



What is a BMC watchdog timer?

The BMC watchdog timer in Dell PowerEdge Systems is a feature defined in the Intelligent Platform Management Interface (IPMI) v2.0 specification. It can restart, turn off, or cycle power to your server in your absence to support automatic system recovery functions.

Does ipmitool reset watchdog timer?

According to ipmitool manual, it will reset the IPMI Management Controller watchdog timer. As I understand, this command resets the watchdog timer back to 300s. Once the timer reaches 0, the system is rebooted. However, is there a some sort of watchdog automatically set to place during the installation of ipmitool?

Does 0x00 trigger a watchdog timer?

EDIT. Also when I trigger watchdog timer with echoing \0x00 to /dev/watchdog and then kept it untouched -- system is correctly rebooted after default 10 second timeout. So watchdog works good but at exactly 350 seconds from startup system reboots.

How often does a watchdog timer reset a computer?

the watchdog timer would reboot the hardware every 300 seconds, but at the same time a software timer resets the hardware watchdog timer every 5 seconds. So it is constantly being reset back to 300 seconds. It is done for the purpose where if your machine gets hung the hardware timer will countdown to 0 and cause a reboot within 300 seconds.

Does ipmitool see watchdog hardware?

Programs apparently see watchdog hardware (ipmitool with openipmi enabled): Freeipmi: However, after certain amount of time I get (with good "current countdown" values reported by programs above): [294.107534] Uhhuh. NMI received for unknown reason 21 on CPU 0. [294.107998] Do you have a strange power saving mode enabled?

Can interrupt storm cause a watchdog to reset?

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If you have an interrupt storm, it can also cause the watchdog to reset, even if the computer does not really "hang". And querying it repeatedly shows the countdown doing what we'd expect, albeit with slightly wonky numbers. But the result seems to work.



This command is used for starting and restarting the watchdog timer from the initial countdown value that was specified in the set watchdog timer command. If a pre-timeout interrupt has been configured, the reset watchdog timer command is not restart the timer once the pre-timeout interrupt interval has been reached. The only way to stop the timer once it has reached this ???

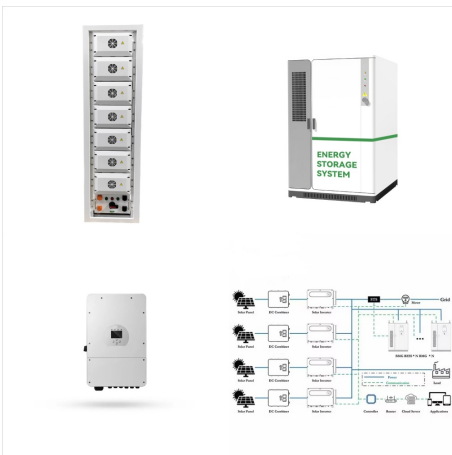


Ok, so here is the deal. 1) "As I understand, this command resets the watchdog timer back to 300s." Yes this command `/usr/bin/ipmitool mc watchdog reset` will do just that reset the ipmitool back to its "Initial Countdown" value which is 300s by default.. 2) Once the timer reaches 0, the system is rebooted.

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-r, --reset Reset BMC Watchdog Timer.-t, --start Start BMC Watchdog Timer. Does nothing if the timer is currently running. Identical to --reset command when the timer is stopped with the exception of the start command options listed below under START OPTIONS.-y, --stop Stop BMC Watchdog Timer. Stops the current timer.-c, --clear



The MC implements a standardized watchdog timer that can be used for a number of system timeout functions by system management software or by the BIOS. Setting a timeout value of 0 allows the selected timeout action to occur immediately. This provides a standardized means for devices on the IPMB, such as remote management cards, to perform



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The results are printed to the system log. + When compiled into the kernel, the kernel command line is available for configuring the watchdog:: -

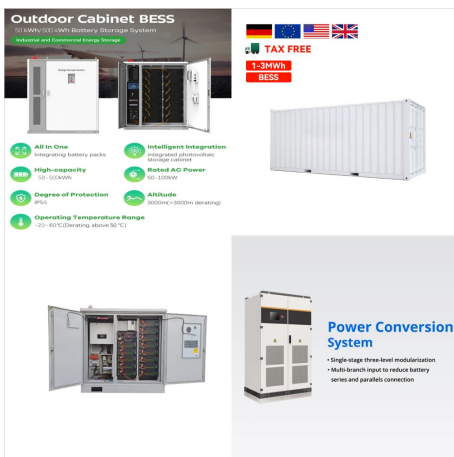
`ipmi_watchdog.timeout=<t>`

`ipmi_watchdog.pretimeout=<t>` -

`ipmi_watchdog.action=<action type>` -

`ipmi_watchdog.preaction=<preaction type>` -

`ipmi_watchdog.preop=<preop type>` - ???



`-r, --reset` Reset BMC Watchdog Timer. `-t, --start` Start BMC Watchdog Timer. Does nothing if the timer is currently running. Identical to `--reset` command when the timer is stopped with the exception of the start command options listed below under START OPTIONS. `-y, --stop` Stop BMC Watchdog Timer. Stops the current timer. `-c, --clear`



NOTE: The cold reset command is provided for platform development, test, and platform-specific initialization and recovery actions. The system actions of the cold reset command are platform specific. Issuing a cold reset command could have adverse effects on system operation, particularly if issued during run-time. Therefore, the cold reset command should not be used ???

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By default, the MC automatically logs the corresponding sensor-specific watchdog sensor event when a timer expiration occurs. A don't log bit is provided to temporarily disable the automatic logging. The don't log bit is automatically cleared (logging re-enabled) whenever a ???



The BMC (Board Management Controller) implements a standardized "Watchdog Timer" that can be used for a number of system timeout functions by system management software or by the BIOS (Basic Input Output System). Setting a timeout value of "0" allows the selected timeout action to occur immediately. This provides a standardized means for devices on the IPMB (Intelligent ???



A watchdog timer allows a selected action to occur when the timer expires. For timer actions, pre-timeout interrupts are currently not supported. The following actions are supported: System reset System power off System power cycle Alerting

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Informational iLO 2 06/08/2006 12:12 06/08/2006
12:12 1 BMC IPMI Watchdog Timer Timeout:
Action=System Power Reset. Message Added to
Integrated Management Log (IML) File Critical ASR
06/08/2006 12:44 06/08/2006 12:44 16 ASR
Detected by System ROM.



Detailed Description: The operating system or
potentially an application failed to communicate to
the baseboard management controller (BMC) within
the timeout period. Recommended Action: Check
the operating system, application, hardware, and
system event log for exception events. Message ID:
ASR0000. System Model: PowerEdge T620. Power
State: ON



Hi, we have a big problem with watchdog timer with
4 R740XD. We have disabled the watchdog in the
bios options but often we get a reboot with this alert
what's the problem? When the BMC/iDRAC
watchdog timer is enabled it heartbeats with
OpenManage Server Administrator. If the watchdog
is enabled and then OMSA is uninstalled it will likely

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System power off. System power cycle. Pre-timeout interrupt (optional) The system reset on timeout, system power off on timeout, and system power cycle on timeout action selections are mutually exclusive. The watchdog timer is stopped whenever the system is powered-down. A command must be sent to start the timer after the system powers up.



[23] ipmi0: <IPMI System Interface> port 0xca2,0xca3 on acpi [23] ipmi0: KCS mode found at io 0xca2 on acpi [23] ipmi0: IPMI device rev. 1, firmware rev. 3.45, version 2.0, device support mask 0xbf [23] ipmi0: Number of channels 2 [23] ipmi0: Attached watchdog [23] ipmi0: Establishing power cycle handler [25] ipmi1 failed to probe on isa0 [45] ichwd0: <Intel ???>



The Baseboard Management Controller (BMC) event log contains the message "Hard Reset", instead of the proper message "Power Cycle", after the system in which the IPMI watchdog with its parameter "action=powercycle" has been enabled, recovers from an operating system crash, or experiences a failure.

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bmc-watchdog controls a Baseboard Management Controller (BMC) watchdog timer. The bmc-watchdog tool typically executes as a cronjob or daemon to manage the watchdog timer. A user must be root in order to run bmc-watchdog. Listed below are ???



set watchdog timer ??? „reset watchdog timer ???
set watchdog timer ???



1 This is RedHat/Fedora specific, but can be used with other distros with minor adjustments. 2 3 Instructions for how to set up the watchdog daemon to work with IPMI's hardware watchdog 4 ----- 5 6 First, verify that the ipmitool utility is present on the system to allow 7 the watchdog timer to be turned off via the command line (which ipmitool).

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Watchdog Timer Is. Started/Running. ??? Stopped.
??? Watchdog Timer Actions. No Action. ??? Hard
Reset. ??? Power Down. ??? Power Cycle



DESCRIPTION ipmiutil wdt is a program that uses
IPMI commands to display and set WatchDog Timer
parameters.. This utility can use either any available
IPMI driver, or direct user-space IOs, or the IPMI
LAN interface if -N. This utility is an example of how
to access the IPMI watchdog parameters directly,
which allows changing the timer configuration.



BMC Watchdog Timer Commands?. The BMC
implements a standardized "Watchdog Timer" that
can be used for a number of system timeout
functions by system management software or by the
BIOS. Setting a timeout value of "0" allows the
selected timeout action to occur immediately. This
provides a standardized means for devices on the
IPMB to performs emergency recovery ???

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If one requests a "Power down" action for the watchdog using IPMI Set Watchdog command, then the requested action is correctly reported by subsequent IPMI Get Watchdog command, but ???