

Checkpoint **cpstat** diagnostics and information tool cheat sheet

Author: Yuri Slobodyanyuk, <https://www.linkedin.com/in/yurislobodyanyuk/>

NOTE

The tool is to be run in Expert mode. It is available on both Management Server and Gateway. The available **flavor** options depend on the blades enabled and their subscription status, also on platform used. To know what options are available on your specific Checkpoint - run **cpstat** without any switches. Example of using: **cpstat os -f ifconfig**

blades

Flavor	Description
fw	Statistics: Packets accepted, packets dropped, Peak number of connections, current Number of connections, Top Rule Hits (shows rules with IDs with the most hits),

OS

Flavor	Description
default	Product Name, SVN Foundation Version String, SVN Foundation Build Number, SVN Foundation Status (OK), OS Name (e.g. Gaia), OS Major Version (3), OS Minor Version (10), OS Build Number/SP Major/SP Minor/Version Level, Appliance SN (Serial Number), Appliance Name, Appliance Manufacturer.
ifconfig	Interface information: Name, IP Address, MTU, State, MAC address, RX Bytes (Received), TX Bytes (Transmitted), RX/TX Errors, RX/TX Drops, TX/RX Packets.
routing	Routing info - IPv4 routing table.
routing6	IPv6 routing table.
memory	Physical/virtual memory specs: Total/Active Virtual Memory, Total/Active/Free Real Memory, Memory Swaps/sec, Memory to Disk Transfers/sec.

Flavor	Description
cpu	CPU load stats (analog of Linux top): CPU User Time (%), CPU System Time (%), CPU Idle Time (%), CPU Usage (%), CPU Queue Length, CPU Interrupts/Sec, CPUs Number.
disk	Local hard disk stats: Disk Servicing Read\Write Requests Time, Disk Requests Queue, Disk Free Space (%), Disk Total Free Space (Bytes), Disk Available Free Space (Bytes), Disk Total Space (Bytes).
perf	Combined output of flavors memory , cpu , and disk above.
multi_cpu	CPU load as in cpu , but per processor/core.
multi_disk	Disk partitioning info, analog of df -h : Partition Name, Size, Used (%/bytes), Free Total (%/bytes), Free Available.
raidInfo	RAID disks and volumes info: Volume id, Volume type, Number of disks, Max LBA, Volume state, Volume flags, Volume size (GB), Volume id, Disk id, Disk number, Disk vendor, Disk product id, Disk revision, Disk max LBA, Disk state, Disk flags, Disk sync state, Disk size (GB).
sensors	Shows appliance hardware sensors stats: Temperature Sensors, Fan Speed Sensors, Voltage Sensors. Not relevant for Open Servers.
power_supply	Status of the power supply, appliances only.
hw_info	List appliance hardware info: Serial Number (SN), Appliance Model and name.
average_cpu	Average CPU load sharing (User, System, Idle), over unclear what period.
average_cpu	Average memory stats (time period unclear): Active Virtual Memory, Active Real Memory, Free Real Memory, Memory Swaps/Sec, Memory To Disk Transfers/Sec.
updates	All applied and available updates to this Check Point: Deployment agent build, Deployment agent status, Cloud connection status, number of Available packages, number of Available recommended packages, list of Recommended packages, Available Packages, Installed packages.

Flavor	Description
licensing	All about licenses: applied licenses and their status, expiration date, and quota used. Also UserCenter Account ID, CK Signature, Container SKU, Support level, Support expiration date, Activation status.
connectivity	Connectivity to the User Center status.
vsx	For VSX systems: Device name/type/context ID.
all	Combination of some, but not all flavors above: cpu, memory, ifconfig, routing, disk.

cpsemd - logging into the SmartEvent GUI

Flavor	Description
default	Status and stats of cpsemd service, responsible for logging into the SmartEvent GUI: Process Status, number of New events handled/Updates handled, Current database size, Database capacity, Events in database, Available database disk space, Is database full, Total database disk space.

vsec - cloud Controller

Flavor	Description
default	Status of vSEC Controller (Check Point firewall for virtualized environments like VMware ESXi, Microsoft Hyper-V and KVM): vSEC Controller Status (on/off), Number of disconnected Data Centers, Number of Data Centers, Number of imported Data Center objects, Number of gateways enforcing Data Center objects, for each Data Center: Controller, Type, Status, Imported Objects, Controller Updates. For Gateways Enforcing Data Center objects: Name, IP, Version, Update status.

cpsead - Correlation Unit

Flavor	Description
default	Stats of cpsead daemon responsible for Correlation Unit functionality: Process is alive, Connected to SEM, Logs Processed, No Free Disk Space.

cvpn - Mobile Access

Flavor	Description
cvpnd	Number of active sessions
sysinfo	OS name (Gaia), OS build, Product string.
products	IPS/SWS/ESOD versions.
overall	Overall status code/description.

fw - Firewall module

Flavor	Description
default	Installed Security Policy name, Total number of accepted/denied packets per interface, ISP links table (if any)

thresholds - Alert Thresholds

NOTE

Thresholds and their actions are configured via **threshold_config** CLI tool. The thresholds are saved (by default) to **\$FWDIR/conf/thresholds.conf**.

Flavor	Description
default	Active Profile Name, State, Number of thresholds, Number of active thresholds, Number of events since startup.
active_thresholds	Active Thresholds name, Category, Severity, Subject, State.
destinations	Alert destinations: name (Check Point log server), Type (Check Point Log Server), State (OK), number of alerts.
error	Threshold errors: Threshold name, its OID, Error description, Time of error occurrence.

polsrv - Policy Server

Flavor	Description
default	Policy server status - enabled/up, number of licensed/connected users.
all	Policy server status, versions major/minor, licensed/connected users.

svr - SmartReporter/SmartEvent

Flavor	Description
default	SmartEvent/SmartReporter server info: Product Name, SmartReporter Status, SmartReporter Version, SmartReporter Server State, Number of generations in queue, Enevtia Reporter Log Consolidator sessions (yes there is a typo in the tool "Enevtia" → "Eventia"): Log Server, Customer, State, pid, Started since, Last startup, Database queue length, Memory occupied, Current log file name, Log records processed since startup, Log records stored, Log records ignored, Log records read per second, Is part of sequence, Currently open consolidated records, Consolidation rate (X100), Size allocated for database [KB], Current database size [KB], Database target table name, Temporary records loaded into database, Committed recors per second, Permanent records loaded into database, Records added into database, DNS items in cache, DNS cache size, DNS cache hits, DNS cache misses, DNS cache hit rate (X100), DNS open requests.

ha - ClusterXL

Flavor	Description
default	Shows clusterXL version, Status (OK), Wokring Mode (Load SHaring/High Availability), State (Up/Down/Active), HA module state (s tarted).

Flavor	Description
all	CLusterXL info includes: Product Name, Major/Minor ClusterXL versions, Status, HA protocol version (2), Working Mode, HA State, Monitored Interfaces table with their IPs and status, CLuster IPs table, Sync table listing Sync interface name and IP address.

mg

Flavor	Description
default	Show management sessions info: administrator username currently connected, Windows domain name of the administrator PC or its IP address, and general Checkpoint Management server info like Product Name, Major/Minor versions, Build number, whether started or not, status (OK).
log_server	Log server stats and info: Log Receive Rate, Log Receive Rate Peak, Log Receive Rate Last 10 Minutes, Log Receive Rate Last Hour, Log Server Connected Gateways, their state (connected/not connected), Last Login Time, Log Receive Rate.
indexer	Log Indexer stats: Total Read Logs, Total Updates and Logs Indexed, Total Read Logs Errors, Total Updates and Logs Indexed Errors, Updates and Logs Indexed Rate, Read Logs Rate, Updates and Logs Indexed Rate (10min), Read Logs Rate (10min), Updates and Logs Indexed Rate (60min), Read Logs Rate (60min), Updates and Logs Indexed Rate Peak, Read Logs Rate Peak, Read Logs Delay.

fg

Flavor	Description
all	QOS version, kernel build, QOS Policy name, QOS Policy install time, interface table with statistics for average Bps/conns/packets, per interface limits.

https_inspection

Flavor	Description
default	State of HTTPS Inspection: On/Off.
hsm_status	Status of Hardware Security Module (HSM): Enabled/Disabled, HSM partition access, status for outbound HTTPS Inspection: HSM on/HSM off/HSM error.
all	Combined output from default and hsm_status flavors.

antimalware

Flavor	Description
default	Status of the antimalware blade (0 - disabled, 1 - enabled).
subscription_status	Subscription status for each Anti-Bot/Anti-Virus/Anti-Spam component. Info includes status, expiration date, description.
update_status	Antimalware blade updates status for Anti-Bot/Anti-Virus/Anti-Spam. The info includes status (up to date), Database version, package date, whether the next update is scheduled to run.
ab_prm_contracts	Anti-Malware premium contracts information: contract state, update status, DB version.
av_prm_contracts	Anti-Virus premium contracts information: contract state, update status, DB version.
scanned_hosts	Statistics for number of Scanned Hosts for Hour/Day/Week. Stats for number of Infected Hosts for Hour/Day/Week.
scanned_mails	Number of scanned mails.

ci - Content Inspection (Anti-virus)

Flavor	Description
default	Shows stats about Content Inspection/AV blade work: AV State code, AV Engine name (KSS - Kaspersky (?)) table version/signature version/date, name and count of top ever viruses, URL Filtering top blocked sites and categories, top blocked sources by AV/UF/File-Type, total scanned.

dlp - DLP

Flavor	Description
default	DLP status code.
dlp	Version, License status, LDAP Status, Traffic scans, DLP incidents, Scanned e-mails, E-mail incidents, Last E-mail scan, Quarantined messages, Size of quarantined messages, Sent e-mails, Expired e-mails, Discarded e-mails, Postfix queue length, Postfix errors, E-mails in queue older than 1 hour, Size of messages in queue, Free space in queue, Free space for quarantine, Quarantine status, HTTP scans, HTTP incidents, HTTP last scan, FTP scans, FTP incidents, FTP last scan, Bypass status, UserCheck clients, Last policy install status, Last scan time.
fingerprint	Fingerprint Current/Completed Tables DB info: Repository Id, Data Type Uid, Repository Root Path, Scan Id, Start Time, Repository Total Size, Repository Files, Repository Total Files Scanned, Duration, Status, Status Description, Repository Total Directories, Repository Unreach Total Directories, Fingerprinted Total Files, Total Skipped Files, Total Scanned Directories, Total Errors, Description, Data type name, Next Scheduled Scan Date.
exchange_agents	Status of Exchange agents: Name, Status, Total messages, Total scanned, Dropped, Uptime, Time since last message, Agent queue length, Exchange queue length, Avg. time per message, Avg. time per scanned message, Version, CPU usage, Memory usage, Policy timestamp.

ctnt - Content Awareness

Flavor	Description
default	Is Content Awareness blade active: True/False. Total files scanned, total data types detected.

scrub - Threat Extraction process

Flavor	Description
subscription_status	License/subscription status and expiration date.