

**SYSSTAT(5)**

**Linux User's Manual**

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## **NAME**

**sysstat - sysstat configuration file.**

## **DESCRIPTION**

This file is read by **sa1(8)** and **sa2(8)** shell scripts from the **sysstat's** set of tools. It consists of a sequence of shell variable assignments used to configure **sysstat** logging. The variables and their meanings are:

### **COMPRESSAFTER**

Number of days after which daily data files are to be compressed. The compression program is given in the **ZIP** variable.

### **DELAY\_RANGE**

Tell **sa2** script to wait for a random delay in the indicated range before running. This delay is expressed in seconds, and is aimed at preventing a massive I/O burst at the same time on VM sharing the same storage area. A value of 0 means that **sa2** script will generate its reports files immediately.

## **HISTORY**

The number of days during which a daily data file or a report

days will be removed by the `sa2(8)` shell script. Data files and reports are normally saved in the `/var/log/sysstat` directory, under the name `saDD` (for data files) or `sarDD` (for reports), where the `DD` parameter indicates the current day.

The number of files actually kept in the `/var/log/sysstat` directory may be slightly higher than the `HISTORY` value due to the way the `sa2` script figures out which files are to be removed (see below "How the `sa2(8)` script applies `HISTORY` value"). Using a value of 28 keeps a whole month's worth of data. If you set `HISTORY` to a value greater than 28 then you should consider using `sadc`'s option `-D` to prevent older data files from being overwritten (see `sadc(8)` manual page). In this latter case data files are named `saYYYYMMDD` and reports `sarYYYYMMDD`, where `YYYY` stands for the current year, `MM` for the current month and `DD` for the current day.

## How the `sa2(8)` script applies `HISTORY` value

The `sa2` script uses the `find` command with the `-mtime` option to figure out which files are to be removed. The `find` command interprets this value as "N 24 hour periods", ignoring any fractional part. This means that the last modified time of a given `sa[r]DD` data or report file, using a `HISTORY` of 1, has to have

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And for a HISTORY of 28 that would mean 29 days ago.

To figure out how a HISTORY of 28 is applied in practice, we need to consider that the sa2 script that issues the find command to remove the old files typically runs just before midnight on a given system, and since the first record from sadc can also be written to the previous day's data file (thereby moving its modification time up a bit), the sa2 script will leave 30 files untouched. So for a setting of 28, and counting the data file of the current day, there will always be 31 files (or 30 files, depending on the number of days in a month) in the /var/log/sysstat directory during the majority of a given day. E.g.:

April 30th: 31 files (Apr 30th-1st, Mar 31th)

May 1st: 30 files (May 1st, Apr 30th-2nd)

Yet we can note the following exceptions (as inspected at Noon of the given day):

February 28th: 31 files (Feb 28th-1st, Jan 31st, 30th & 29th)

March 1st: 30 files (Mar 1st, Feb 28th-2nd, Jan 31st & 30th)

March 2nd: 29 files (Mar 1st & 2nd, Feb 28th-3rd, Jan. 31st)

March 3rd: 28 files (Mar 1st-3rd, Feb 28th-4th)

March 4th - March 28th: 28 files

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March 30th: 30 files

March 31st: 31 files

(Determining the number of files in March on a leap year is left as an exercise for the reader).

Things are simpler if you use the sa[r]YYYYMMDD name format. Apply the same logic as above in this case and you will find that there are always HISTORY + 3 files in the /var/log/sysstat directory during the majority of a given day.

## REPORTS

Set this variable to false to prevent the sa2 script from generating reports (the sarDD files).

**SA\_DIR** Directory where the standard system activity daily data and report files are saved. Its default value is /var/log/sysstat.

## SADC\_OPTIONS

Options that should be passed to sadc(8). With these options (see sadc(8) manual page), you can select some additional data which are going to be saved in daily data files. These options are used only when a new data file is created. They will be ignored with an already existing one.

## YESTERDAY

By default `sa2` script generates yesterday's summary, since the cron job usually runs right after midnight. If you want `sa2` to generate the summary of the same day (for example when cron job runs at 23:53) set this variable to `no`.

**ZIP** Program used to compress data and report files.

## FILE

`/etc/sysstat/sysstat`

## AUTHOR

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## SEE ALSO

`sadc(8)`, `sa1(8)`, `sa2(8)`

<https://github.com/sysstat/sysstat>

<http://pagesperso-orange.fr/sebastien.godard/>