NAME
vnstat.conf − vnStat configuration file

SYNOPSIS
/etc/vnstat.conf

DESCRIPTION
vnstat(1), **vnstati**(1) and **vnstatd**(1) all use the same configuration file for configuration related settings. Some of the settings are common for all three programs. The file consists of keyword-argument pairs, one per line. Empty lines and lines starting with '#´ are interpreted as comments and not processed. Arguments may optionally be enclosed in double quotes (") in order to represent arguments containing spaces. Arguments can be padded with spaces or tabulator characters. A hardcoded default value will be used if a keyword can't be found from the configuration file or if the configured value cannot be parsed or is outside supported value range.

The configuration file is divided into three sections based on the usage of each keyword. The first section contains keywords that are considered common for all commands, the second section is for daemon related keywords and the last section is for image output.

COMMON KEYWORDS
DatabaseDir
> Specifies the directory where the database is to be stored. A full path must be given and a leading '/' isn't required.

DayFormat, MonthFormat, TopFormat
> Formatting of date in available outputs. Uses the same format as **date**(1). (vnstat and vnstati only)

DefaultDecimals
> Number of decimals to use in outputs. Value range: 0..2 (vnstat and vnstati only)

HourlyDecimals
> Number of decimals to use in hourly graph output. Value range: 0..2 (vnstat only)

HourlySectionStyle
> Select what kind of spacer is used for separating the numerical sections of the hourly graph output. 0 = none, 1 = '|', 2 = '][', 3 = '[ ]'. (vnstat only)

Interface
> Default interface used when no other interface is specified on the command line. (vnstat and vnstati only)

List5Mins, ListHours, ListDays, ListMonths, ListYears, ListTop
> Number of entries to show in list outputs unless overridden from the command line. Set to 0 to show all entries available in the database. (vnstat and vnstati)

Locale Locale setting to be used for prints. This replaces the LC_ALL environment variable. Set to "-" or leave empty in order to use the system default value. (vnstat and vnstati only)

OutputStyle
> Modify the content and style of text outputs. 0 = minimal and narrow output for terminal with limited width, 1 = normal output with bar column visible, 2 = same as 1 except rate is visible in

summary output, 3 = rate column is visible in all outputs where it is supported. (vnstat and vnstati only)

QueryMode

Default query mode when no parameters are given. 0 = normal, 1 = days, 2 = months, 3 = top, 5 = short, 6 = years, 7 = hours graph, 8 = xml, 9 = one line, 10 = json, 11 = hours and 12 = 5 minute. (vnstat only)

RateUnit

Select which unit is used when traffic rate is visible. 0 = bytes, 1 = bits. (vnstat and vnstati only)

RateUnitMode

Select used prefix when traffic rate is shown in bits per second. IEC binary prefixes are calculated with powers of 1024. SI decimal prefixes are calculated with powers of 1000. 0 = IEC binary prefixes (Kibit/s...), 1 = SI decimal prefixes (kbit/s...). (vnstat and vnstati only)

RXCharacter, TXCharacter

Character used for representing the percentual share of received and transmitted traffic in list mode outputs. (vnstat only)

RXHourCharacter, TXHourCharacter

Character used for representing the percentual share of received and transmitted traffic in hourly graph output. (vnstat only)

Sampletime

Defines how many seconds the −tr option will sample traffic. Value range: 2..600 (vnstat only)

UnitMode

Select how units are prefixed. IEC and JEDEC binary prefixes are calculated with powers of 1024. SI decimal prefixes are calculated with powers of 1000. 0 = IEC standard prefixes (B/KiB/MiB/GiB...), 1 = old style (JEDEC) binary prefixes (B/KB/MB/GB...), 2 = SI decimals prefixes (B/kB/MB/GB...) (vnstat and vnstati only)

DAEMON RELATED KEYWORDS

5MinuteHours

Data retention duration for the 5 minute resolution entries. The configuration defines for how many past hours entries will be stored. Set to -1 for unlimited entries or to 0 to disable the data collection of this resolution.

64bitInterfaceCounters

Select interface counter handling. Set to 1 for defining that all interfaces use 64-bit counters on the kernel side and 0 for defining 32-bit counter Set to -1 for using the old style logic used in earlier versions where counter values within 32-bits are assumed to be 32-bit and anything larger is assumed to be a 64-bit counter. This may produce false results if a 64-bit counter is reset within the 32-bits. Set to -2 for using automatic detection based on available kernel datastructures.

BandwidthDetection

Try to automatically detect **MaxBandwidth** value for each monitored interface. Mostly only ethernet interfaces support this feature. **MaxBandwidth** or interface specific **MaxBW** will be used as fallback value if detection fails. 1 = enabled, 0 = disabled.

BandwidthDetectionInterval

> How often in minutes interface specific detection of **MaxBandwidth** is done for detecting possible changes when **BandwidthDetection** is enabled. Can be disabled by setting to 0. Value range: 0..30

BootVariation

> Time in seconds how much the boot time reported by system kernel can variate between updates. Value range: 0..300

CheckDiskSpace

> Enable or disable the availability check of at least some free disk space before a database write. 1 = enabled, 0 = disabled.

CreateDirs

> Enable or disable the creation of directories when a configured path doesn't exist. This includes **DatabaseDir** , **LogFile** and **PidFile** directories. The **LogFile** directory will be created only when **UseLogging** has been set to 1. The **PidFile** directory will be created only if the daemon is started as a background process. The daemon process will try to create the directory using permissions of the user used to start the process.

DaemonGroup

> Specify the group to which the daemon process should switch during startup. The group can either be the name of the group or a numerical group id. Leave empty to disable group switching. This option can only be used when the process is started as root.

DaemonUser

> Specify the user to which the daemon process should switch during startup. The user can either be the login of the user or a numerical user id. Leave empty to disable user switching. This option can only be used when the process is started as root.

DailyDays

> Data retention duration for the one day resolution entries. The configuration defines for how many past days entries will be stored. Set to -1 for unlimited entries or to 0 to disable the data collection of this resolution.

HourlyDays

> Data retention duration for the one hour resolution entries. The configuration defines for how many past days entries will be stored. Set to -1 for unlimited entries or to 0 to disable the data collection of this resolution.

LogFile

> Specify log file path and name to be used if UseLogging is set to 1.

MaxBandwidth

> Maximum bandwidth for all interfaces. If the interface specific traffic exceeds the given value then the data is assumed to be invalid and rejected. Set to 0 in order to disable the feature. Value range: 0..50000

MaxBW

> Same as MaxBandwidth but can be used for setting individual limits for selected interfaces. The name of the interface is specified directly after the MaxBW keyword without spaces. For example

MaxBWeth0 for eth0 and MaxBWppp0 for ppp0. Value range: 0..50000

MonthlyMonths

Data retention duration for the one month resolution entries. The configuration defines for how many past months entries will be stored. Set to -1 for unlimited entries or to 0 to disable the data collection of this resolution.

MonthRotate

Day of month that months are expected to change. Usually set to 1 but can be set to alternative values for example for tracking monthly billed traffic where the billing period doesn't start on the first day. For example, if set to 7, days of February up to and including the 6th will count for January. Changing this option will not cause existing data to be recalculated. Value range: 1..28

MonthRotateAffectsYears

Enable or disable **MonthRotate** also affecting yearly data. Applicable only when **MonthRotate** has a value greater than one. 1 = enabled, 0 = disabled.

OfflineSaveInterval

How often in minutes cached interface data is saved to file when all monitored interfaces are offline. Value range: **SaveInterval**..60

PidFile   Specify pid file path and name to be used.

PollInterval

How often in seconds interfaces are checked for status changes. Value range: 2..60

SaveInterval

How often in minutes cached interface data is saved to file. Value range: (**UpdateInterval** / 60)..60

SaveOnStatusChange

Enable or disable the additional saving to file of cached interface data when the availability of an interface changes, i.e., when an interface goes offline or comes online. 1 = enabled, 0 = disabled.

TimeSyncWait

How many minutes to wait during daemon startup for system clock to sync if most recent database update appears to be in the future. This may be needed in systems without a real-time clock (RTC) which require some time after boot to query and set the correct time. 0 = wait disabled. Value range: 0..60

TopDayEntries

Data retention duration for the top day entries. The configuration defines how many of the past top day entries will be stored. Set to -1 for unlimited entries or to 0 to disable the data collection of this resolution.

TrafficlessEntries

Create database entries even when there is no traffic during the entry's time period. 1 = enabled, 0 = disabled.

UpdateFileOwner

Enable or disable the update of file ownership during daemon process startup. During daemon startup, only database, log and pid files will be modified if the user or group change feature (**DaemonUser** or **DaemonGroup**) is enabled and the files don't match the requested user or group. During manual database creation, this option will cause file ownership to be inherited from the database directory if the directory already exists. This option only has effect when the process is started as root or via sudo.

UpdateInterval

How often in seconds the interface data is updated. Value range: **PollInterval**..300

UseLogging

Enable or disable logging. 0 = disabled, 1 = logfile and 2 = syslog.

YearlyYears

Data retention duration for the one year resolution entries. The configuration defines for how many past years entries will be stored. Set to -1 for unlimited entries or to 0 to disable the data collection of this resolution.

IMAGE OUTPUT RELATED KEYWORDS

CBackground

Background color.

CEdge Edge color, if visible.

CHeader

Header background color.

CHeaderTitle

Header title text color.

CHeaderDate

Header date text color.

CLine Line color.

CLineL

Lighter version of line color. Set to '-' in order to use a calculated value based on **CLine**.

CRx Color for received data.

CRxD Darker version of received data color. Set to '-' in order to use a calculated value based on **CRx**.

CText Common text color.

CTx Color for transmitted data.

CTxD   Darker version of transmitted data color. Set to '-' in order to use a calculated value based on **CTx**.

HeaderFormat
> Formatting of date in header. Uses the same format as **date**(1).

HourlyRate
> Show hours with rate instead of transferred amount. 1 = enabled, 0 = disabled.

SummaryRate
> Show rate in summary output if available. 1 = enabled, 0 = disabled.

TransparentBg
> Set background color as transparent. 1 = enabled, 0 = disabled.

FILES

/etc/vnstat.conf
> Config file that will be used unless *$HOME/.vnstatrc* exists or alternative value is given as command line parameter.

RESTRICTIONS

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

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SEE ALSO

vnstat(1), **vnstati**(1), **vnstatd**(1), **units**(7)