How to Configure the Watchdog

https://campus.barracuda.com/doc/41116330/

Activate the watchdog and specify the repair mode. Configure the operational settings, resource limits, and monitoring settings for the watchdog. You may first try running the watchdog in monitoring mode to report problems without rebooting the system. However, note that even in monitoring mode, the watchdog will still reboot the system after certain severe error conditions such as a full process table.

In this article:

Activate the Watchdog

1. Open the **Watchdog** page (**Config** > **Full Config** > **Box** > **Advanced Configuration**).
2. Click **Lock**.
3. Enable **Run S.M.A.R.T** to create an event if a critical condition occurs on a HD (Event-ID 34).
4. Enable **Run Watchdog** to start the watchdog.
5. Select a **Repair Mode**. For a list of selectable modes, see Watchdog.
6. Click **Send Changes** and **Activate**.

Configure Watchdog Details

1. Open the **Watchdog** page (**Config** > **Full Config** > **Box** > **Advanced Configuration**).
2. In the left navigation, select **Watchdog Details**.
3. Click **Lock**.
4. In the **Watchdog Operational Setup** section, specify the operational settings for the watchdog:
   - **Realtime Mode** – Enable to log the watchdog into memory so that it is never swapped out. On a system under heavy load, this setting minimizes the risk that the daemon process possibly might not manage to write to the kernel device in due time (60 seconds).
   - **Scheduler Priority** – The scheduler priority for operation in real-time mode. Unless you are a savvy Linux expert with a deep operating system knowledge, do not change the default setting of 1. Watchdog uses round-robin scheduling (SCHED_RR). The larger the number, the higher the priority of the process. Standard userspace processes are usually assigned priority 0.
   - **Check Interval[sec]** – The interval in seconds between two writes to the kernel device. The kernel drivers expects a write operation at least once every 60 seconds. Each write is accompanied by a check on all monitored system entities.
   - **Verbose Logging** – Enable verbose mode. This mode will log status information to syslogd

with facility LOG_LPR. Syslogd forwards this log traffic to the syslog interface psyslogd, which in turn redirects the log stream into the **Box > Watchdog > Monitor** log file. The load average, monitored process (pid) status, memory usage, and alive time of watchdog are reported.
    - Logtick – The number of monitoring intervals that are skipped before a verbose log message is written to syslogd. The default value of 3 reduces log traffic to decrease disk space consumption by 66%.
5. In the **Watchdog Monitored Entities** section, specify the system resource limits and monitoring settings for the watchdog:
    - **Max Memory Used** – The upper bound for memory usage before the repair binary steps into action (default: 95%). Both RAM and swap space are taken into account.
    - **Check System Load** – Enable to monitor the average system load.
    - **Max Load [1min]** – Maximum 1 min average system load. Default is 24.
    - **Max Load [5mins]** – Maximum 5 mins average system load. Default is 18.
    - **Max Load [15mins]** – Maximum 15 mins average system load. Default is 12.
    - **Watch Control Daemon** – Enable to monitor the process state of controld.
    - **Watch SSH Daemon** – Enable to monitor the process state of sshd.
    - **Watch Cron Daemon** – Enable to monitor the process state of the cron daemon.
    - **Watch Disk** – When enabled, the watchdog daemon performs a disktest (write/read).
    - **Max. successive Disktest failures** – Specifies the maximum number of fails allowed. If this number is surpassed, watchdog causes a hard reboot. There is an exponential backoff time between the tests (max. 4s).
6. Click **Send Changes** and **Activate**.