NAME

atoprc - atop/atopsar related rcfile

DESCRIPTION

This manual page documents the rcfile of the *atop* and *atopsar* commands. These commands can be used to monitor the system and process load on a Linux system.

The atoprc file contains the default settings. These settings are read during startup, first from the system-wide rcfile */etc/atoprc* and after that from the user-specific rcfile *~/.atoprc* (so system-wide settings can be overruled by an individual user). The options in both rcfiles are identical.

OPTIONS

The rcfile contains keyword-value pairs, one on every line (blank lines and lines starting with a #-sign are ignored).
The following keywords can be specified:

flags
A list of default flags for **atop** can be defined here. The flags which are allowed are 't', 'B', 'H', 'G', '2' till '9', 'g', 'm', 'd', 'n', 'u', 'p', 's', 'c', 'v', 'C', 'M', 'D', 'N', 'A', 'a', 'y', 'Y', 'f', 'F', 'R', '1', 'e', 'E' and 'x'.

twindir
The default absolute path name of the temporary directory in which the twin file should be allocated.

interval
The default interval value in seconds.

linelen
The length of a screen line when sending output to a file or pipe (default 80).

username
Regular expression or one numerical UID to select the users for which (active) processes will be shown.

procname
The default regular expression for the process names to be shown.

maxlinecpu
The maximum number of active CPUs that will be shown.

maxlinegpu
The maximum number of active GPUs that will be shown.

maxlinelvm
The maximum number of active logical volumes that will be shown.

maxlinemdd
The maximum number of active multiple devices that will be shown.

maxlinedisk
The maximum number of active disks that will be shown.

maxlinenfsm
The maximum number of NFS mounts that will be shown on an NFS client.

maxlineintf
The maximum number of active network interfaces that will be shown.

maxlinecont
The maximum number of active containers that will be shown.

maxlineifb
The maximum number of Infiniband ports that will be shown.

maxlinenuma
The maximum number of NUMA node metrics that will be shown. Notice that two lines are shown for each NUMA node.

maxlinellc
The maximum number of lines with LLC metrics that will be shown.

cpucritperc
The busy percentage considered critical for a processor (see section COLORS in the man-page of the *atop* command). This percentage is used to determine a weighted percentage for line coloring and sorting of active processes in text mode. When this value is zero, no line coloring or automatic sorting is performed for this resource.

dskcritperc
The busy percentage considered critical for a disk (see section COLORS in the man-page of the *atop* command). This percentage is used to determine a weighted percentage for line coloring and sorting of active processes in text mode. When this value is zero, no line coloring or automatic sorting is performed for this resource.

netcritperc
The busy percentage considered critical for a network interface (see section COLORS in the man-page of the *atop* command). This percentage is used to determine a weighted percentage for line coloring and sorting of active processes in text mode. When this value is zero, no line coloring or automatic sorting is performed for this resource.

memcritperc
The percentage considered critical for memory utilization (see section COLORS in the man-page of the *atop* command). This percentage is used to determine a weighted percentage for line coloring and sorting of active processes in text mode. When this value is zero, no line coloring or automatic sorting is performed for this resource.

swpcritperc
The occupation percentage considered critical for swap space (see section COLORS in the man-page of the *atop* command). This percentage is used to determine a weighted percentage for line coloring and sorting of active processes in text mode. When this value is zero, no line coloring or automatic sorting is performed for this resource.

swoutcritsec
The number of pages swapped out per second considered critical for for memory utilization (see section COLORS in the man-page of the *atop* command). This threshold is used in combination with 'memcritperc' to determine a weighted percentage for line coloring and sorting of active processes in text mode. When this value is zero, no line coloring or automatic sorting is performed for this resource.

almostcrit
A percentage of the critical percentage to determine if the resource is almost critical (see section COLORS in the man-page of the *atop* command). When this value is zero, no line coloring for 'almost critical' is performed.

cpubarwidth
Number of columns used per bar in the processor bar graph. The default value is 0 which means that the bar width will be scaled automatically (the wider the terminal, the more columns per bar up to a maximum of three). With the value 1, 2 or 3 the number of bars can be statically pinned to that number of columns, with one column of white space in between the bars.

colorinfo
Definition of color name for information messages (default: green) in text mode.
Allowed colors are: red green yellow blue magenta cyan black white.

colorthread
Definition of color name for thread-specific lines when using the 'y' option (default: yellow).
Allowed colors are: red green yellow blue magenta cyan black white.

coloralmost
Definition of color name for almost critical resources (default: cyan) in text mode.
Allowed colors are: red green yellow blue magenta cyan black white.

colorcritical
Definition of color name for critical resources (default: red) in text mode.
Allowed colors are: red green yellow blue magenta cyan black white.

atopsarflags
A list of default flags for **atopsar** can be defined here. The flags that are allowed are 'S', 'x', 'C', 'M', 'H', 'a', 'A' and the flags to select one or more specific reports.

perfevents
Defines whether or not the CPU cycle counter should be retrieved by **atop** via the 'perf' counters. The values 'auto' (default), 'enable' or 'disable' can be specified. In case of 'auto', the CPU cycle counter will not be retrieved on virtual machines due to the overhead of reading this counter in a guest.

pacctdir
The name of the topdirectory used by the **atopacctd** daemon. In this directory, the daemon creates a subdirectory **pacct_shadow.d** in which files will be written containing the process accounting records. The default topdirectory is **/var/run** and this option only has to be specified when the **atopacctd** daemon is started with an alternative topdirectory as command line argument.
This option can only be specified in the **/etc/atoprc** file (on system level)!

An example of the **/etc/atoprc** or **~/.atoprc** file:

```
flags         Aaf
interval      5
username
procname
maxlinecpu    4
maxlinedisk   10
maxlineintf   5
cpucritperc   80
almostcrit    90
atopsarflags  CMH
ownprocline   PID:50 VGROW:40 RGROW:45 COMMAND-LINE:50
ownpagline    PAGSCAN:3 BLANKBOX:0 PAGSWIN:3 PAGSWOUT:7
```

The keywords 'ownprocline' and 'ownpagline' are explained in the subsequent section.

OWN DEFINITION OF OUTPUT LINE

Via the rcfile it is possible to define the layout of the output lines yourself, i.e. you can define the layout of one line with process information with the keyword 'ownprocline' (to be selected with the key 'o' or the flag −o) and you can redefine all lines with system information.

The layout of an output-line can be defined as follows (notice that this should be specified as one line in the rcfile):

keyword <columnid>:<prio> [<columnid>:<prio> ...]

The **columnid** is the symbolic name of a column that should shown at this position in the output line.
The **prio** is a positive integer value that determines which columns have precedence whenever not all specified columns fit into the current screen-width. The higher value, the higher priority.
The column-specifications should be separated by a space. The order in which columns have been specified is the order in which they will be shown, with respect to their priority (columns that do not fit, will be dropped dynamically).

A special columnid for system lines is 'BLANKBOX'. This indicates that an empty column is required at this position. Also this special columnid is followed by a priority (usually low).

The following definition can be specified for process information:

ownprocline
The columnids are the names of the columns that are shown in the normal output of the process-related lines that are shown by *atop* such as 'PID', 'CMD', 'S', ... The only exception is the special columnid 'SORTITEM' that is used to show one of the columns CPU%/DSK%/MEM%/NET%, depending on the chosen sort-criterium.
An example of a user-defined process line:

ownprocline PID:20 PPID:10 SYSCPU:15 USRCPU:15 VGROW:14 VSIZE:12 RGROW:14 RSIZE:12 ST:8 EXC:7 S:11 SORTITEM:18 CMD:20

The following definitions are used internally by *atop* as the default system lines (you can redefine each of them in the rcfile as one line):

ownsysprcline
Redefinition of line labeled with 'PRC':

ownsysprcline PRCSYS:8 PRCUSER:8 BLANKBOX:0 PRCNPROC:7 PRCNZOMBIE:5 PRCCLONES:4 BLANKBOX:0 PRCNNEXIT:6

ownallcpuline
Redefinition of line labeled with 'CPU' for total CPU-utilization:

ownallcpuline CPUSYS:8 CPUUSER:7 CPUIRQ:4 BLANKBOX:0 CPUIDLE:5 CPUWAIT:6 BLANKBOX:0 CPUSTEAL:1 CPUGUEST:3

ownonecpuline
Redefinition of line labeled with 'CPU' for utilization of one CPU:

ownonecpuline CPUISYS:8 CPUIUSER:7 CPUIIRQ:4 BLANKBOX:0 CPUIIDLE:5 CPUIWAIT:6 BLANKBOX:0 CPUISTEAL:1 CPUIGUEST:3

owncplline
Redefinition of line labeled with 'CPL':

owncplline CPLAVG1:4 CPLAVG5:3 CPLAVG15:2 BLANKBOX:0 CPLCSW:6 CPLINTR:5 BLANKBOX:0 CPLNUMCPU:1

ownmemline
Redefinition of line labeled with 'MEM':

ownmemline MEMTOT:2 MEMFREE:5 MEMCACHE:3 MEMDIRTY:1 MEMBUFFER:3 MEMSLAB:3 BLANKBOX:0 BLANKBOX:0 BLANKBOX:0 BLANKBOX:0

ownswpline
Redefinition of line labeled with 'SWP':

ownswpline SWPTOT:3 SWPFREE:4 BLANKBOX:0 BLANKBOX:0 BLANKBOX:0 BLANKBOX:0 BLANKBOX:0 BLANKBOX:0 SWPCOMMITTED:5 SWPCOMMITLIM:6

ownpagline
Redefinition of line labeled with 'PAG':

ownpagline PAGSCAN:3 PAGSTALL:1 BLANKBOX:0 PAGSWIN:4 PAGSWOUT:3

owndskline
Redefinition of lines labeled with 'LVM', 'MDD' and 'DSK':

owndskline DSKNAME:8 DSKBUSY:7 DSKNREAD:6 DSKNWRITE:6 DSKKBPERRD:4 DSKKBPERWR:4 DSKMBPERSECRD:5 DSKMBPERSECWR:5 DSKAVQUEUE:1 DSKAVIO:5

ownnettrline
Redefinition of line labeled with 'NET' for transport:

ownnettrline NETTRANSPORT:9 NETTCPI:8 NETTCPO:8 NETUDPI:8 NETUDPO:8 NETTCPACTOPEN:6 NETTCPPASVOPEN:5 NETTCPRETRANS:4 NETTCPINERR:3 NETTCPORESET:20 NETUDPNOPORT:1 NETUDPINERR:3

ownnetnetline
Redefinition of line labeled with 'NET' for network:

ownnetnetline NETNETWORK:5 NETIPI:4 NETIPO:4 NETIPFRW:4 NETIPDELIV:4 BLANKBOX:0 BLANKBOX:0 BLANKBOX:0 NETICMPIN:1 NETICMPOUT:1

ownnetifline
Redefinition of line labeled with 'NET' for interfaces:

ownnetifline NETNAME:8 NETPCKI:7 NETPCKO:7 NETSPEEDIN:6 NETSPEEDOUT:6 NETCOLLIS:3 NETMULTICASTIN:2 NETRCVERR:5 NETSNDERR:5 NETRCVDROP:4 NETSNDDROP:4

The lines above are shown in the order as shown by *atop* in combination with the **-f** flag (in a very wide window you should be able to see all of the columns).

SEE ALSO

atop(1), atopsar(1), atopacctd(8), netatop(4), netatopd(8), logrotate(8)
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