

Options available when running 'analyze'

The number of switches and options available in SarCheck continues to grow and this section is designed to help you decide how to do what you want. The following switches are used from the command line. The format is the 'analyze' command followed by the desired switches and then the sar report to be analyzed (for Linux, it is followed by the procstat data file).

For example: Creating an HTML-formatted report, with ps -elf data, tabular summary, and on a system with a large number of disks. By default, SarCheck will filter out information on 'uninteresting' disks, but it will still produce a paragraph on each disk. This can get a little hard to read, so we'll use the -dtbl switch to format the disk information into an HTML table, and the -dbusy switch to sort the disk information so that the busiest disks are at the top of the table. The -ptbl switch is also being used to format ps -elf statistics into a table. The -t switch will produce a tabular summary with cells that will be colored if SarCheck wants to draw your attention to specific data. Note that the -dtbl and -ptbl switches are most useful with the -html switch. The following command uses /var/adm/sa/sar23 as an example and assumes that you are in the /opt/sarcheck/bin directory or that /opt/sarcheck/bin is included in your PATH.

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analyze -html -ptbl -t -dtbl -dbusy /var/adm/sa/sar23 > sar23test.html
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| -cs (Version 7) | Turn off the custom settings section. |
| -cid (Linux only) | Include "cid:" at the beginning of the name in an HTML IMG tag. |
| -csv | Produce output in comma separated value (CSV) format. If the -html switch is used in conjunction with the -csv switch, these statistics will be printed as two HTML tables. If the -html switch is not used, the -csv switch will cause a SarCheck report to be generated with CSV output of statistics only.

Please note that the -csv switch puts parts of the SarCheck analysis into CSV format. The -gr switch is used to put the sar report and the tabular summary (see the -t switch) into CSV format. |
| -ctd (Solaris only) | Display disk devices using the c0t0d0 naming convention as well as the sd334 convention used in the sar report. To turn the option on permanently, add the CTD keyword to the sarcheck_parms file. For more information on the sarcheck_parms file refer to "SarCheck parms file keywords" pdf located in the /opt/sarcheck/doc directory. If the data is to be analyzed on a system other than where the sar data was collected include the static file in the analysis. Refer to the -static switch.

On systems with several thousand disk devices, the use of the -ctd switch may increase the CPU utilization required by SarCheck. In tests we have conducted, as much as 30 seconds of a single processor's time may be required for systems with several thousand disk devices. |
| -d | Print info on all disks if more than 12 disk drives were seen in sar. Because the SarCheck report will produce a paragraph on each disk, reports may get too verbose on systems with 30 or more disk devices. Without this option, SarCheck will "filter out" information on disks which are lightly used. Please note that not all versions of AIX support the collection of disk data by sar. |
| -dblp | Suppress warnings about suspiciously large database processes. |

-dbml	Suppress warnings about possible memory leaks in database processes.
-dbrp	Suppress warnings about possible runaway database processes.
-dbusy	If the -dtbl switch is used, -dbusy will sort the disk information by average percent busy. Please note that not all versions of AIX support the collection of disk data by sar.
-dcall	Disable limiting the number of warnings about suspiciously large, possible runaway, and possible memory leaks in processes.
-dclp	Disable limiting the number of warnings about suspiciously large processes.
-dcml	Disable limiting the number of warnings about possible memory leaks in processes.
-dcrp	Disable limiting the number of warnings about possible runaway processes.
-desktop (Linux)	Force the algorithms to see the system as a desktop, where latency is more important than throughput.
-diag	This option will add a paragraph to the report showing how full SarCheck's internal tables have become. If a table comes too close to becoming full, a message should appear in the SarCheck report asking you to send a copy of the report to support@sarcheck.com This switch will also print the exact command used to produce the report.
-dmy	This switch causes the date format used in the SarCheck report to appear in the format dd/mm/yyyy. To make this be your default use the DMY sarcheck_parms keyword in the /opt/sarcheck/etc/sarcheck_parms file. For more information on the sarcheck_parms file refer to "SarCheck parms file keywords" pdf located in the /opt/sarcheck/doc directory.
-dnz	Suppress the reporting of disks with no activity. This option is most likely to be useful when SarCheck is used on systems with thousands of disk devices. In one case where data on all 2,505 disks were reported in an HTML report using both tables and text, the size of report approached one megabyte. The size of the report was reduced by 90 percent with this switch.
-dserv	If the -dtbl switch is used, -dserv will sort the disk information by average service time. Please note that not all versions of AIX support the collection of disk data by sar and versions that do report disk statistics still have problems with service time. When the AIX implementation of sar supports this, we will be ready.
-dtbl	If the -html switch is used, -dtbl will produce a table of disk statistics instead of generating a paragraph on each disk. Cells in the table will be color coded to highlight interesting disk statistics. This option is recommended for large systems where 50 or more individual paragraphs on disk activity would be hard to comprehend.
-dtoo	If the -html switch is used, -dtoo will produce a table of disk statistics in addition to generating a paragraph on each disk. Cells in the table will be color coded to highlight interesting disk statistics and will link to the appropriate paragraph. Please note that not all versions of AIX support the collection of disk data by sar.

-dtbl and -dtoo	If the -html switch is not used, the -dtbl and -dtoo will cause disk statistics to be output in a comma separated value (CSV) format. CSV output should generally be produced with the -csv switch.
-en	Specify the ending time for data to be analyzed in a 24 hour format. Specifying 17 will cause data through 17:00:00 to be analyzed, and specifying 17:30 will cause analysis to stop with any data after 17:30:00. This switch will work on single day or multiple days of data and is usually used in conjunction with the -st switch.
-fs (AIX only)	Specify the filesystem data file to be included in SarCheck's analysis.
-fsd (AIX only)	Change the directory in which SarCheck puts the filesystem data files. To make this be your new default directory for filesystem data files use the FSDIR sarcheck_parms keyword in the /opt/sarcheck/etc/sarcheck_parms file. For more information on the sarcheck_parms file refer to "SarCheck parms file keywords" pdf located in the /opt/sarcheck/doc directory.
-g24	This switch will change the appearance of multiday graphs. It changes the graph to be displayed with an X-axis of up to 24 hours and data from different days will be superimposed. This can help to spot activity that occurs at the same time each day.
-gd	Change the directory in which SarCheck puts the graphs generated by gnuplot. To make this be your new default graph directory use the GRAPHDIR sarcheck_parms keyword in the /opt/sarcheck/etc/sarcheck_parms file. For more information on the sarcheck_parms file refer to "SarCheck parms file keywords" pdf located in the /opt/sarcheck/doc directory.
-gonly	Produce graphs only. This switch should be used together with the -jpeg, -jpg, or -png switches. The names of the graphs produced will be sent to stdout and no report will be produced.
-gr	Produce output which can be used by graphing tools. While the output is in comma separated value (CSV) format, this option is different from the -csv switch because it reformats the sar report instead of the analysis.
-gt32rpt (Linux)	Report on per-processor details if greater than 32 CPUs.
-h	Displays brief instructions and shows all of the possible switches.
-hg	How to produce graphs using the -jpg, -jpeg, and -png switches.
-hgd	Change the directory where the graphs appear to be in the HTML output's tags.
-hm	How to analyze multiple days of sar data.
-hp	How to analyze supplemental ps -elf data.
-html	Insert HTML tags in text for use by a browser. The -dtbl, -dtoo, -dserv, -dbusy, -ptbl, -ptoo, -t, -png and -jpg switches are likely to be of interest to you if you're using -html.

-ir (AIX only)	The recommendation algorithms will not make recommendations for any restricted tunable parameters or any parameters which are related to restricted parameters. This switch was added to version 7.01.43 of SarCheck for AIX.
-jpeg or -jpg	These switches will cause SarCheck to look for gnuplot and use it to produce graphs in JPEG format. The naming convention used by SarCheck will append either ".jpeg" or ".jpg" to the file name of the graph, depending on the switch you use. The creation of JPEG formatted graphs uses less CPU time than the creation of PNG formatted graphs. JPEG formatted graphs are also larger and do not look as crisp as PNG graphs, but they are much more likely to display correctly with older browsers.
-k	Allows you to change the activation key and software expiration date.
-lp	Allows you to report both legacy and persistent disk names in 11.3 data. This will result in SarCheck pre-7.01.07 behavior.
-nfs (Solaris only)	This switch causes disks which are NFS mounted to be treated as local disks by the analysis algorithms. This is probably not a useful thing to do and is provided for backward compatibility with older versions of SarCheck. Those versions did not ignore the statistics associated with NFS disks.
-newkey	Enter new activation key from the command line. Format is analyze -newkey expiration date(mm/dd/yy)and the key.
-nomp (Linux only)	Don't print individual CPU information on multiprocessor systems.
-nonice (Linux only)	Disregard %nice when analyzing CPU utilization.
-noparms	Ignore the contents of the sarcheck_parms file when generating the report.
-normss (AIX only)	Don't run the rmss program to see if any memory is being kept from use. A few systems don't respond to rmss, causing SarCheck to hang.
-o	Prints an order/registration form for those wishing to purchase a software license, or register their licensed software.
-p	Suppress page numbering & page breaks. This is especially useful when the output is piped to pg.
-ps	Incorporate the analysis of a single ps -elf file called /opt/sarcheck/ps/yyyymmdd where the date is extracted from the sar data.
-pd	Change the directory in which SarCheck expects to find ps -elf data. SarCheck will still determine the name of the ps -elf data file and the purpose of this switch is to allow you to store ps -elf data wherever you want. This data can take up a considerable amount of space. To make this be your new default directory for ps -elf data files use the PSELFDIR sarcheck_parms keyword in the /opt/sarcheck/etc/sarcheck_parms file. For more information on the sarcheck_parms file refer to "SarCheck parms file keywords" pdf located in the /opt/sarcheck/doc directory.
-pf	Include analysis of a specified file containing ps -elf data

-pv	Verbose analysis of ps -elf data, overridden by the -Q and -q switches.
-plp	Suppress warnings about suspiciously large processes.
-pml	Suppress warnings about possible memory leaks.
-prp	Suppress warnings about possible runaway processes.
-png	This switch will cause SarCheck to look for gnuplot and use it to produce graphs in PNG format. The naming convention used by SarCheck will append ".png" to the file name of the graph. The creation of PNG formatted graphs takes more CPU time on AIX. PNG formatted graphs are also smaller and look cleaner than JPEG graphs, but may not display correctly with older browsers.
-ptbl	<p>If the -html switch is used, -ptbl will produce a table of ps -elf statistics instead of generating a paragraph on each process whose resource utilization exceeds the threshold. Cells in the table will be color coded to highlight the interesting statistics. This option is recommended for systems where a large number of individual paragraphs would be hard to comprehend.</p> <p>If the -html switch is not used, -ptbl will cause ps -elf statistics to be output in a comma separated value (CSV) format. CSV output should generally be produced with the -csv switch, but it can be done by using -ptbl too.</p>
-ptoo	<p>If the -html switch is used, -ptoo will produce a table of ps -elf statistics in addition to generating a paragraph on each process whose resource utilization exceeds the threshold. Cells in the table will be color coded to highlight interesting statistics. If the -html switch is not used, -ptoo will cause ps -elf statistics to be output in a comma separated value (CSV) format. In addition, the -csv switch generates a paragraph on each process whose resource utilization exceeds the threshold.</p>
-Q	Print a non-verbose (super-Quiet) analysis. This option automatically sets the -p option.
-q	Print a less verbose (quiet) analysis.
-r	Print an analysis only if recommendations are made.
-ret0	Force a return code of zero. The analyze program normally returns zero if no recommendations are made and one if it makes recommendations. This option exists because some scheduling tools report non-zero return codes as errors or exceptional conditions.
-s	Display all the information needed to activate SarCheck.
-server (Linux only)	Force the algorithms to see the system as a server, where throughput is more important than latency.
-st	Specify the starting time for data to be analyzed in a 24 hour format. Specifying 09 (or just 9) will cause data starting at 09:00:00 to be analyzed, and specifying 9:30 will cause analysis to start with any data collected at or after 09:30:00. This switch will work on a single day or multiple days of data and is usually used in conjunction with the -en switch.

- static (Solaris only) Override the default static file and analyze a specific static file.
- staticdir (Solaris only) Override the default static directory but not the filename. To make this be your new default directory for static data files use the STATICDIR sarcheck_parms keyword in the /opt/sarcheck/etc/sarcheck_parms file. For more information on the sarcheck_parms file refer to "SarCheck parms file keywords" pdf located in the **/opt/sarcheck/doc** directory.
- summ Display only the text summary at the beginning of the SarCheck report.
- t This option will produce a summary of interesting statistics in a tabular format. This output can be parsed with relative ease. If the -html switch is used, the statistics will be presented in an HTML table, and cells in the table will be color coded to highlight noteworthy statistics. This option works well with -dtbl.
- tonly This option will produce nothing but a summary of interesting statistics in a tabular format. All recommendations, analysis, and other hopefully interesting text will vanish. If the -html switch is used, the statistics will be presented in an HTML table, and cells in the table will be color coded to highlight noteworthy statistics.
- vgtbl (HP-UX only) If the -html switch is used and ps -elf analysis has been requested, -vgtbl will produce a table of volume group statistics instead of generating a paragraph on each volume group. Cells in the table will be color coded to highlight interesting volume group statistics. This option is recommended for large systems where a large number of individual paragraphs on volume group activity would be hard to comprehend. If the -html switch is not used, -vgtbl will cause volume group statistics to be output in a comma separated value (CSV) format.
- vgtoo (HP-UX only) If the -html switch is used and ps -elf analysis has been requested, -vgtoo will produce a table of volume group statistics in addition to generating a paragraph on each volume group. Cells in the table will be color coded to highlight interesting volume group statistics and will link to the appropriate paragraph. If the -html switch is not used, -vgtoo will cause volume group statistics to be output in a comma separated value (CSV) format in addition to generating a paragraph on each volume group.
- w Suppress page breaks and newline characters, primarily for export to PC-based word processing programs.
- wide Change the width of the graphs generated by gnuplot. If you want to see graphs that are wider than the ones produced by the default width of 0.7 to 1.3, this switch can be used to produce wider graphs. To make this be your new default behavior use the WIDE sarcheck_parms keyword in the /opt/sarcheck/etc/sarcheck_parms file. For more flexibility, use the sarcheck_parms keyword HSIZE to specify the width.
- ymd This switch causes the date format used in the SarCheck report to appear in the format yyyy/mm/dd. To make this be your default use the YMD sarcheck_parms keyword in the /opt/sarcheck/etc/sarcheck_parms file. For more information on the sarcheck_parms file refer to "SarCheck parms file keywords" pdf located in the **/opt/sarcheck/doc** directory.