



SAR

System Activity
Report

SAR

.Collects data about CPU,
Memory usage, disk activity and
many other performance metrics

Installation

`.sudo apt install or dnf install sysstat`

`.sudo systemctl enable sysstat`

`.sudo systemctl start sysstat`

`.systemctl status sysstat`

`$ sar -V`

`sysstat version 12.6.1`

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Usage

- .Sar can collect current and past data

- .Example:

- Sar 10 5 (will collect 5 samples every 10 seconds of CPU data)

- .Sar -u will show the cpu stats for today

Historical Data

.Sysstat collects data on a daily basis and stores it in /var/log/sysstat (or /var/log/adm/sa)

```
/var/log/sysstat$ ls -l
```

```
total 3224
```

```
-rw-r--r-- 1 root root 251140 Jul 17 16:40 sa17  
-rw-r--r-- 1 root root 241700 Jul 18 16:30 sa18  
-rw-r--r-- 1 root root 44572 Jul 19 14:30 sa19  
-rw-r--r-- 1 root root 39704 Jul 20 18:24 sa20  
-rw-r--r-- 1 root root 198428 Jul 21 14:31 sa21  
-rw-r--r-- 1 root root 222616 Jul 22 16:49 sa22  
-rw-r--r-- 1 root root 463068 Jul 23 23:50 sa23  
-rw-r--r-- 1 root root 323232 Jul 24 11:00 sa24  
-rw-r--r-- 1 root root 64125 Jul 21 07:51 sar20  
-rw-r--r-- 1 root root 314370 Jul 22 07:54 sar21  
-rw-r--r-- 1 root root 350889 Jul 23 08:07 sar22  
-rw-r--r-- 1 root root 731734 Jul 24 08:07 sar23
```

Historical Data -cont-

- .There are 2 types of files sa and sar.
- The sa file is a binary file that contains the raw data
- The sar file is an ASCII file
- The number at the end denotes the day of the month.
- le: sa09 is the data from the 9th of July.
- .sar -2 will show CPU data from yesterday
- .sar -f /var/log/sysstat/sa20 will show data from the 20th.

Historical Data -cont-

.Time Range

`-sar -s 12:41:01 -e 17:27:00 -f /var/log/sysstat/sa20`

.Cron – sets up collection intervals

`–/etc/cron.d/sysstat`

Options

- .CPU – `sar -P ALL` or (individual cpu numbers)
- .Memory – `sar -r`
- .Swap – `sar -S`
- .I/O – `sar -b`
- .Network – `sar -n IP` (shows IPv4)
- .Load Average – `sar -q`

Graphs

- isag

- apt or dnf install isag

- isag -m sa20

- Ksar – java utility to visualize sar data

- <https://sourceforge.net/projects/ksar/>

- LC_ALL=C sar -A -f /var/log/sysstat/sa20 > sa20text.txt

- java -jar kSar.jar

- Can save to file / pdf