

NAME

atopacctd - process accounting daemon

SYNOPSIS

atopacctd [-v | topdirectory]

DESCRIPTION

The *atopacctd* daemon switches on the process accounting feature in the kernel and let the process accounting records be written to a file, called the source file from now. After process accounting is activated, the *atopacctd* daemon transfers every process accounting record that is available in the source file to a shadow file. Client processes (like *atop* processes) will read the shadow files instead of the process accounting source file.

In this way, the *atopacctd* daemon operates as a 'layer' between the process accounting file that is written by the kernel and the shadow accounting files that are read by *atop* processes.

This approach has the following advantages:

- o The *atopacctd* daemon takes care that the source file is kept to a limited size. As soon as its maximum size is reached, it is truncated to a size of zero again (this is not noticed by the *atop* processes).
- o The *atopacctd* daemon takes care that a shadow file is kept to a limited size. As soon as the current shadow file reaches this maximum size, the *atopacctd* daemon creates a new (subsequent) shadow file. While client processes still have the possibility to read the previous shadow file(s), the *atopacctd* daemon continues writing accounting records to the newest (current) shadow file. For this reason, the name of a shadow file consists of a 10-digit sequence number followed by the extension '.paf' (process accounting file). Old shadow files that are not used by client processes any more, are automatically removed by the garbage collector in the *atopacctd* daemon.
- o When no client processes are active (any more), all shadow files will be deleted and no records will be transferred to a shadow file any more. As soon as at least one client is activate again, the *atopacctd* daemon continues writing shadow files.

The directory **/var/run** is used as the default topdirectory. Below this top-directory, the source file **pacct_source** is created to which the kernel writes the process accounting records.

Furthermore, the subdirectory **pacct_shadow.d** is created as a 'container' for the shadow files. Apart from the shadow files, also the file **current** is maintained in this subdirectory, containing the sequence number of the current (newest) shadow file and the maximum number of records that will be written in each shadow file.

An alternative topdirectory can be specified as command line argument. When an alternative topdirectory is defined, also modify the configuration file **/etc/atoprc** to inform *atop* clients about this alternative location (see the **atoprc** man page). Such alternative topdirectory should be owned by root and may not be writable for the group or others (security reasons).

Notice that the kernel suspends writing process accounting records when the free space of the filesystem on which the process accounting file resides drops below 2%. Writing is resumed when the free space is 4% or more. These lowwater and highwater percentages can be configured via the **/proc/sys/kernel/acct** pseudo-file.

The *atopacctd* daemon suspends transferring process accounting records to shadow files when the free space of the filesystem on which the process accounting file resides drops below 5%. Transfer is resumed when the free space is 5% or more. Log messages are generated via syslog when writing to the current shadow file is suspended or resumed.

The **-v** flag can be used to verify the version of the *atopacctd* daemon.

FILES

/var/run/pacct_source

Regular file to which the kernel writes the process accounting records. This file will be regularly truncated.

/var/run/pacct_shadow.d/current

Regular file containing the sequence number of the current shadow file and the maximum number of records per shadow file.

/var/run/pacct_shadow.d/N.paf

Regular files containing the process accounting records that have been copied transparently from the source file (N represents a 10-digit sequence number).

SEE ALSO

atop(1), atopsar(1), atoprc(5), netatop(4), netatopd(8)
<http://www.atoptool.nl>

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