

**NAME**

**last** - indicate last logins of users and ttys

**SYNOPSIS**

**last** [--libxo] [-swy] [-d [[CC]YY][MMDD]hhmm[.SS]] [-f *file*] [-h *host*] [-n *maxrec*] [-t *tty*] [*user ...*]

**DESCRIPTION**

The **last** utility will either list the sessions of specified *users*, *ttys*, and *hosts*, in reverse time order, or list the users logged in at a specified date and time. Each line of output contains the user name, the tty from which the session was conducted, any hostname, the start and stop times for the session, and the duration of the session. If the session is still continuing or was cut short by a crash or shutdown, **last** will so indicate.

The following options are available:

**--libxo** Generate output via libxo(3) in a selection of different human and machine readable formats. See `xo_parse_args(3)` for details on command line arguments.

**-d *date*** Specify the snapshot date and time. All users logged in at the snapshot date and time will be reported. This may be used with the **-f** option to derive the results from stored *utx.log* files. When this argument is provided, all other options except for **-f** and **-n** are ignored. The argument should be in the form `[[CC]YY][MMDD]hhmm[.SS]` where each pair of letters represents the following:

<i>CC</i>	The first two digits of the year (the century).
<i>YY</i>	The second two digits of the year. If <i>YY</i> is specified, but <i>CC</i> is not, a value for <i>YY</i> between 69 and 99 results in a <i>CC</i> value of 19. Otherwise, a <i>CC</i> value of 20 is used.
<i>MM</i>	Month of the year, from 1 to 12.
<i>DD</i>	Day of the month, from 1 to 31.
<i>hh</i>	Hour of the day, from 0 to 23.
<i>mm</i>	Minute of the hour, from 0 to 59.
<i>SS</i>	Second of the minute, from 0 to 60.

If the *CC* and *YY* letter pairs are not specified, the values default to the current year. If the *SS* letter pair is not specified, the value defaults to 0.

**-f *file*** Read the file *file* instead of the default, `/var/log/utx.log`.

**-h *host*** *Host* names may be names or internet numbers.

- n** *maxrec* Limit the report to *maxrec* lines.
- s** Report the duration of the login session in seconds, instead of the default days, hours and minutes.
- t** *tty* Specify the *tty*. Tty names may be given fully or abbreviated, for example, "last -t 03" is equivalent to "last -t tty03".
- w** Widen the duration field to show seconds, as well as the default days, hours and minutes.
- y** Report the year in the session start time.

If multiple arguments are given, and a snapshot time is not specified, the information which applies to any of the arguments is printed, e.g., "last root -t console" would list all of "root's" sessions as well as all sessions on the console terminal. If no users, hostnames or terminals are specified, **last** prints a record of all logins and logouts.

The pseudo-user *reboot* logs in at reboots of the system, thus "last reboot" will give an indication of mean time between reboot.

If **last** is interrupted, it indicates to what date the search has progressed. If interrupted with a quit signal **last** indicates how far the search has progressed and then continues.

## FILES

*/var/log/utx.log* login data base

## EXAMPLES

Show logins in pts/14 with the duration in seconds and limit the report to two lines:

```
$ last -n2 -s -t pts/14
bob pts/1 Wed Dec 9 11:08 still logged in
bob pts/2 Mon Dec 7 20:10 - 20:23 ( 776)
```

Show active logins at 'December 7th 20:23' of the current year:

```
$ last -d 12072023
bob pts/1 Mon Dec 7 20:10 - 20:23 (00:12)
bob pts/6 Mon Dec 7 19:24 - 22:27 (03:03)
alice ttyv0 Mon Dec 7 19:18 - 22:27 (03:09)
```

**SEE ALSO**

lastcomm(1), getutxent(3), libxo(3), xo\_parse\_args(3), ac(8), lastlogin(8)

**HISTORY**

**last** utility first appeared in 1BSD.

**AUTHORS**

The original version was written by Howard P. Katseff; Keith Bostic rewrote it in 1986/87 to add functionality and to improve code quality. Philip Paeps added libxo(3) support in August 2018.

**BUGS**

If a login shell should terminate abnormally for some reason, it is likely that a logout record will not be written to the *utx.log* file. In this case, **last** will indicate the logout time as "shutdown".