NAME

vnstati – image output support for vnStat

SYNOPSIS

vnstati [**–5bcdDehiLmosStvy?**] [**––95th** *mode*] [**–5g** [*limit*] [*height*]] [**––altdate**] [**––begin** *date*] [**––cache** *time*] [**––config** *file*] [**––days** [*limit*]] [**––db** *file*] [**––dbdir** *directory*] [**––dbiflist** [*mode*]] [**––debug**] [**––end** *date*] [**––fivegraph** [*limit*] [*height*]] [**––fiveminutes** [*limit*]] [**––headertext** *text*] [**––help**] [**–hg** [*mode*]] [**––hours** [*limit*]] [**––hoursgraph** [*mode*]] [**–hs** [*graph*]] [**––hsummary** [*graph*]] [**–i** *interface*] [**––iface** *interface*] [**–ic** [*mode*]] [**––invert–colors** [*mode*]] [**––large**] [**––limit** *limit*] [**––locale** *locale*] [**––months** [*limit*]] [**–ne**] [**–nh**] [**–nl**] [**––noedge**] [**––noheader**] [**––nolegend**] [**––output** *file*] [**–ru** [*mode*]] [**––rateunit** [*mode*]] [**––scale** *percent*] [**––small**] [**––style** *number*] [**––summary**] [**––top** [*limit*]] [**––transparent** [*enabled*]] [**––version**] [**–vs** [*graph*]] [**––vsummary** [*graph*]] [**––months** [*limit*]] [*interface*]

DESCRIPTION

The purpose of **vnstati** is to provide image output support for statistics collected using **vnstat**(1). The available image file formats depend on what is supported by the used GD library. All basic outputs of vnStat are supported excluding live traffic features. The image can be outputted either to a file or to standard output, with the later being limited to png image format.

OPTIONS

--95th *mode*

Show 95th percentile output graph for the ongoing month. This output uses the 5 minute resolution data of the ongoing month to calculate the 95th percentile traffic rate for received, transmitted or total as selected using the mandatory *mode* parameter. The 95th percentile will be shown as a horizontal line in the graph with the exact 95th percentile traffic rate visible in the legend section of the image. In addition, a one hour resolution traffic rate bar graph averaged from the 5 minute resolution data of the selected *mode* is presented. This output requires the **5MinuteHours** configuration option to have a value of at least 744 for storing all the necessary data, otherwise 100% coverage isn't possible. Available modes: 0 = received, 1 = transmitted, 2 = total.

--altdate

Use alternative date and time text location. The date and time text will be moved from the upper right header section to the lower left corner. This option will have no effect if **-nh, --noheader** has been selected.

-b, --begin *date*

Begin the list output with a specific date / time defined by *date* instead of the begin being selected based on the number of entries to be shown. If *date* isn't available in the database then the closest later date will be used. *date* supports the following formats: YYYY-MM-DD HH:MM, YYYY-MM-DD and "today". This option can only be used with list outputs.

-c, --cache *time*

Update output file only if at least *time* minutes have passed since the previous file update. This option is ignored if stdout is used as output.

--config *file*

Use *file* as configuration file instead of using automatic configuration file search functionality. If **--config** is used multiple times, the configuration settings from files later on the command line will override configuration settings loaded from earlier files if the settings defined in the files overlap.

-d, --days *[limit]*
Output traffic statistics on a daily basis for the last days. The length of the list will be limited to 30 entries unless configured otherwise or unless the optional *limit* parameter is used. All entries stored in the database will be shown if *limit* is set to 0.

--db *file*
Use *file* as database file instead of searching for a database from the directory specified in the configuration file or the hardcoded default if no configuration file is available. This option overrides **--dbdir**.

--dbdir *directory*
Use *directory* as database directory instead of using the directory specified in the configuration file or the hardcoded default if no configuration file is available. This option is ignored if **--db** is also defined.

--dbiflist *[mode]*
List interfaces currently in the database. If *mode* is not defined or is set to 0 then the output will use a one line verbose format. If *mode* is set to 1 then the output will contain one interface per line and if *mode* is set to 2 then only the interface count will be shown as a single number. See also **--iflist**.

-D, --debug
Show additional debug output.

-e, --end *date*
End the list output with a specific date / time defined by *date* instead of the latest date / time in the database. If *date* isn't available in the database then the closest earlier date will be used. *date* supports the following formats: YYYY-MM-DD HH:MM and YYYY-MM-DD. This option can only be used with list outputs. The top list also requires **--begin** to be used at the same time with this option.

-5g, --fivegraph *[limit] [height]*
Output traffic statistics with a 5 minute resolution for the last 48 hours using a bar graph. The width of the graph can be modified using the optional *limit* parameter which represents the number of 5 minute entries with 12 entries for each hour. The smallest supported value is 288 (last 24 hours). Additionally, the height of the graph can be modified using the optional *height* parameter. The smallest supported height is 150 pixels.

-5, --fiveminutes *[limit]*
Output traffic statistics with a 5 minute resolution for the last hours. The length of the list will be limited to 24 entries unless configured otherwise or unless the optional *limit* parameter is used. All entries stored in the database will be shown if *limit* is set to 0.

--headertext *text*
Show *text* in image header section instead of automatically generated interface identification. *text* is limited to 64 characters and may not get completely shown if longer than the width of the image. Use with **--altdate** if maximal space is needed. This option will have no effect if **-nh, --noheader** has been selected.

-h, --hours *[limit]*

Output traffic statistics on a hourly basis. The length of the list will be limited to 24 entries unless configured otherwise or unless the optional *limit* parameter is used. All entries store in the database will be shown if the *limit* is set to 0.

-hg, --hoursgraph *[mode]*

Output traffic statistics on a hourly basis for the last 24 hours using a bar graph. The optional *mode* parameter can be used to override the configuration file setting. Available modes: 0 = 24 hour sliding window, 1 = graph begins from midnight.

-hs, --hsummary *[graph]*

Output traffic summary with the graph selected using the **SummaryGraph** setting in the configuration file next to it using a horizontal layout. The optional *graph* parameter can be used to override the configuration file setting. Available graphs: 0 = hours, 1 = 5 minutes.

-i, --iface *interface*

Use *interface* instead of default or configured interface. It is also possible to merge the information of two or more interfaces using the *interface1+interface2+...* syntax. All provided interfaces must be unique and must exist in the database when the merge syntax is used. Optionally, depending on the **InterfaceMatchMethod** configuration setting, *interface* can be replaced with *alias* previously set using **vnstat --setalias**. Merge syntax isn't supported when *alias* is used. The **-i, --iface** option is optional and *interface* can be used as parameter on the command line for selecting the used interface even without the option being explicitly used.

-ic, --invert-colors *[mode]*

Invert image colors. Results in black becoming white, dark colors becoming light, light colors becoming dark and white becoming black. The optional *mode* parameter can be used to change the color inversion behaviour. Available modes: 0 = no color inversion, 1 = invert all colors except those used for rx and tx, 2 = invert all colors. When *mode* isn't specific, mode 1 will be used.

-L, --large

Use large fonts in output.

--limit *limit*

Set the maximum number of shown entries in list outputs to *limit*. Usage of **--limit** overrides the default list entry limit values and the optional *limit* parameter given directly for a list query. All entries stored in the database will be shown if *limit* is set to 0.

--locale *locale*

Use *locale* instead of using the locale setting specified in the configuration file or the system default if no configuration file is available.

-m, --months *[limit]*

Output traffic statistics on a monthly basis for the last months. The length of the list will be limited to 12 entries unless configured otherwise or unless the optional *limit* parameter is used. All entries stored in the database will be shown if *limit* is set to 0.

-ne, --noedge

Remove darker edges from around the image.

-nh, --noheader
Remove header containing title and update time. Time of the previous update will still be visible in the lower right corner using a less visible color.

-nl, --nolegend
Remove legend containing rx and tx color mapping information from the image.

-o, --output *file*
Write image to *file* and exit. The used image format is selected by the given file extension of *file*. For example, "image.png" results in the file getting written using the png image format due to the ".png" extension having been used. Usage of png image format usually results in the smallest file size without loss of detail or introduction of compression artifacts. Alternatively, output can be directed to stdout by giving "-" as *file* in which case png image format is used.

-ru, --rateunit *[mode]*
Swap the configured rate unit. If rate has been configured to be shown in bytes then rate will be shown in bits if this option is present. In the same way, if rate has been configured to be shown in bits then rate will be shown in bytes when this option is present. Alternatively, *mode* with either 0 or 1 can be used as parameter for this option in order to select between bytes (0) and bits (1) regardless of the configuration file setting.

--scale *percent*
Scale output to given *percent* resulting in the image being either smaller or larger than the default size.

-S, --small
Use small fonts in output.

--style *number*
Modify the content and style of outputs. Setting *number* to 3 will show average traffic rate in all outputs where it is supported. Other values will show bar graphics instead.

-s, --summary
Output traffic statistics summary.

-t, --top *[limit]*
Output all time top traffic days. The length of the list will be limited to 10 entries unless configured otherwise or unless the optional *limit* parameter is used. All entries stored in the database will be shown if *limit* is set to 0. When used with **--begin** and optionally with **--end**, the list will be generated using the daily data instead of separate top entries. The availability of daily data defines the boundaries the date specific query can access.

--transparent *[enabled]*
Toggle background color transparency depending of the **TransparentBg** setting in the configuration file. Alternatively, 0 or 1 can be given as parameter *enabled* for this option in order to either disable (0) or enable (1) transparency regardless of the configuration file setting.

-v, --version
Show current version.

-vs, --vsummary *[graph]*
Output traffic summary with the graph selected using the **SummaryGraph** setting in the configuration file below it using a vertical layout. The optional *graph* parameter can be used to override the configuration file setting. Available graphs: 0 = hours, 1 = 5 minutes.

-y, --years *[limit]*
Output traffic statistics on a yearly basis for the last years. The list will show all entries by default unless configured otherwise or unless the optional *limit* parameter is used. All entries stored in the database will also be shown if *limit* is set to 0.

-?, --help
Show a command option summary.

FILES

/var/lib/vnstat/
Default database directory.

/etc/vnstat.conf
Config file that will be used unless *$HOME/.vnstatrc* exists. See **vnstat.conf**(5) for more information.

EXAMPLES

vnstati -s -i eth0 -o /tmp/vnstat.png
Output traffic summary for interface eth0 to file /tmp/vnstat.png.

vnstati -vs -i eth0+eth1+eth2 -o /tmp/vnstat.png
Output traffic summary with hourly data under the normal summary for a merge of interfaces eth0, eth1 and eth2 to file /tmp/vnstat.png.

vnstati -h -c 15 -o /tmp/vnstat_h.png
Output hourly traffic statistics for default interface to file /tmp/vnstat_h.png if the file has not been updated within the last 15 minutes.

vnstati -d -ne -nh -o -
Output daily traffic statistics without displaying the header section and edges for default interface to standard output (stdout).

vnstati -m --config /home/me/vnstat.cfg -i -o -
Output monthly traffic statistics for default interface specified in configuration file /home/me/vnstat.cfg to standard output (stdout).

RESTRICTIONS

Depending on the built-in fonts provided by the GD library, not all characters may end up shown correctly when a UTF-8 locale is used.

Using long date output formats may cause misalignment in shown columns if the length of the date exceeds the fixed size allocation.

Scaling an image when background transparency is enabled may not result in transparency being retained.

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SEE ALSO

vnstat(1), **vnstatd**(8), **vnstat.conf**(5), **units**(7)