NAME

    sa − Shell accounting

SYNOPSIS

    /etc/sa [**−abcjlnrstuv**] [file]

DESCRIPTION

    When a user logs in, if the Shell is able to open the file */etc/sha,* then as each command completes the Shell writes at the end of this file the name of the command, the user, system and real time consumed, and the user ID. *Sa* reports on, cleans up, and generally maintains this and other accounting files. To turn accounting on and off, the accounting file must be created or destroyed externally.

    Sa is able to condense the information in */etc/sha* into a summary file */usr/adm/sht* which contains a count of the number of times each command was called and the time resources consumed. This condensation is desirable because on a large system *sha* can grow by 100 blocks per day. The summary file is read before the accounting file, so the reports include all available information.

    If a file name is given as the last argument, that file will be treated as the accounting file; *sha* is the default. There are zillions of options:

a   Place all command names containing unprintable characters and those used only once under the name "***other."

b   Sort output by sum of user and system time divided by number of calls. Default sort is by sum of user and system times.

c   Besides total user, system, and real time for each command print percentage of total time over all commands.

j   Instead of total minutes time for each category, give seconds per call.

l   Separate system and user time; normally they are combined.

n   Sort by number of calls.

r   Reverse order of sort.

s   Merge accounting file into summary file */usr/adm/sht* when done.

t   For each command, report ratio of real time to the sum of user and system times.

u   Superseding all other flags, print for each command in the accounting file the day of the year, time, day of the week, user ID and command name.

v   If the next character is a digit *n,* then type the name of each command used *n* times or fewer. Await a reply from the terminal; if it begins with "y", add the command to the category "**junk**." This is used to strip out garbage.

FILES

    /etc/sha accounting
    /usr/adm/sht   summary

SEE ALSO

    sha(V), ac(VIII)