User log showing different dates

Why the user logs are showing two different dates?

Overview: This article explains reason behind SSH logs displaying two different dates.

As shown in the screenshot below, the user log for Jake on February 19th was generated on February 20th. These two different dates indicate that one represents the **log file creation date**, while the other represents the **end of the user session**. In this example, February 19th is the log file creation date, while February 20th marks the end of the user session.


```
root@gatewayserver:~# ls -l /var/log/ezlogin/full/jake/
total 40
-rw-r--r-- 1 jake ezuser 485 Feb 19 20:15 root~log.eznoc.com~Wed_Feb_19_20:15:44_2025
-rw-r--r-- 1 jake ezuser 485 Feb 19 20:15 root~log.eznoc.com~Wed_Feb_19_20:15:46_2025
-rw-r--r-- 1 jake ezuser 485 Feb 19 20:15 root~log.eznoc.com~Wed_Feb_19_20:15:48_2025
-rw-r--r-- 1 jake ezuser 519 Feb 19 20:15 root~log.eznoc.com~Wed_Feb_19_20:15:51_2025
-rw-r--r-- 1 jake ezuser 485 Feb 19 20:15 root~log.eznoc.com~Wed_Feb_19_20:15:54_2025
-rw-r--r-- 1 jake ezuser 485 Feb 19 20:15 root~log.eznoc.com~Wed_Feb_19_20:15:56_2025
-rw-r--r-- 1 jake ezuser 485 Feb 19 20:16 root~log.eznoc.com~Wed_Feb_19_20:15:59_2025
-rw-r--r-- 1 jake ezuser 485 Feb 19 20:16 root~log.eznoc.com~Wed_Feb_19_20:16:02_2025
-rw-r--r-- 1 jake ezuser 485 Feb 19 20:16 root~log.eznoc.com~Wed_Feb_19_20:16:05_2025
-rw-r--r-- 1 jake ezuser 700 Feb 20 00:00 root~log.eznoc.com~Wed_Feb_19_20:18:41_2025
root@gatewayserver:~#
```

Step 1(A): Run the below command on the gateway server to display detailed information about the specified log file

```
root@gateway:~# stat /path/to/log/file

Example:

root@gateway:~# stat /var/log/ezlogin/full/jake/root~log.eznoc.com~Wed_Feb_19_20:18:41_2025
File: /var/log/ezlogin/full/jake/root~log.eznoc.com~Wed_Feb_19_20:18:41_2025
Size: 700 Blocks: 8 IO Block: 4096 regular file
Device: 8,1 Inode: 663370 Links: 1
Access: (0644/-rw-r--r--) Uid: ( 1008/ jake) Gid: ( 1001/ ezuser)
Access: 2025-02-19 20:18:41.458121452 +0530
Modify: 2025-02-20 00:00:04.106094578 +0530
Change: 2025-02-20 00:00:04.106094578 +0530
Birth : 2025-02-19 20:18:41.458121452 +0530

From the above output Birth date indicates the log file creation date
```

Alternative method to view detailed information about the specified log file

Step 1(B): You can also run below command on the gateway server to get the log file creation date

```
root@gateway:~# ls -lt --time=atime <filename>

Example:

root@gateway:~# ls -lt --time=atime /var/log/ezlogin/full/jake/root~l
og.eznoc.com~Wed_Feb_19_20:18:41_2025
-rw-r--r-- 1 jake ezuser 700 Feb 19 20:18 /var/log/ezlogin/full/jake/
root~log.eznoc.com~Wed_Feb_19_20:18:41_2025
```

2. How to log all SSH commands with timestamps?

At the moment only the ssh session start time and end time are recorded and not the times when each command is run. In order to have the timestamps of commands executed in SSH, the easiest method would be add the date in the command prompt in the bash shell as follows.

Step 2(A): For Ubuntu and Debian, create **/etc/bashrc** file and add the below line at end of the file.

```
root@remote_server:~# vi /etc/bashrc


PS1="[u@h D{%Y%m%d-%H:%M:%S}]$ "
```

Step 2(B): For the **root user,** edit the .bashrc file and add the below lines at the end of the file.

```
root@remote_server:~# vi /root/.bashrc
```

```
if [ -f /etc/bashrc ]; then
. /etc/bashrc
fi
```

An example of a timestamp for a root user in Ubuntu:-

```
[root@log 20250225-17:12:25]$ uptime

17:12:28 up 19:22, 2 users, load average: 0.07, 0.03, 0.00

[root@log 20250225-17:12:28]$
```

Add timestamp for command prompt in CentOS, Ubuntu, Debian, and SUSE Linux

Backend will config the date and timestamp as shown below.

SSH log

Linux log.eznoc.com 6.1.0-30-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.124-1 (2025-01-12) x86_64

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permitted by applicable law.
Last login: Fri Feb 21 19:27:16 2025 from 192.168.1.44

[root@log 20250221-19:31:35]$

[root@log 20250221-19:31:37]$ whoami

root
[root@log 20250221-19:31:39]$ uptime

19:38:04 up 4:31, 3 users, load average: 0.00, 0.00, 0.00
[root@log 20250221-19:38:04]$

[root@log 20250221-19:38:05]$ df -h

Filesystem Size Used Avail Use% Mounted on
udev 954M 0 954M 0% /dev
tmpfs 198M 584K 197M 1% /run
/dev/sda1 22G 6.5G 14G 33% /
tmpfs 986M 0 986M 0% /dev/shm
tmpfs 5.0M 8.0K 5.0M 1% /run/lock
tmpfs 197M 4.0K 197M 1% /run/user/0
[root@log 20250221-19:38:19]$

[root@log 20250221-19:38:20]$ logout

```
root@gatewayserver:~#
root@gatewayserver:~# cat /var/log/ezlogin/full/admin/root~log.eznoc.com~Fri_Feb_21_19:31:35_2025
Linux log.eznoc.com 6.1.0-30-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.124-1 (2025-01-12) x86_64

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[root@log 20250221-19:31:35]$
[root@log 20250221-19:31:37]$ whoami
root
[root@log 20250221-19:31:39]$ uptime
 19:38:04 up  4:31,  3 users,  load average: 0.00, 0.00, 0.00
[root@log 20250221-19:38:04]$
[root@log 20250221-19:38:05]$ df -h
Filesystem       Size  Used Avail Use% Mounted on
udev             954M     0  954M   0% /dev
tmpfs            198M  584K  197M   1% /run
/dev/sda1         22G  6.5G   14G  33% /
tmpfs            986M     0  986M   0% /dev/shm
tmpfs            5.0M  8.0K  5.0M   1% /run/lock
tmpfs            197M  4.0K  197M   1% /run/user/0
[root@log 20250221-19:38:19]$
[root@log 20250221-19:38:20]$ logout
```