Statistics

https://campus.barracuda.com/doc/53248405/

By default, the Barracuda NextGen Firewall F-Series generates statistics entries for most of the configured services. Each service or module creates its own statistics entries, and the system stores these entries in a database. You can view statistics for your system box and server processes, disk utilization, processor load, and traffic generation on the STATISTICS Tab.

Note that NextGen Firewall F-Series models F10, F100, F101, F18, and F80 do not offer statistics because of their limited storage architecture.

Please note that statistical data are not suitable for reliable and consistent auditing purposes. Depending on system load or I/O utilization, the NextGen Firewall F-Series may silently drop arising statistic data to prevent negative impacts on operative functions of the system.

For reliable auditing purposes, please consult the log output of the NextGen Firewall F-Series. For further information, see Logging.

The NextGen Firewall F-Series generates two different types of statistics:

- **Top Statistics** – Connection information. Identified by the suffix 'Top'.
- **Time Statistics** – Time information. Identified by the suffix 'Time'.

Statistics data are stored in the */var/phion/stat* directory. The */var/phion/stat* directory is the root directory of the statistics data structure. The data files are BDB files in binary format. You can view these files with the *showstat* utility (`/opt/phion/bin`).

DO NOT change anything within this directory.

Statistics Services

The statistics package represents an integral part of the NextGen Firewall F-Series box infrastructure and consists of two box services named *cstatd* and *qstatd*, along with a utility program named *dstats* that is regularly invoked by cron. The *dstats* utility processes and deletes statistical data according to configurable rules.

The following services are responsible for handling statistics data:

Service	Description
cstatd	Collects statistics files.
qstatd	Handles statistics queries and displays statistics files in the statistics viewer.
dstats	(*statcook* daemon) Validates and cooks (or compresses) statistics files. The utility is run by cron as daily job. *dstats* recognizes corrupted statistics files and prevents them from being collected by *cstatd* and *dstatm*. Available on stand-alone systems and the Barracuda NextGen Control Center.
dstatm	NextGen Control Center service. Collects statistics files from systems that are managed by the NextGen Control Center.
qstatm	NextGen Control Center service. Handles statistics queries and displays statistics files on the statistics viewer for the NextGen Control Center.

Box Statistics

You can view the following statistics for the box:

Statistics	Description
cpu(Time)	The CPU load x 100 is displayed in the graphic. The CPU load is an equivalent and has no unit. For example, on a single processor machine CPU load 1 states that a given process utilizes the whole processor. The equivalent on a dual processor machine is CPU load 0.5, which means a given process utilizes half of the available CPUs.
cputime	The amount of CPU time needed for running or completed processes is displayed. The unit is a millisecond per second.
disk	Status of available disk space (filling degree) of the single partitions, available in bytes and percentage.
fdesc	Number of file descriptors per NextGen Firewall F-Series box or server process.
mem	Main memory capacity in bytes per NextGen Firewall F-Series box or server process.
net	Net transfer statistic (in/out) per network interface in bytes, packets, and the number of errors in the configured network interface.
proc	Number of current box and server processes.
sock	Number of open sockets per box or server process.

Server Statistics

You can view the following statistics from the server:

Statistics	Description
byte (Time for Dst)	Bytes transferred for a certain destination address.
byte (Time for Src)	Bytes transferred for a certain source address.
byte (Time)	Bytes transferred.
byte (Top Dst)	Bytes transferred for a certain destination address.
byte (Top Src-Dst / Dst-Src)	Bytes transferred for a certain pair of source and destination addresses.
byte (Top Src)	Bytes transferred for a certain source address.
conn (Time for Dst)	Number of connections to a specific destination.
conn (Time for Src)	Number of connections from a specific source.
conn (Time)	Number of connections.
conn (Top for Dst)	Number of connections to a specific destination.
conn (Top for Src)	Number of connections from a specific source.
conn (Top for Src-Dst / Dst-Src)	Number of connections for a specific pair of source and destination addresses.
open-conn (Time)	Number of open connections.

Configure Statistics

Configure the statistics settings and specify how statistics data are handled, archived, and recorded.

> Make sure that the correct times are configured for your system. Otherwise, the date and time entries in the access cache will be incorrect and can cause other issues.

For more information, see How to Configure Statistics.

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