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.

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 **systemd-timesyncd.service**(8).

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, seperated 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.

COMMANDS

The following commands are understood:

status
Show current settings of the system clock and RTC, including whether network time synchronization

through systemd−timesyncd.service is active. Even if it is inactive, a different service might still synchronize the clock. 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 existed service listed in the environment variable *$SYSTEMD_TIMEDATED_NTP_SERVICES* of systemd−timedated.service. If the argument is false, then this disables and stops the all services listed in *$SYSTEMD_TIMEDATED_NTP_SERVICES*.

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=**.

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").

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. This allows **less** to handle Ctrl+C itself.

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

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)