be ignored by the executable, and needs to be handled by the pager.

X

This option instructs the pager to not send termcap initialization and deinitialization strings to the terminal. It is set by default to allow command output to remain visible in the terminal even after the pager exits. Nevertheless, this prevents some pager functionality from working, in particular pagged output cannot be scrolled with the mouse.

See **less(1)** for more discussion.

\$SYSTEMD_LESSCHARSET

Override the charset passed to **less** (by default "utf-8", if the invoking terminal is determined to be UTF-8 compatible).

\$SYSTEMD_COLORS

The value must be a boolean. Controls whether colorized output should be generated. This can be specified to override the decision that **systemd** makes based on *\$TERM* and what the console is connected to.

\$SYSTEMD_URLIFY

The value must be a boolean. Controls whether clickable links should be generated in the output for terminal emulators supporting this. This can be specified to override the decision that **systemd** makes based on *\$TERM* and other conditions.

EXAMPLES

Show current settings:

```
$ timedatectl
```

```
Local time: Thu 2017-09-21 16:08:56 CEST
```

```
Universal time: Thu 2017-09-21 14:08:56 UTC
```

```
RTC time: Thu 2017-09-21 14:08:56
```

```
Time zone: Europe/Warsaw (CEST, +0200)
```

```
System clock synchronized: yes
```

```
NTP service: active
```

```
RTC in local TZ: no
```

Enable network time synchronization:

```
$ timedatectl set-ntp true
```

```
==== AUTHENTICATING FOR org.freedesktop.timedate1.set-ntp ====
```

```
Authentication is required to control whether network time synchronization shall be enabled.
Authenticating as: user
Password: ****
==== AUTHENTICATION COMPLETE ====
```

```
$ systemctl status systemd-timesyncd.service
systemd-timesyncd.service – Network Time Synchronization
Loaded: loaded (/lib/systemd/system/systemd-timesyncd.service; enabled)
Active: active (running) since Mo 2015-03-30 14:20:38 CEST; 5s ago
Docs: man:systemd-timesyncd.service(8)
Main PID: 595 (systemd-timesyn)
Status: "Using Time Server 216.239.38.15:123 (time4.google.com)."
```

CGroup: /system.slice/systemd-timesyncd.service
595 /lib/systemd/systemd-timesyncd
...

Show current status of **systemd-timesyncd.service(8)**:

```
$ timedatectl timesync-status
Server: 216.239.38.15 (time4.google.com)
Poll interval: 1min 4s (min: 32s; max 34min 8s)
Leap: normal
Version: 4
Stratum: 1
Reference: GPS
Precision: 1us (-20)
Root distance: 335us (max: 5s)
Offset: +316us
Delay: 349us
Jitter: 0
Packet count: 1
Frequency: -8.802ppm
```

SEE ALSO

systemd(1), **hwclock(8)**, **date(1)**, **localtime(5)**, **systemctl(1)**, **systemd-timedated.service(8)**, **systemd-timesyncd.service(8)**, **systemd-firstboot(1)**