Linux Set Date and Time From a Command Prompt

*by* VIVEK GITE *on* OCTOBER 2, 2006*last updated*MARCH 13, 2016

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How can I set the system date and time from the command prompt (bash shell)? I don’t have GUI installed and I am login over ssh session. How can I set date under Linux operating systems?  
  
Use the date command to display the current date and time or set the system date / time over ssh session. You can also run the date command from X terminal as root user.

This is useful if the Linux server time and/or date is wrong, and you need to set it to new values from the shell prompt.

You must login as root user to use date command.

Linux Display Current Date and Time

Just type the date command:  
$ date  
Sample outputs:

Wed Apr 23 10:32:59 CDT 2014

Linux Display The Hardware Clock (RTC)

Type the following hwclock command to read the Hardware Clock and display the time on screen:  
# hwclock -r  
OR  
# hwclock --show  
OR show it in Coordinated Universal time (UTC):  
# hwclock --show --utc  
Sample outputs:

Wed 23 Apr 2014 10:36:23 AM CDT -0.157239 seconds

Linux Set Date Command Example

Use the following syntax to set new data and time:

|  |
| --- |
| **date** --set="STRING" |

For example, set new data to 2 Oct 2006 18:00:00, type the following command as root user:  
# date -s "2 OCT 2006 18:00:00"  
OR  
# date --set="2 OCT 2006 18:00:00"  
You can also simplify format using following syntax:  
# date +%Y%m%d -s "20081128"

**Linux Set Time Examples**

To set time use the following syntax:  
# date +%T -s "10:13:13"  
Where,

* 10: Hour (hh)
* 13: Minute (mm)
* 13: Second (ss)

Use %p locale’s equivalent of either AM or PM, enter:  
# date +%T%p -s "6:10:30AM"  
# date +%T%p -s "12:10:30PM"

**How do I set the Hardware Clock to the current System Time?**

Use the following syntax:  
# hwclock --systohc  
OR  
# hwclock -w

A note about systemd based Linux system

With systemd based system you need to use the timedatectl command to set or view the current date and time. Most modern distro such as RHEL/CentOS v.7.x+, Fedora Linux, Debian, Ubuntu, Arch Linux and other systemd based system need to the timedatectl utility. Please note that the above command should work on modern system too.

**timedatectl: Display the current date and time**

Type the following command:  
$ timedatectl  
Sample outputs:

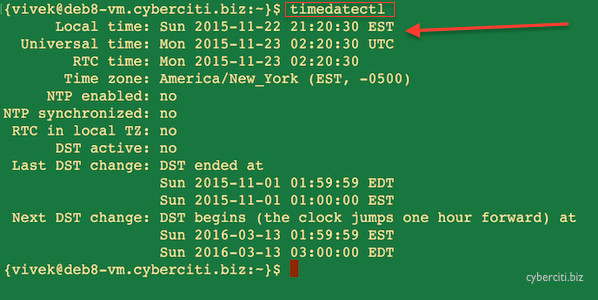
[](https://www.cyberciti.biz/faq/howto-set-date-time-from-linux-command-prompt/timedatecetl-command-show-date-time/)

Fig.01: Systemd Linux timedatecetl command to display the current date and time

**How do I change the current date using the timedatectl command?**

To change the current date, type the following command as root user:  
# timedatectl set-time YYYY-MM-DD  
OR  
$ sudo timedatectl set-time YYYY-MM-DD  
For example set the current date to 2015-12-01 (1st, Dec, 2015):  
# timedatectl set-time '2015-12-01'  
# timedatectl  
Sample outputs:

Local time: Tue 2015-12-01 00:00:03 EST

Universal time: Tue 2015-12-01 05:00:03 UTC

RTC time: Tue 2015-12-01 05:00:03

Time zone: America/New\_York (EST, -0500)

NTP enabled: no

NTP synchronized: no

RTC in local TZ: no

DST active: no

Last DST change: DST ended at

Sun 2015-11-01 01:59:59 EDT

Sun 2015-11-01 01:00:00 EST

Next DST change: DST begins (the clock jumps one hour forward) at

Sun 2016-03-13 01:59:59 EST

Sun 2016-03-13 03:00:00 EDT

To change both the date and time, use the following syntax:  
# timedatectl set-time YYYY-MM-DD HH:MM:SS  
Where,

1. HH : An hour.
2. MM : A minute.
3. SS : A second, all typed in two-digit form.
4. YYYY: A four-digit year.
5. MM : A two-digit month.
6. DD: A two-digit day of the month.

For example, set the date ’23rd Nov 2015′ and time to ‘8:10:40 am’, enter:  
# timedatectl set-time '2015-11-23 08:10:40'  
# date

**How do I set the current time only?**

The syntax is:  
# timedatectl set-time HH:MM:SS  
# timedatectl set-time '10:42:43'  
# date  
Sample outputs:

Mon Nov 23 08:10:41 EST 2015

**How do I set the time zone using timedatectl command?**

To see list all available time zones, enter:  
$ timedatectl list-timezones  
$ timedatectl list-timezones | more  
$ timedatectl list-timezones | grep -i asia  
$ timedatectl list-timezones | grep America/New  
To set the time zone to ‘Asia/Kolkata’, enter:  
# timedatectl set-timezone 'Asia/Kolkata'  
Verify it:  
# timedatectl

Local time: Mon 2015-11-23 08:17:04 IST

Universal time: Mon 2015-11-23 02:47:04 UTC

RTC time: Mon 2015-11-23 13:16:09

Time zone: Asia/Kolkata (IST, +0530)

NTP enabled: no

NTP synchronized: no

RTC in local TZ: no

DST active: n/a

**How do I synchronizing the system clock with a remote server using NTP?**

Simply type the following command:  
# timedatectl set-ntp yes  
Verify it:  
$ timedatectl  
Sample outputs:

Local time: Mon 2015-11-23 08:18:49 IST

Universal time: Mon 2015-11-23 02:48:49 UTC

RTC time: Mon 2015-11-23 02:48:50

Time zone: Asia/Kolkata (IST, +0530)

NTP enabled: yes

NTP synchronized: yes

RTC in local TZ: no

DST active: n/a

See also:

* You can also set new timzone using this [mini-howto](https://www.cyberciti.biz/faq/howto-linux-unix-change-setup-timezone-tz-variable/).
* Man pages – [hwclock(8)](http://www.manpager.com/linux/man8/hwclock.8.html), [date(1)](http://www.manpager.com/linux/man1/date.1.html), [timedatectl(8)](http://www.manpager.com/linux/man8/timedatectl.8.html)