

IPMI Watchdog

The IPMI Watchdog feature is a very powerful capability but can also cause unintentional disruption if not implemented correctly.

There are two stages of IPMI Watchdog configuration, **BIOS** and **Management Software**

***Please Note** The Watchdog in the BIOS can be implemented in two ways, System BIOS and IPMI, please do not enable Watchdog in BIOS if it is not in the IPMI menus as it means this is the System BIOS watchdog and will not respond to IPMI Watchdog commands.

First it is recommended that the System Client be installed on the IPMI based server, second you enter the servers BIOS to enable the IPMI Watchdog. When enabling the IPMI Watchdog in BIOS you may have a timer value that can be chosen, we highly recommend having this at the highest possible amount of minutes as this timer starts as soon as the server is powered on and is not turned off or reconfigured until the System Client service is running.

IPMI Watchdog Process with configured Watchdog setting in System Client

IPMI Server is powered on	BIOS sets watchdog timer	Watchdog Timer is set by BIOS, timer starts counting down
Operating System Initializes	System Client reconfigures IPMI Watchdog timer settings that had been saved	Watchdog Timer is updated by System Client, timer starts counting down
System Runs normally	System Client resets IPMI Watchdog Timer each minutes	Timer is reset, timer starts counting down
System crashes	System Client no longer is working as system is no longer operational	Timer counts down, when it reaches 0 it performs the defined action

IPMI Watchdog Process with Watchdog setting not configured in System Client

IPMI Server is powered on	BIOS sets watchdog timer	Watchdog Timer is set by BIOS, timer starts counting down
Operating System Initializes	System Client reconfigures IPMI Watchdog timer to be disabled	Watchdog Timer is updated by System Client, timer stops
System Runs normally	System Client runs no IPMI Watchdog action	No action
System crashes	System Client no longer is working as system is no longer operational	System stays crashed

IPMI Watchdog Process with Watchdog enabled no System Client installed

IPMI Server is powered on	BIOS sets watchdog timer	Watchdog Timer is set by BIOS, timer starts counting down
Operating System Initializes	No application running to reset timer	Timer counts down, when it reaches 0 it performs the defined action set in BIOS