13 March 2017

CPView: Monitor Security Gateway Statistics

R80.10

Guide

Check Point
SOFTWARE TECHNOLOGIES LTD.

Important Information

More Information

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Check Point is engaged in a continuous effort to improve its documentation.

Please help us by sending your comments mailto:cp_techpub_feedback@checkpoint.com?subject=Feedback on CPView: Monitor Security Gateway Statistics R80.10 Guide.

Revision History

Date	Description
13 March 2017	First release of this document

Contents

CPView

You can monitor your network activity and Software Blade performance using Check Point SmartView Monitor, and use SNMP-based management tools to monitor the system and to modify selected objects.

In R77.20, Check Point introduced another tool - CPView, a text based utility that runs on Check Point gateways. It shows statistical information about the system and the Check Point Software Blades. The data is continuously updated in different CPView views.

Starting CPView

To start CPView, run `cpview` in clish or Expert Mode, in SecurePlatform and in Gaia.

Syntax

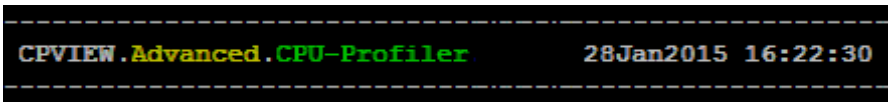
`cpview [ -t [<timestamp>] | -c <conf_file> | -p | history {on | off | stat}]`

Parameter	Description
`-t [<timestamp>]`	Start CPView in History mode to show a data snapshot, stored in the History Daemon database. If the timestamp is not specified, CPView shows the oldest available snapshot. If it is specified, CPView shows the database snapshot for the specific timestamp. The historical data is stored at configured refresh rate in `/var/log` for 30 days, unless the available storage space is less than 512 MB. The format of the `timestamp` is: `[Jan..Dec] [01..31] [4-digit Year] [hh:mm:ss]`.
`-c <conf_file>`	Load the configuration from the named file.
`-p`	Show all the data in one continuous view.
`history {on | off | stat}`	Control the history daemon: • `on` - start the history daemon • `off` - stop the history daemon • `stat` - show the current state of the history daemon (`activated` or not `activated`) **Note** - the state of the history daemon does not change after you restart Check Point applications.

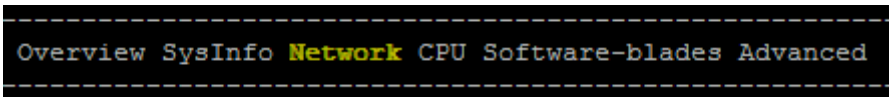
User Interface

The CPView user interface sections are:

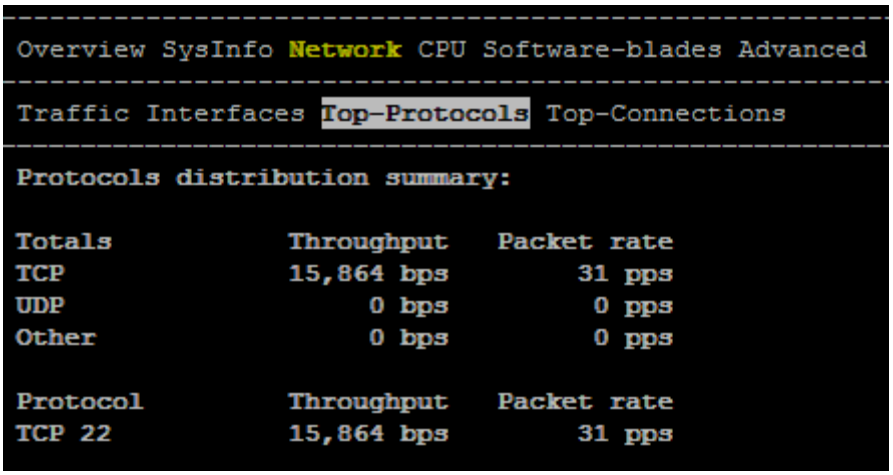
- **Header** - Shows the name of the view with the full navigation path and the current date and time



- **Navigation menus** - Open different views



- **View** - Shows the data collected by CPView, with a predefined format and refresh rate (default is 2 seconds)



Navigating CPView

Use these keys to navigate and control CPView:

Key	Description
Arrows	Change view and scroll in a view.
Tab	See the next view in the menu.
Shift-Tab	See the previous view in the menu.
Space	Refresh the statistics in the current view.
Home	Return to the **Overview**.
Enter	Change to **View** mode. If the current menu has submenus, go to the view of the lowest submenu.
Esc	Return to **Menu** mode.

Key	Description
R	Change the refresh rate. • In **History** mode, set the rate (in seconds) for database snapshots, between `60.0` and `86400.0` (default = **60**) • In other modes, set the interval of seconds for data collection, between `0.1` and `86400.0` (default = 2).
+ and -	Show the database snapshot. Only in **History** mode (`cpview -t` [<*timestamp*>]). Plus - Show the database snapshot of the next timestamp Minus - Show the database snapshot of the last timestamp.
T	Change the timestamp in **History** mode.
W	Toggle between the wide screen mode and the normal screen mode. In the wide screen mode, CPView stretches to fit the window horizontally.
S	Set the number of rows and columns displayed in the normal screen mode.
M	Turn on (or off) navigation with the mouse.
P	Pause (or resume) the collection of statistics.
C	Save the current view to a file. The filename format is `cpview_`<*pid*>`.cap`<*n*> *W*here *pid* is the CPView process ID and *n* is the sequential number of the capture.
Q	Quit CPView.

Views

CPView has a number of views. Each view shows statistics related to a specific aspect of the system or to a specific software blade.

Overview

The **Overview** view is the primary view in CPView. It shows information about the state of the gateway.

```
|-------------------------------------------------------------------------------|
| Overview                                                  08Jun2014 10:56:58  |
|-------------------------------------------------------------------------------|
| CPU:                                                                          |
|                                                                               |
| Num of CPUs:      6                                                           |
|                                                                               |
|       CPU      Used                                                           |
|         5      100%                                                           |
|         0        0%                                                           |
|         1        0%                                                           |
| ----------------------------------------------------------------------------- |
| Memory:                                                                       |
|                                                                               |
|            Total MB   Used MB   Free MB                                       |
| Physical     23,962     4,617    19,344                                       |
| FW Kernel     4,014       863     3,150                                       |
```

```
| Swap         10,236         0    10,236                                    |
| ------------------------------------------------------------------------- |
| Traffic counters:                                                         |
|                                                                           |
| Throughput             22,574Kbps                                         |
| Packet rate             2,494pps                                          |
| Connection rate            19cps                                          |
| Concurrent conns          378                                             |
| ------------------------------------------------------------------------- |
| Disk space (top 3 used partitions):                                       |
|                                                                           |
| Partition  Total MB   Used MB   Free MB                                   |
| /boot           144        45        91                                   |
| /            31,741     4,981    25,121                                   |
| /var/log    148,789       718   140,391                                   |
| ------------------------------------------------------------------------- |
| Events:                                                                   |
|                                                                           |
| # of monitored daemons crashed since last cpstart         0               |
|---------------------------------------------------------------------------|
```

- In the **CPU** section:
  - **Num of CPUs** - Number of CPUs
  - **CPU** - CPU ID
  - **Used** - Percent used of the CPU's capacity
- In the **Memory** section, for different memory partitions:
  - **Physical** - Physical RAM (Mbytes): **Total**, **Used**, and **Free**
  - **FW Kernel** - Firewall kernel memory (Mbytes): **Total**, **Used**, and **Free**
  - **Swap** - Swap memory(Mbytes): **Total**, **Used**, and **Free**
- In the **Traffic counters** section:
  - **Throughput** - Throughput in bits per second (bps)
  - **Packet rate** - Packet rate in packets per second (pps)
  - **Connection rate** - Connection rate in connections per seconds (cps)
  - **Concurrent conns** - Number of concurrent connections at the time
- In the **Disk space** section, for the three most used partitions:
  - **Partition** - Path of the partition
  - **Total MB** - Total space allocated to the partition (Mbytes)
  - **Used MB** - Amount of space used by the partition (Mbytes)
  - **Free MB** - Amount of free space in the partition (Mbytes)
- In the **Events** section:
  - Number of monitored daemons that crashed from the last restart

SysInfo

The **SysInfo** view shows general information about the system.

```
|---------------------------------------------------------------------------|
| SysInfo                                              08Jun2014 10:56:58   |
|---------------------------------------------------------------------------|
| Configuration Information:                                                |
|                                                                           |
| Platform            Gaia 32Bit                                            |
| Configuration       StandAlone                                            |
| Cluster status      Module is not a part of cluster                       |
| PPack Status        on                                                    |
| CoreXL Status       off                                                   |
| CoreXL instances    1                                                     |
| SMT Status          Unsupported                                           |
| ------------------------------------------------------------------------- |
```

```
| General information:                                                          |
|                                                                               |
| System uptime                 0 days, 20:00:22                                |
| Last policy install time      26May2014 17:55:55                              |
| Last policy name              Standard                                        |
| ----------------------------------------------------------------------------- |
| Version Information:                                                          |
|                                                                               |
| fw1_wrapper package version   R77.20                                          |
|                                                                               |
|                Branch Name    Build Number                                    |
| FW User Mode   gollum         990170152                                       |
| FW Kernel      gollum         990170152                                       |
| ----------------------------------------------------------------------------- |
| Hardware Information:                                                         |
|                                                                               |
| HW Model            Check Point 12400                                         |
| Sam CPLD Version    N/A                                                       |
| Sam Total Memory    N/A                                                       |
|-------------------------------------------------------------------------------|
```

- In the **Configuration Information** section:
  - **Platform** - Operating system
  - **Configuration** - Type of Check Point configuration - VSX Security Gateway, Secure Web Gateway, or Standalone Gateway
  - **Cluster Status** - Cluster configuration - Provider-1, Cluster, or Standalone (not a part of a cluster)
  - **PPack Status** - PPack optimization state - on or off
  - **CoreXl Status** - CoreXL state - on or off
  - **CoreXL instances**: Number of CoreXL instances
  - **SMT Status** - Current status of simultaneous multithreading - on or off
- In the **General information** section:
  - **System uptime** - Time elapsed since the last reboot
  - **Last policy install time** - Date and time of the last policy installation
  - **Last policy name** - Name of the last installed policy
- In the **Version Information** section:
  - **fw1_wrapper package version** - Version of the installed wrapper package
  - **FW User Mode** - Branch name and build number of the FW in user mode
  - **FW Kernel** - Branch name and build number of the FW kernel
- In the **Hardware information** section:
  - **HW Model** - Hardware Model
  - **SAM CPLD Version** - SAM card version
  - **SAM Total Memory** - Total memory available on the appliance for the SAM card

Network

The **Network** view shows these subviews:

- Network Traffic (on page 10)
- Network Interface Overview (on page 11)
- Network Interface Traffic (on page 11)
- Network Top-Protocols (on page 12)
- Network Top-Connections (on page 13)

Network Traffic

The **Network Traffic** view shows detailed network traffic information.

```
|-------------------------------------------------------------------------------|
| Network.Traffic                                          08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| Traffic Rate:                                                                 |
|                                                                               |
|                            Total          FW         PXL         SXL         |
| Inbound packet/sec         3,702       3,702           0           0         |
| Outbound packet/sec        2,494       2,494           0           0         |
| Inbound bits/sec         23,213K     23,213K           0           0         |
| Outbound bits/sec        22,574K     22,574K           0           0         |
| Connections/sec               19          19           0           0         |
| ----------------------------------------------------------------------------- |
| Concurrent Connections:                                                       |
|                                                                               |
|                            Total          FW         PXL         SXL         |
| Connections                  378         378           0           0         |
| Non-TCP                       12          12           0           0         |
| TCP handshake                  0           0           0           0         |
| TCP established               13          13           0           0         |
| TCP closed                   353         353           0           0         |
|                                                                               |
| Drop out of state TCP         enabled                                         |
| ----------------------------------------------------------------------------- |
| Templates:                                                                    |
|                                                                               |
| % Conns from templates       0%                                               |
| % Unused templates           0%                                               |
| ----------------------------------------------------------------------------- |
| Drops:                                                                        |
|                                                                               |
| Software Blades            257                                                |
| Interface incoming drops     0                                                |
| Instance high CPU            0                                                |
| Rulebase                     0                                                |
| Capacity                     0                                                |
| SecureXL                     0                                                |
|-------------------------------------------------------------------------------|
```

- In the **Traffic Rate** section:
  - **Inbound packet/sec** - Inbound packets per second - total, through Firewall, through PSL acceleration, and through SecureXL
  - **Outbound packet/sec** - Outbound packets per second - total, through Firewall, through PSL acceleration, and through SecureXL
  - **Inbound bits/sec** - Inbound bits per second - total, through Firewall, through PSL acceleration, and through SecureXL
  - **Outbound bits/sec** - Outbound bits per second - total, through Firewall, through PSL acceleration, and through SecureXL
  - **Connections/sec** - New connections per second - total, through Firewall, through PSL acceleration, and through SecureXL
- In the **Concurrent Connections** section:
  - **Connections** - Number of concurrent connections - total, through Firewall, through PSL acceleration, and through SecureXL
  - **Non-TCP** - Number of non-TCP connections - through Firewall, through PSL acceleration, and through SecureXL
  - **TCP handshake** - Number of attempted TCP connections - through Firewall, through PSL acceleration, and through SecureXL
  - **TCP established** - Number of established TCP connections - through Firewall, through PSL acceleration, and through SecureXL
  - **TCP closed** - Number of closed TCP connections - through Firewall, through PSL acceleration, and through SecureXL

  - **Drop out of state TCP** - Whether out of state TCP packets are dropped
- In **Templates** section:
  - **% Conns from templates** - Percent of connections using templates
  - **% Unused templates** - Percent of unused templates
- In **Drops** section:
  - **Software Blades** - Number of packets dropped by software blades
  - **Interface incoming drops** - Number of incoming packets dropped by the interface
  - **Instance high CPU** - Number of drops due to high CPU usage.

CoreXL Queue - Number of packets dropped from CoreXL queues

- **Rulebase** - Number of packets dropped by a rule in the rulebase
- **Capacity** - Number of packets dropped because of lack of capacity
- **SecureXL** - Number of packets dropped by SecureXL

Network Interface Overview

The **Network Interface Overview** view shows summary of information about the network interfaces.

```
CPVIEW.Network.Interfaces.Overview                                    08Feb2015 14:22:51
Overview SysInfo Network I/S Software-blades
Traffic Interfaces
Overview Traffic
Interfaces Information:

Interface State     Type      Port      Driver    Speed     IPv4                IPv6
lo        on        loopback  N/A       N/A       N/A       127.0.0.1/8         N/A
eth0      on        ethernet  TP        e1000     1000M     172.23.29.143/25    N/A
eth1      off       ethernet  TP        e1000     1000M     Not Configured      N/A
eth2      off       ethernet  TP        e1000     1000M     Not Configured      N/A
eth3      off       ethernet  TP        e1000     1000M     Not Configured      N/A
```

- **Interface** - Name of the network interface
- **State** - State of the network interface - on (up) or off (down)
- **Type** - Type of the network interface - loopback, ethernet, WAN
- **Port** - Port supported by the interface
- **Driver** - Driver installed on the interface
- **Speed** - Network speed of the interface
- **IPv4** - IPv4 address and mask of the interface
- **IPv4** - IPv6 address and mask of the interface

Network Interface Traffic

The **Network Interface Traffic** view shows detailed information about the network traffic at each network interface.

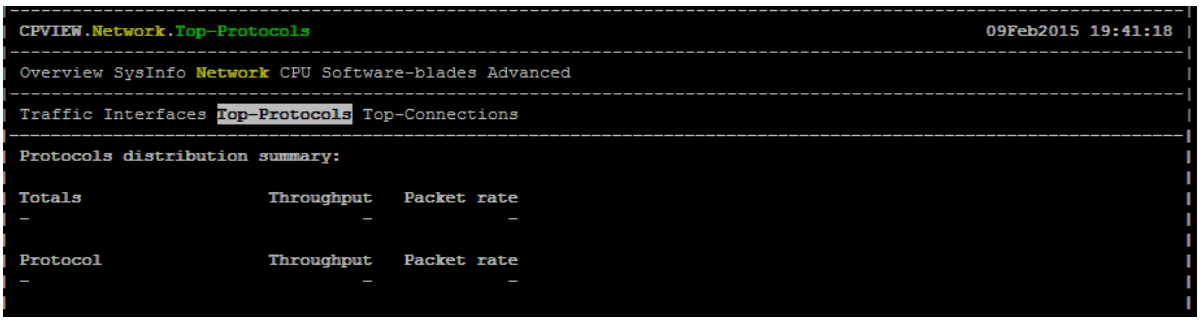
```
|-------------------------------------------------------------------------------|
| Network.Interfaces.Traffic                          08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| RX Traffic                                                                    |
|                                                                               |
```

```
| Interface   packets       pps       peak     Bytes       Bps       peak        |
| lo           1,381K       N/A        N/A    1,211M       N/A        N/A        |
| eth1-01      1,130M       N/A        N/A      203G       N/A        N/A        |
| eth1-02      1,901M       N/A        N/A    2,602G       N/A        N/A        |
| Mgmt        61,013K       N/A        N/A    5,305M       N/A        N/A        |
| eth1-05           0       N/A        N/A         0       N/A        N/A        |
| eth1-06           0       N/A        N/A         0       N/A        N/A        |
| eth1-07           0       N/A        N/A         0       N/A        N/A        |
| eth1-08           0       N/A        N/A         0       N/A        N/A        |
| Sync              0       N/A        N/A         0       N/A        N/A        |
| sit0              0       N/A        N/A         0       N/A        N/A        |
| TOTAL        3,094M       N/A        N/A    2,812G       N/A        N/A        |
| ------------------------------------------------------------------------------ |
| TX Traffic                                                                     |
|                                                                                |
| Interface   packets       pps       peak     Bytes       Bps       peak        |
| lo           1,381K       N/A        N/A    1,211M       N/A        N/A        |
| eth1-01      1,901M       N/A        N/A    2,602G       N/A        N/A        |
| eth1-02      1,130M       N/A        N/A      198G       N/A        N/A        |
| Mgmt           123M       N/A        N/A      141G       N/A        N/A        |
| eth1-05           0       N/A        N/A         0       N/A        N/A        |
| eth1-06           0       N/A        N/A         0       N/A        N/A        |
| eth1-07           0       N/A        N/A         0       N/A        N/A        |
| eth1-08           0       N/A        N/A         0       N/A        N/A        |
| Sync              0       N/A        N/A         0       N/A        N/A        |
| sit0              0       N/A        N/A         0       N/A        N/A        |
| TOTAL        3,156M       N/A        N/A    2,943G       N/A        N/A        |
| ------------------------------------------------------------------------------ |
| Errors and Drops:                                                              |
|                                                                                |
| Interface  RX drops RX errors  TX drops TX errors                              |
| lo                0          0         0         0                           |
| eth1-01           0          0         0         0                           |
| eth1-02           0          0         0         0                           |
| Mgmt              0          0         0         0                           |
| eth1-05           0          0         0         0                           |
| eth1-06           0          0         0         0                           |
| eth1-07           0          0         0         0                           |
| eth1-08           0          0         0         0                           |
| Sync              0          0         0         0                           |
| sit0              0          0         0         0                           |
| TOTAL             0          0         0         0                           |
|--------------------------------------------------------------------------------|
```

- In the **RX Traffic** section, see network traffic received by each interface: total packets from last restart, pps, packets at peak, total bits since last restart, bps, bits at peak.
- In the **TX Traffic** section, see network traffic transmitted by each interface: total packets from last restart, pps, packets at peak, total bits since last restart, bps, bits at peak.
- In the **Errors and Drops** section, see the number of incoming and outgoing packets that were dropped or had errors, for each interface.

Network Top-Protocols

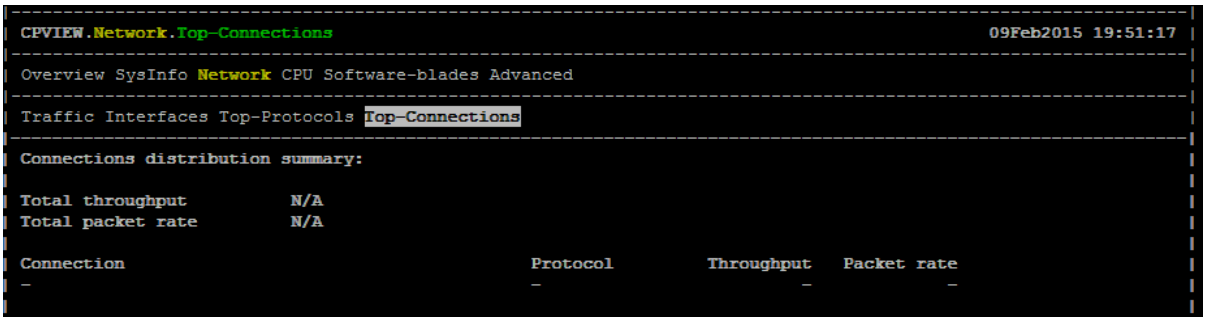
The **Network Top-Protocols** view shows traffic distribution summary for each protocol.



- **Totals** - Sum of packets for the most common protocols, with **Throughput** (Mbps) and **Packet rate** (pps).
- **Protocol** - **Throughput** (Mbps) and **Packet rate** (pps) for each protocol.

Network Top-Connections

The **Network Top-Connections** view shows traffic distribution summary for each connection.



- **Total throughput** - Total throughput (Mbps)
- **Total packet rate** - Total packet rate (pps)
- **Connection** - Source IP address and destination IP address of a connection
- **Protocol** - Name of the connection protocol
- **Throughput** - Throughput (Mbps) for the protocol
- **Packet rate** - Packet rate (pps) for the protocol

CPU

The **CPU** view shows these subviews:

- **Overview**
- **Top-Services**
- **Top-Connections**

CPU Overview

The **CPU Overview** view shows a summary of information about CPU usage.

```
|-------------------------------------------------------------------------------|
| I/S.CPU.Overview                                        08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| CPU:                                                                          |
|                                                                               |
|    CPU   User System   Idle      I/O wait    Interrupts                       |
|      0     0%     0%     0%            0%             3                       |
|      1     0%     0%     0%            0%             7                       |
|      2     0%     0%     0%            0%            10                       |
|      3     0%     0%     0%            0%            14                       |
|      4     0%     0%     0%            0%            19                       |
|      5     0%     0%     0%            0%            25                       |
|-------------------------------------------------------------------------------|
```

- **CPU** - Sequential number of the CPU (the count starts at 0)
- **User** - CPU utilization by execution of user space code
- **System** - CPU utilization by execution of the kernel code
- **Idle** - Percentage the CPU resources in idle state
- **I/O wait** - CPU utilization by Input/Output operations
- **Interrupts** - Number of interrupts a CPU has handled since the last restart

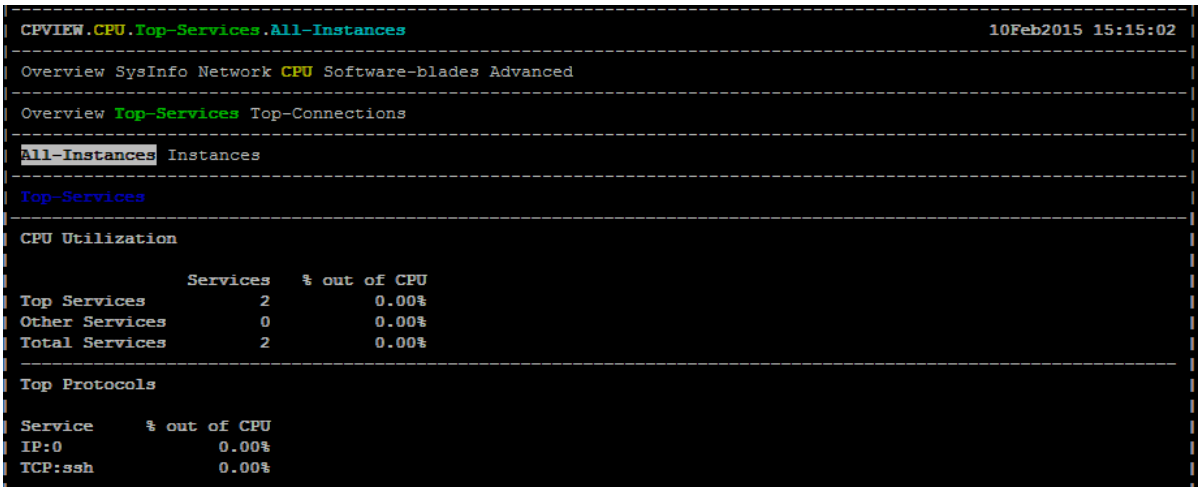
CPU Top-Services

The **CPU Top-Services** view shows these subviews:

- **All-Instances**
- **Instances**

CPU Top-Services All-Instances

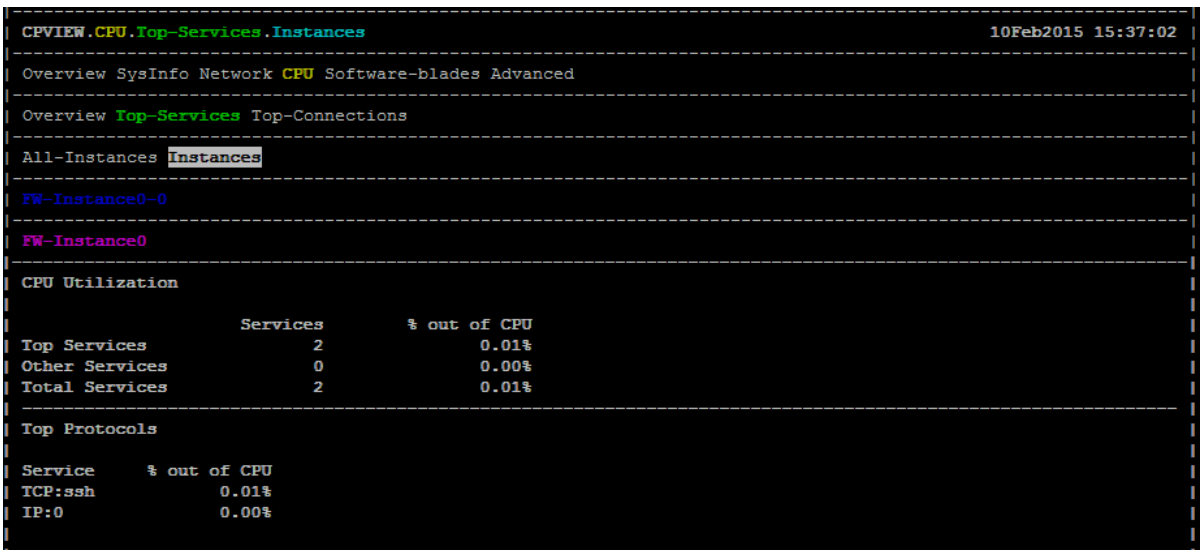
The **CPU Top-Services All-Instances** view shows CPU utilization by different services and protocols.



- In the **CPU Utilization** section:
  - **Services** - Number of **Top Services**, **Other Services**, and the total number of services
  - **% out of CPU** - Percentage of CPU resources utilized by **Top Services**, **Other Services**, and all services combined
- In the **Total Protocols** section:
  - **Service** - Network service
  - **% out of CPU** - Percentage of CPU resources utilized by each service

CPU Top-Services Instances

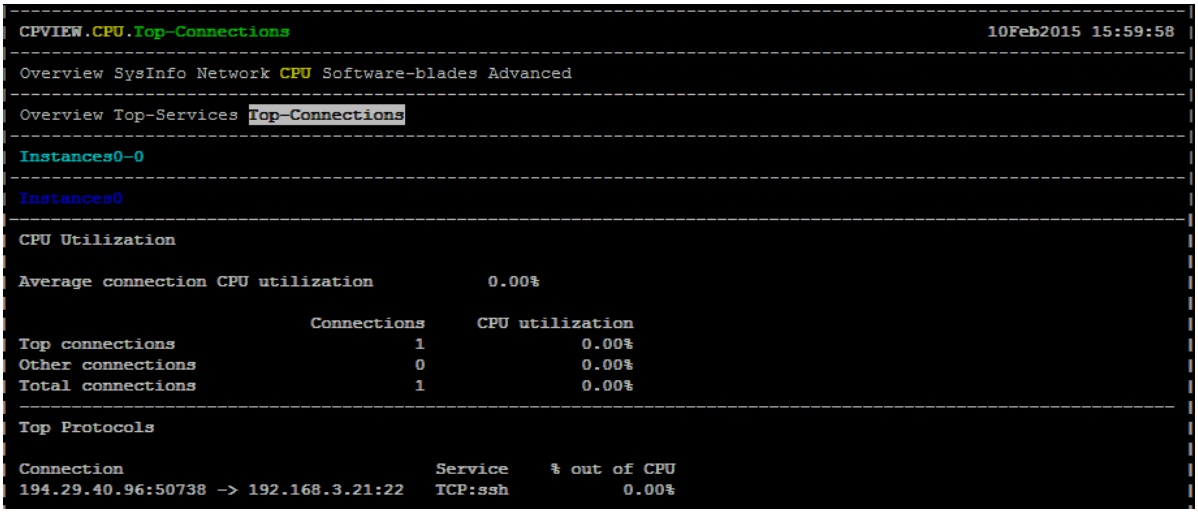
The **CPU Top-Services Instances** view shows CPU usage by different services and protocols of the top instances.



- In the **CPU Utilization** section:
  - **Services** - Number of **Top Services**, **Other Services**, and the total number of services
  - **% out of CPU** - Percentage of CPU resources utilized by **Top Services**, **Other Services**, and all services combined
- In the **Total Protocols** section:
  - **Service** - Network service
  - **% out of CPU** - Percentage of CPU resources utilized by each service

CPU Top-Connections

The **CPU Top-Connections** view shows the CPU utilization by the top connections.



- In the **CPU Utilization** section:
  - **Average connection CPU utilization** - Average CPU utilization per connection
  - **Connections** - Number of **Top Connections**, **Other Connections**, and the total number of connections
  - **CPU utilization** - Percentage of CPU resources utilized by **Top Services**, **Other Services**, and all services combined
- In the **Top Protocols** section:
  - **Connection** - Source IP address and destination IP address of the connection
  - **Service** - Network service that the connection uses
  - **% out of CPU** - Percentage of CPU resources utilized by each connection

In the **CPU Top-Connections** view:

- **Index** - Sequential connection number (the count starts at 1)
- **Connection** - Source and destination addresses of the connection
- **Service** - Network service
- **% out of CPU** - CPU utilization by the connection
- **% out of Total conns** - How many percent the connection comprises of total number of connections

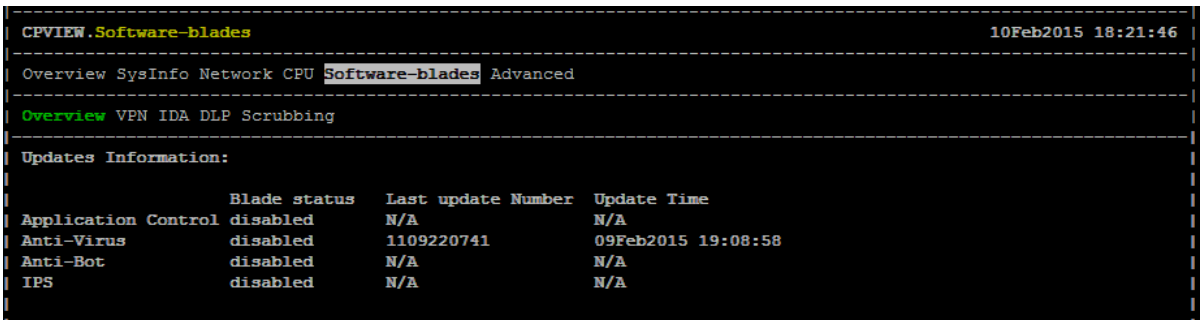
Software-Blades

The **Software-Blades** view shows these subviews:

- **Overview**
- **VPN**
- **IDA**
- **DLP**
- **Scrubbing**

Software-Blades Overview

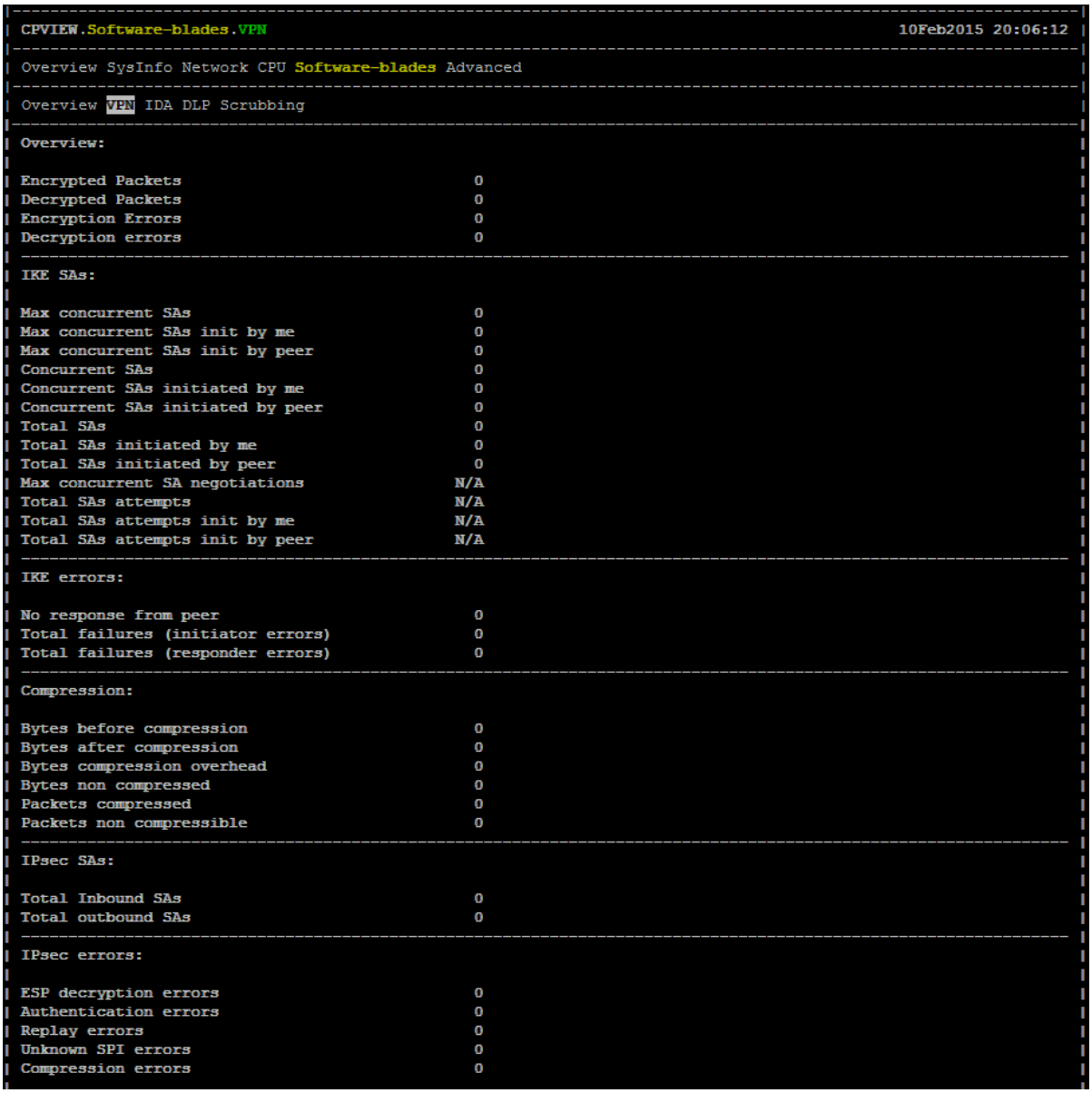
The **Software-Blades Overview** view shows summary of information about the Software Blades.



- Name of the Software Blade
- **Blade Status** - Whether the Software Blade is enabled or disabled
- **Last Update Number** - Version of the last Software Blade update
- **Updated Time** - Date and time of the last Software Blade update

Software-Blades VPN

The **Software-Blades VPN** view shows the information about the VPN connection sessions.



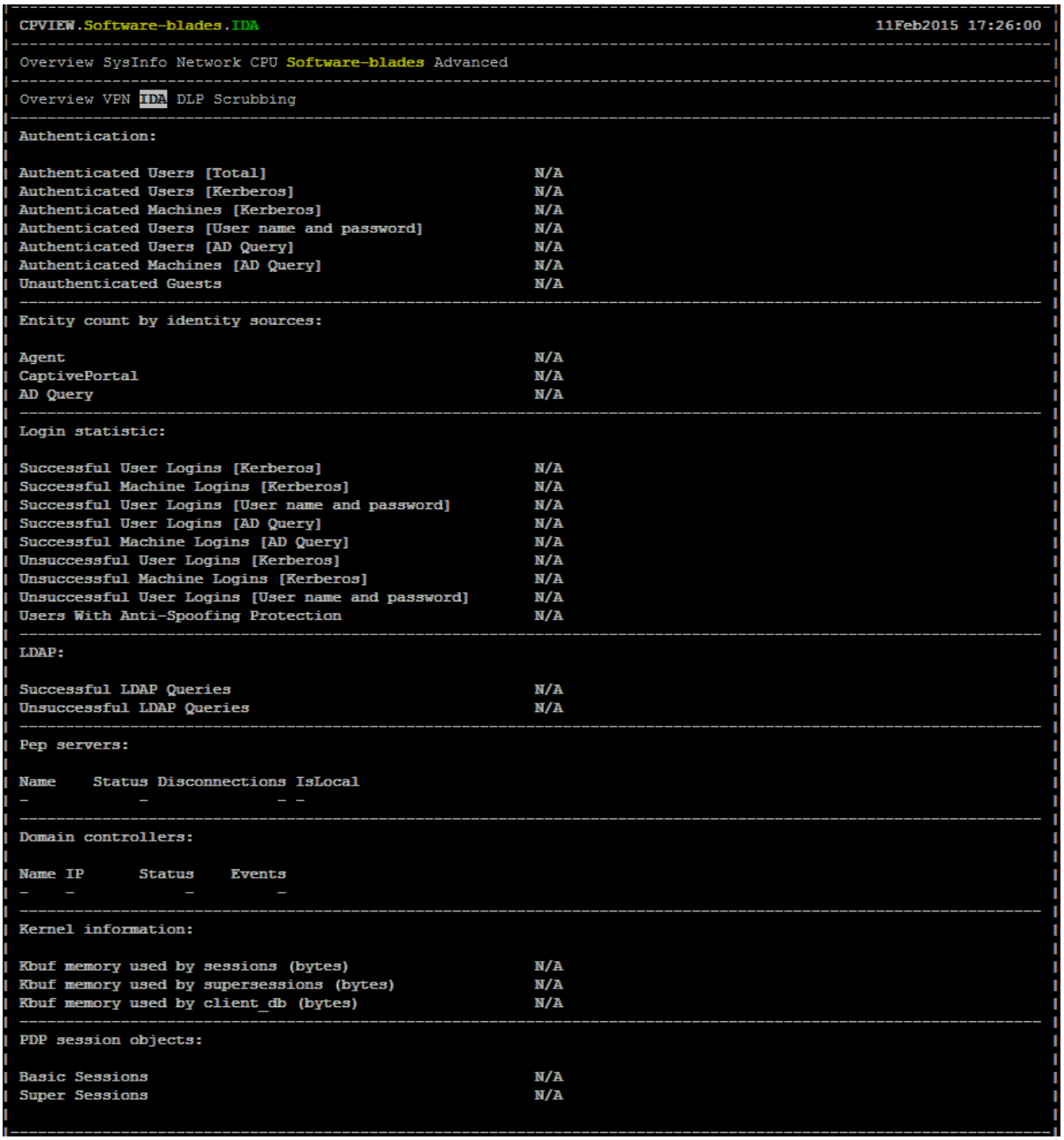
- In the **Overview** section:
  - **Encrypted packets** - Number of encrypted ESP packets, UDP-encapsulated ESP packets, and accelerated packets
  - **Decrypted packets** - Number of decrypted ESP packets, UDP-encapsulated ESP packets, and accelerated packets
  - **Encryption Errors** - Number of ESP packets, UDP-encapsulated ESP packets, and accelerated packets, that were dropped because they failed to get encrypted
  - **Decryption Errors** - Number of ESP packets, UDP-encapsulated ESP packets, and accelerated packets, that were dropped because they failed to get decrypted
- In the **IKE SAs** section:
  - **Max concurrent SAs** - Highest total number of concurrent SAs on this appliance
  - **Max concurrent SAs init by me** - Highest number of concurrent SAs initiated by this appliance

- **Max concurrent SAs init by peer** - Highest number of concurrent SAs initiated by peers
- **Concurrent SAs** - Total current number of concurrent SAs on this appliance
- **Concurrent SAs initiated by me** - Current number of concurrent SAs initiated by this appliance
- **Concurrent SAs initiated by peer** - Current number of concurrent SAs initiated by peers
- **Total SAs** - Total number of SAs on this appliance
- **Total SAs initiated by me** - Total number of SAs initiated by this appliance
- **Total SAs initiated by peer** - Total number of SAs initiated by peers
- **Max concurrent SA negotiations** - Highest number of concurrent SA negotiations
- **Total SAs attempts** - Total number of IKE SA negotiation attempts
- **Total SAs attempts init by me** - Total number of IKE SA negotiation attempts initiated by this appliance
- **Total SAs attempts init by peer** - Total number of IKE SA negotiation attempts initiated by peers

- In the **IKE errors** section:
  - **No response from peer** - Number of IKE SA negotiation attempts initiated by this appliance that did not receive response from peers
  - **Total failures (initiator errors)** - Total number of failed IKE SA negotiation attempts because of initiation errors on this appliance
  - **Total failures (responder errors)** - Total number of failed IKE SA negotiation attempts because of response errors on this appliance
- In the **Compression** section:
  - **Bytes before compression** - Number of bytes before compression
  - **Bytes after compression** - Number of bytes after compression
  - **Bytes compression overhead** - Size of the compression header in bytes
  - **Bytes non-compressed** - Number of bytes that can not be compressed
  - **Packets compressed** - Number of compressed packets
  - **Packets non-compressible** - Number of packets that can not be compressed
- In the **IPsec SAs** section:
  - **Total Inbound SAs** - Total number of incoming SAs
  - **Total Outbound SAs** - Total number of outgoing SAs
- In the **IPsec errors** section:
  - **ESP decryption errors** - Number of IPsec ESP packets, not including UDP-encapsulated ESP packets, that were dropped because they failed to get decrypted
  - **Authentication errors** - Number of IPsec Authentication errors
  - **Replay errors** - Number of relay counter errors
  - **Unknown SPI errors** - Number of unknown SPI errors
  - **Compression errors** - Number of IPsec compression errors

Software-Blades IDA

The **Software-Blades IDA** view shows the Identity Awareness statistics.



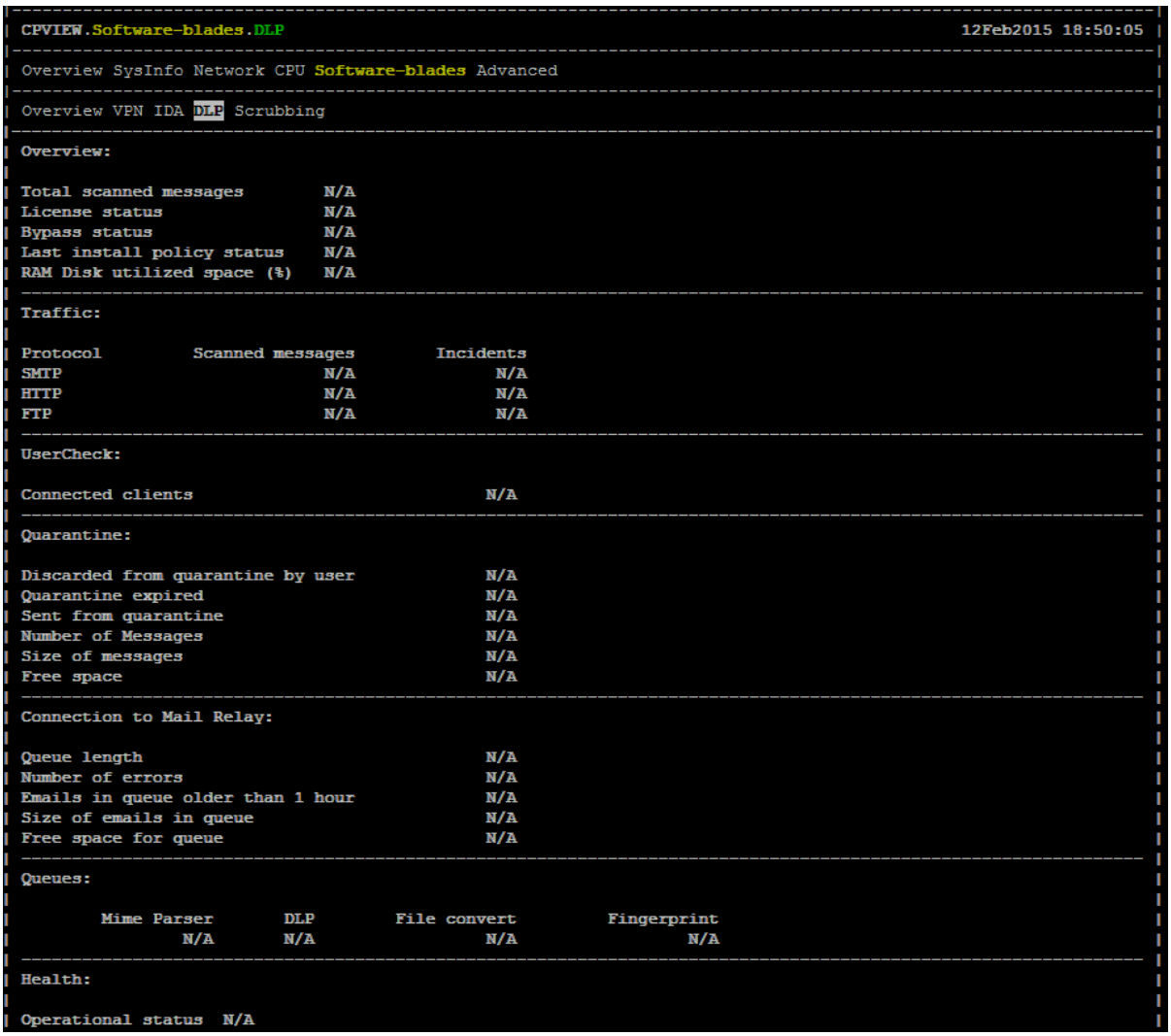
- In the **Authentication** section:
  - **Authenticated Users [Total]** - Total number of authenticated users
  - **Authenticated Users [Kerberos]** - Number of users authenticated by Kerberos authentication protocol through Identity Agent or through Browser Based Authentication
  - **Authenticated Machines [Kerberos]** - Number of devices authenticated by Kerberos authentication protocol through Identity Agent
  - **Authenticated Users [User name and password]** - Number of users authenticated by Username/Password method through all Identity sources
  - **Authenticated Users [AD Query]** - Number of users authenticated through ADQuery Identity sources

  - **Authenticated Machines [AD Query]** - Number of devices authenticated through ADQuery Identity sources
  - **Unauthenticated Guests** - Number of identified guests that were not authenticated
- In the **Entity count by identity sources** section:
  - **Agent** - Total number of users and devices logged in through Identity Agent
  - **CaptivePortal** - Number of users logged in through Captive Portal
  - **AD Query** - Total number of users and devices logged in through AD Query
- In the **Login Statistics** section:
  - **Successful User Logins [Kerberos]** - Successful user logins with Kerberos authentication
  - **Successful Machine Logins [Kerberos]** - Successful device logins with Kerberos authentication
  - **Successful User Logins [User name and password]** - Successful user logins with username and password authentication
  - **Successful User Logins [AD Query]** - Successful user logins through AD Query
  - **Successful Machine Logins [AD Query]** - Successful device logins through AD Query
  - **Unsuccessful User Logins [Kerberos]** - Unsuccessful user logins with Kerberos authentication
  - **Unsuccessful Machine Logins [Kerberos]** - Unsuccessful device logins with Kerberos authentication
  - **Unsuccessful User Logins [User name and password]** - Unsuccessful user logins with username and password authentication
  - **Users With Anti-Spoofing Protection** - Number of users that use Check Point packet-tagging for anti-spoofing
- In the **LDAP** section:
  - **Successful LDAP Queries** - Number of successful LDAP queries
  - **Unsuccessful LDAP Queries** - Number of unsuccessful LDAP queries
- In the **PEP servers** section:
  - **Name** - Name of a PEP server
  - **Status** - Connectivity status of a PEP server
  - **Disconnections** - Number of disconnections with a PEP server
  - **IsLocal** - Whether the PEP server is local (works on this appliance) or remote (works on a remote appliance)
- In the **Domain controllers** section:
  - **Name** - Name of a domain controller
  - **IP** - IP address of a domain controller
  - **Status** - Connectivity status of a domain controller
  - **Events** - Number of events received by a domain controller in the last hour
- In the **Kernel information** section:
  - **Kbuf memory used by sessions (bytes)** - Total memory allocated for kbufs in pdp_sessions kernel table
  - **Kbuf memory used by supersessions (bytes)** - Total memory allocated for kbufs in pdp_super_sessions kernel table
  - **Kbuf memory used by client_db (bytes)** - Total memory allocated for kbufs in pep_client_db kernel table

- In the **PDP session objects** section:
  - **Basic Sessions** - Total memory that PDP daemon utilizes for storing basic sessions
  - **Super Sessions** - Total memory that PDP daemon utilizes for storing super sessions

Software-Blades DLP

The **Software-Blades DLP** view shows information about Data Loss Prevention activity.



- In the **Overview** section:
  - **Total scanned messages** -
  - **License status** -
  - **Bypass status** -
  - **Last install policy status** -
  - **RAM Disk utilized space (%)** -
- In the **Traffic** section:
  - **Protocol** -
  - **Scanned messages** -
  - **Incidents** -

- In the **UserCheck** section:
  - **Connected clients** -
- In the **Quarantine** section:
  - **Discarded from quarantine by user** -
  - **Quarantine expired** -
  - **Sent from quarantine** -
  - **Number of messages** -
  - **Size of messages** -
  - **Free space** -
- In the **Connection to Mail Relay** section:
  - **Queue length** -
  - **Number of errors** -
  - **Emails in queue older than 1 hour** -
  - **Size of emails in queue** -
  - **Free space for queue** -
- In the **Queues** section:
  - **Name** -
  - **Parser** -
  - **DLP** -
  - **File convert** -
  - **Fingerprint** -
- In the **Health** section:
  - **Operational status** -

Advanced

I/S Memory

The **I/S Memory** view shows these subviews:

- **FW-Kernel**
- **SMEM-Failures**
- **Contexts**

I/S Memory FW-Kernel

The **I/S Memory FW-Kernel** view shows details of the firewall memory usage.

```
|-------------------------------------------------------------------------------|
| I/S.Memory.FW-Kernel                                  08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| Firewall kernel memory usage summary:                                         |
|                                                                               |
|     Total      Used    %Usage      Free                                       |
|   4,014MB     857MB       21%   3,156MB                                      |
| ----------------------------------------------------------------------------- |
| KMEM:                                                                         |
|                                                                               |
|                          Used KB    Peak KB                                   |
| Memory Usage:            184,101    382,491                                   |
```

```
|                                                                              |
| External Allocations:    Used KB                                             |
| SXL                            0                                             |
| Packets                        0                                             |
|                                                                              |
|                                    Succeeded     Failed                      |
| Allocated                      1,244,386,381          0                      |
| Freed                          1,242,273,322          0                      |
|                                                                              |
| Current allocations 2,113,059                                                |
| ---------------------------------------------------------------------------- |
| HMEM:                                                                        |
|                                                                              |
|                           Current      Limit                                 |
| HMEM Size KB              107,420  2,055,168                                 |
| Blocks                     26,934        N/A                                 |
| Pools                           0         10                                 |
|                                                                              |
|                              Used     Unused       Peak                      |
| HMEM Usage KB             103,601      3,819    222,003                      |
| Blocks Usage               26,432        502     55,823                      |
|                                                                              |
|                                    Succeeded     Failed                      |
| Allocated                      1,244,354,264          0                      |
| Freed                          1,242,243,321        N/A                      |
|                                                                              |
| Current allocations 2,110,943                                                |
| ---------------------------------------------------------------------------- |
| SMEM:                                                                        |
|                                                                              |
| Memory usage:             Used KB    Peak KB                                 |
| Total                     207,682    423,532                                 |
| Atomic                    108,521    223,872                                 |
| Sleepable                  99,161    199,660                                 |
|                                                                              |
|                       Expensive        Used                                  |
| Vmalloc               no                0KB                                  |
|                                                                              |
|                        Succeeded     Failed                                  |
| Allocated                 147,320          0                                 |
| Freed                     117,796          0                                 |
|                                                                              |
| Current allocations    29,524                                                |
| Memory waste            2,905KB                                              |
|------------------------------------------------------------------------------|
```

- In the **Firewall kernel memory usage summary** section:
  - **Total** - Total memory (MB) allocated to the kernel
  - **Used** - Total memory (MB) currently used by the kernel
  - **%Usage** - Current utilization of the kernel memory (%)
  - **Free** - Available kernel memory (MB)
- In the **KMEM** section:
  - **Memory Usage** - Current amount of KMEM memory used (KB) and the highest amount of KMEM memory used
  - **External Allocations** - Current amount of KMEM memory (KB) allocated to SecureXL
  - **Allocated** - Current amount of memory successfully allocated and the amount of memory that failed allocation
  - **Freed** - Current amount of memory freed and the amount of memory that failed being freed
  - **Current allocations** -
- In the **HMEM** section:
  - **HMEM Size KB** - Current amount of memory allocated to HMEM and the highest amount of memory that can be allocated to HMEM
  - **Blocks** - Current number of memory blocks allocated to HMEM

- **Pools** - Current number of memory pools allocated to HMEM and the highest amount of memory pools that can be allocated to HMEM
- **HMEM Usage KB** - Current amount of memory used by HMEM, the amount of currently unused memory, and the highest amount of memory used
- **Blocks Usage** - Current number of memory blocks used by HMEM, the number of currently unused blocks, and the highest number of blocks used
- **Allocated** - Current amount of memory successfully allocated and the amount of memory that failed allocation
- **Freed** - Current amount of memory freed and the amount of memory that failed being freed
- **Current allocations** -

- In the **SMEM** section:
  - **Memory usage** - Current amount of SMEM memory used (KB) and the highest amount of SMEM memory used
  - **Atomic** -
  - **Sleepable** -
  - **Vmalloc** -
  - **Allocated** - Current amount of memory successfully allocated and the amount of memory that failed allocation
  - **Freed** - Current amount of memory freed and the amount of memory that failed being freed
  - **Current allocations** -
  - **Memory waste** -

I/S Memory SMEM-Failures

The **I/S Memory SMEM-Failures** view shows a list of SMEM allocation failures.

```
|-------------------------------------------------------------------------------|
| I/S.Memory.SMEM-Failures                                 08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| Failed memory requests                                                        |
|                                                                               |
| Time           Size Reason    Caller                                          |
| -                 - -         -                                               |
|-------------------------------------------------------------------------------|
```

For each allocation failure, the view shows:

- **Time** - Time in which the allocation failed
- **Size** - Size of the requested allocation
- **Reason** - Reason for the failure
- **Caller** - Application that called for the allocation

I/S Memory Contexts

The **I/S Memory Contexts** view shows the memory usage by different Check Point Software Blades and Check Point infrastructures.

```
|-------------------------------------------------------------------------------|
| I/S.Memory.SMEM.Contexts                                 08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| Contexts                                                                      |
|                                                                               |
|                       Used  Peak Items   Failed alloc                         |
```

```
| URL Filtering          0KB   0KB     0              0                       |
| Application Control    0KB   0KB     0              0                       |
| DLP                    0KB   0KB     0              0                       |
| WS                     0KB   0KB     0              0                       |
| PSL                    N/A   N/A   N/A            N/A                       |
|--------------------------------------------------------------------------|
```

These are the data shown in this view:

- Name of the Software Blade or the infrastructure
- **Used** - Amount of memory used
- **Peak** - Highest amount of memory used
- **Items** - Number of items allocated
- **Failed alloc** - Number of failed allocations

I/S SXL

The **I/S SXL** view shows these subviews:

- **Overview**
- **F2F-Reasons**
- **Drop-Reasons**

I/S SXL Overview

The **I/S SXL Overview** view shows general SecureXL acceleration engine statistics.

```
|--------------------------------------------------------------------------|
| I/S.SXL.Overview                                    08Jun2014 10:56:58 |
|--------------------------------------------------------------------------|
| Accelerated Path                                                         |
|                                                                          |
| Accel packets                                  0                         |
| Accel bytes                                    0                         |
| Conns created                        116,904,284                         |
| Conns deleted                        116,899,792                         |
| C total conns                              4,313                         |
| C templates                                    0                         |
| C TCP conns                                4,302                         |
| C delayed TCP conns                            0                         |
| C non TCP conns                               11                         |
| C delayed nonTCP conns                         0                         |
| Conns from templates                           0                         |
| Temporary conns                              179                         |
| NAT conns                                      0                         |
| Dropped packets                               30                         |
| Dropped bytes                              1,492                         |
| NAT templates                                  0                         |
| Conns from NAT tmpl                            0                         |
| Port alloc templates                           0                         |
| Port alloc conns                               0                         |
| Conns auto expired                             0                         |
| ------------------------------------------------------------------------ |
| Accelerated VPN Path                                                     |
|                                                                          |
| C crypt conns                          0                                 |
| Encrypted bytes                        0                                 |
| Decrypted bytes                        0                                 |
| ESP encrypted pkts                     0                                 |
| ESP encrypted err                      0                                 |
| ESP decrypted pkts                     0                                 |
| ESP decrypted err                      0                                 |
| ESP other err                          0                                 |
| AH encrypted pkts                      0                                 |
| AH encrypted err                       0                                 |
| AH decrypted pkts                      0                                 |
| AH decrypted err                       0                                 |
| AH other err                           0                                 |
| ESPUDP encrypted pkts                  0                                 |
```

```
| ESPUDP encrypted err                0                                       |
| ESPUDP decrypted pkts               0                                       |
| ESPUDP decrypted err                0                                       |
| ESPUDP other err                    0                                       |
| ------------------------------------------------------------------------- |
| Medium Path                                                                 |
|                                                                             |
| PXL bytes                           0                                       |
| PXL packets                         0                                       |
| PXL async packets                   0                                       |
| C PXL conns                         0                                       |
| ------------------------------------------------------------------------- |
| Firewall Path                                                               |
|                                                                             |
| F2F packets                   576,782,898                                   |
| F2F bytes                          96,391MB                                 |
| C F2F conns                         4,313                                   |
| TCP violations                          0                                   |
| C partial conns                         0                                   |
| C anticipated conns                     0                                   |
| C PXL templates                         0                                   |
| Port alloc f2f                          0                                   |
| ------------------------------------------------------------------------- |
| General                                                                     |
|                                                                             |
| Memory used                         0                                       |
| Memory freed                        0                                       |
| Acct update interval               30                                       |
| ------------------------------------------------------------------------- |
| IDA stats                                                                   |
|                                                                             |
| NAC packets                         0                                       |
| NAC bytes                           0                                       |
| NAC conns                           0                                       |
| NAC identities                      0                                       |
| NAC templates                       0                                       |
| Comp failed                         0                                       |
|                                                                             |
|-----------------------------------------------------------------------------|
```

- In the **Accelerated Path** section:
  - **Accel packets** - Total number of packets SecureXL engine has processed
  - **Accel bytes** - Total number of bytes SecureXL engine has processed
  - **Conns created** - Total number of connections offloaded to SecureXL

    Note - Does not include anticipated and partial connections
  - **Conns deleted** - Total number of connections deleted from SecureXL

    Note - Does not include anticipated connections
  - **C total conns** - Number of connections currently handled by SecureXL
  - **C templates** - Number of templates currently handled by SecureXL
  - **C TCP conns** - Number of TCP connections without delayed notifications to Firewall currently handled by SecureXL
  - **C delayed TCP conns** - Number of TCP connections with delayed notifications to Firewall currently handled by SecureXL
  - **C non-TCP conns** - Number of non-TCP connections without delayed notifications to Firewall currently handled by SecureXL
  - **C delayed non-TCP conns** - Number of non-TCP connections with delayed notifications to Firewall currently handled by SecureXL
  - **Conns from templates** -
  - **Temporary conns** - Total number of temporary connections offloaded to SecureXL

    Note - Does not include anticipated and partial connections
  - **NAT conns** - Total number of NAT connections offloaded to SecureXL

- **Dropped packets** - Total number of packets SecureXL engine has dropped
- **Dropped bytes** - Total number of byes SecureXL engine has processed
- **NAT templates** - Total number of NAT templates handled by SecureXL
- **Conns from NAT tmpl** -
- **Port alloc templates** - Total number of port allocation templates handled by SecureXL
- **Port alloc conns** - Total number of port allocation connections handled by SecureXL
- **Conns auto expired** - Total number of connections that were deleted by SecureXL because these connections terminated or got reset

  Note - Does not include partial and temporary connections, or the connections that have been forwarded to the Firewall.

- In the **Accelerated VPN Path** section:
  - **C crypt conns** - Number of encrypted VPN connections currently handled by SecureXL
  - **Encrypted bytes** - Number of encrypted bytes currently handled by SecureXL
  - **Decrypted bytes** - Number of decrypted bytes currently handled by SecureXL
  - **ESP encrypted pkts** - Total number of regular ESP packets and UDP-encapsulated ESP packets encrypted by SecureXL Implementation Module
  - **ESP encrypted err** - Total number of regular ESP packets and UDP-encapsulated ESP packets that were dropped because SecureXL Implementation Module failed to encrypt them
  - **ESP decrypted pkts** - Total number of regular ESP packets and UDP-encapsulated ESP packets decrypted by SecureXL Implementation Module
  - **ESP decrypted err** - Total number of regular ESP packets and UDP-encapsulated ESP packets that were dropped because SecureXL Implementation Module failed to decrypt them
  - **ESP other err** - Total number of regular ESP packets and UDP-encapsulated ESP packets that were dropped because SecureXL Implementation Module failed to encrypt or to decrypt them for unclassified reasons
  - **ESPUDP encrypted pkts** - Total number of UDP-encapsulated ESP packets encrypted by SecureXL Implementation Module
  - **ESPUDP decrypted pkts** - Total number of UDP-encapsulated ESP packets decrypted by SecureXL Implementation Module
- In the **Medium Path** section:
  - **PXL bytes** -
  - **PXL packets** -
  - **PXL async packets** -
  - **C PXL conns** -
- In the **Firewall Path** section:
  - **F2F packets**
  - **F2F bytes**
  - **C F2F conns**
  - **TCP violations**
  - **C partial conns**
  - **C anticipated conns**
  - **C PXL templates**

  - **Port alloc f2f**
- In the **General** section:
  - **Memory used**
  - **Memory freed**
  - **Acct update interval**
- In the **IDA statistics** section:
  - **NAC packets**
  - **NAC bytes**
  - **NAC conns**
  - **NAC identities**
  - **NAC templates**
  - **Comp failed**

F2F-Reasons

The **F2F-Reasons** view shows statistics for Forward to Firewall traffic, broken down by reason.

```
|-------------------------------------------------------------------------------|
| I/S.SXL.F2F-Reasons                                        08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| F2F Reasons                                                                   |
|                                                                               |
| Reason                          #Packets      % out of Total                  |
| pkt is a fragment            31,663,751                 38%                   |
| pkt has IP options                  182                  0%                   |
| ICMP miss conn                   55,786                  0%                   |
| TCP-SYN miss conn               548,737                  0%                   |
| TCP-other miss conn          41,562,735                 50%                   |
| UDP miss conn                   119,004                  0%                   |
| other miss conn                      46                  0%                   |
| ICMP conn is F2Fed               49,400                  0%                   |
| TCP conn is F2Fed             4,413,470                  5%                   |
| UDP conn is F2Fed             1,278,438                  1%                   |
| other conn is F2Fed                 322                  0%                   |
| TCP state viol                1,164,181                  1%                   |
| bridge, src=dst                  34,733                  0%                   |
| temp conn expired                   306                  0%                   |
| PXL returned F2F              1,075,556                  1%                   |
| chain forwarding                 71,827                  0%                   |
|-------------------------------------------------------------------------------|
```

Drop-Reasons

The **Drop-Reasons** view shows statistics for dropped accelerated packets.

- **Reason**: Reason for the dropped packets
- **Value**: Number of dropped packets
- **% out of Total**: Percentage of the packets dropped for this reason

```
|-------------------------------------------------------------------------------|
| I/S.SXL.Drop-Reasons                                       08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| Drop Reasons                                                                  |
|                                                                               |
| Reason                  Value      % out of Total                             |
| interface is down          30                100%                           |
|-------------------------------------------------------------------------------|
```

CoreXL

The **CoreXL** view has these subviews:

- **General**

- **Global**
- **Instances**

General

The **General** view shows general CoreXL statistics:

- **VS stats** (relevant VSX only)
- **Queues**: Statistics for traffic queues since the last reboot

```
|-------------------------------------------------------------------------------|
| I/S.CoreXL.General                                        08Jun2014 10:56:58  |
|-------------------------------------------------------------------------------|
| VS stats                                                                      |
|                                                                               |
| Zeco data mapped                    1,103,604,081                             |
| Zeco data mapped                      512,208,011                             |
| Zeco shared info mapped             1,103,604,081                             |
| Zeco shared info unmapped             512,208,011                             |
| Cut through                                     0                             |
| Non linear skbs                                 0                             |
| Shared skbs                                     0                             |
| Data alloc from pool                  512,202,772                             |
| Data alloc not from pool                        0                             |
| Data free from pool                   512,202,772                             |
| Data free not from pool                         0                             |
| ----------------------------------------------------------------------------- |
| Queues:                                                                       |
|                                                                               |
| Queue entry type                       Enqueue   Enqueue fail        Dequeue   |
| Inbound packet kernel                        0              0              0   |
| Outbound packet kernel                       0              0              0   |
| Inbound packet userspace           646,037,540              0    646,037,540   |
| Outbound packet userspace          969,774,552              0    969,774,552   |
| Multik message kernel                        0              0              0   |
| Multik message userspace                     0              0              0   |
| F2P packet kernel                            0              0              0   |
| F2P packet userspace                         0              0              0   |
| Notification kernel                          0              0              0   |
| Notification userspace                       2              0              2   |
| PSL_SXL new conn                             0              0              0   |
| PSL_SXL release conn               118,637,682              0    118,637,682   |
| Sxl_off_completed                            8              0              8   |
| Etm multik chain                             0              0              0   |
| Vs message                                  74              0             37   |
| Accounting                                   0              0              0   |
| Vs_kill                                      0              0              0   |
|-------------------------------------------------------------------------------|
```

Global

The **Global** view shows CoreXL dispatcher statistics.

```
|-------------------------------------------------------------------------------|
| I/S.CoreXL.Global                                         08Jun2014 10:56:58  |
|-------------------------------------------------------------------------------|
| Global connections stats:                                                     |
|                                                                               |
| Notifications handled                0                                        |
| Conns create failed                  0                                        |
| Conns from pool                      0                                        |
| Conns not from pool                  0                                        |
| Free conns from pool                 0                                        |
| Free conns not from pool             0                                        |
| Conns deleted                        0                                        |
| Conns deleted failed                 0                                        |
| Bad notifications                    0                                        |
| Packet partial search                0                                        |
| Packet partial match                 0                                        |
| Packet localsrc search               0                                        |
| Packet localsrc match                0                                        |
| Multik forwarding count              0                                        |
| ----------------------------------------------------------------------------- |
| Dispatch reason table:                                                        |
|                                                                               |
```

```
| Dispatch reason                  Value                                    |
| Not selected                         0                                    |
| Arbitray                             0                                    |
| Conn                                 0                                    |
| Multik tag                           0                                    |
| Sxl tag                              0                                    |
| Param                                0                                    |
|-------------------------------------------------------------------------|
```

Instances

The **Instances** view shows statistics for a single instance of CoreXL.

By default, CPView does not collect statistics for CoreXL Instances because it impacts performance.

To enable instance statistics collection:

1. Navigate to the instance.
2. Press a.
3. Press y.

```
|-------------------------------------------------------------------------|
| I/S.CoreXL.Instances.FW-Instance0                      08Jun2014 10:56:58 |
|-------------------------------------------------------------------------|
| Worker thread stats                                                     |
|                                                                         |
|                                  Total entries processed                |
| Inbound packet kernel                                  5,280            |
| Outbound packet kernel                                 1,520            |
| Multik message kernel                                    234            |
| F2P packet kernel                                     29,245            |
| Notification kernel                                    1,122            |
| PSL_SXL new conn                                         147            |
| PSL_SXL release conn                                     471            |
| Sxl_off_completed                                          0            |
| Etm multik chain                                       3,150            |
| Accounting                                                 6            |
|                                                                         |
| Total                                                 41,175            |
| Time passed since dequeue                                               |
| Time taken to dequeue                                                   |
| ----------------------------------------------------------------------- |
| Summary                                                                 |
|                                                                         |
| Avg. dequeue rate             1,738                                     |
| Avg. queue size               13                                        |
| Avg. queue size               13                                        |
| Avg. queue processing time    790885 (CYC) (0ms)                        |
| Sleep count                   19,414                                    |
| Time passed since last sleep  N/A                                       |
| Avg. time between sleeps      3164667 (CYC) (1ms)                       |
| Avg. FW-Lock time per entry   255434 (CYC) (0ms)                        |
| ----------------------------------------------------------------------- |
| FW Stats                                                                |
|                                                                         |
|                      Total         per second                           |
| F2F Inbound          5,280                222                          |
| F2F Outbound         1,520                 64                          |
| F2P                 29,245                 64                          |
| Drops                   7                  0                          |
| ----------------------------------------------------------------------- |
| Top FW-Lock consumers:                                                  |
|                                                                         |
| TYPE                 Time (CYC)      Time ago (sec) Data                |
| F2P                   1,968,265      780 <0, 1.1.1.51:40611, 2.2.2.2:80>|
|                                                                         |
|-------------------------------------------------------------------------|
```

Streaming

The **Streaming** view shows statistics on both of the streaming infrastructures used in the gateway, PSL and CPAS. It shows the number of connections in each infrastructure and the memory usage.

It also shows the currently registered PSL applications and the number of connections each application handles.

```
|-------------------------------------------------------------------------------|
| I/S.Streaming                                              08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| PSL statistics:                                                               |
|                                                                               |
| Concurrent connections                        4,313                           |
| Memory usage                                  1,511KB                         |
| Referenced packets                                0                           |
| Referenced packets size                           0                           |
|                                                                               |
| Application                        # of Connections                           |
| PSL_NULL_APP                                      0                           |
| C_ICA                                             0                           |
| HTTP_PSL                                          0                           |
| HTTP_DISPATCHER                                   5                           |
| APPI_LIMIT                                        0                           |
| INSPECT_STREAMING_0                               0                           |
| INSPECT_STREAMING_1                               0                           |
| INSPECT_STREAMING_MT_0                            0                           |
| INSPECT_STREAMING_MT_1                            0                           |
| ASPII_MT                                      1,834                           |
| ASPII                                             0                           |
| FWMAL_FORENSICS                                   0                           |
| MAL_PSL                                          10                           |
| ----------------------------------------------------------------------------- |
| CPAS statistics:                                                              |
|                                                                               |
| Concurrent connections                            0                           |
| Memory usage                                      0                           |
| Referenced packets                                0                           |
| Referenced packets size                           0                           |
|                                                                               |
|-------------------------------------------------------------------------------|
```

RAD

The **RAD** view shows statistics about the RAD processes.

These are disabled by default.

Note - RAD statistics can degrade performance.

To enable RAD Statistics:

1. Enter expert mode.
2. Run:

   ```
   rad_admin stats
   ```

```
|-------------------------------------------------------------------------------|
| CPVIEW.I/S.RAD                                             08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| Overview SysInfo Traffic I/S Software-blades                                  |
|-------------------------------------------------------------------------------|
| CPU Memory SXL CoreXL Streaming RAD                                           |
|-------------------------------------------------------------------------------|
|                                                                               |
|                                                                               |
| To activate RAD statistics, run 'rad_admin stats'                             |
|                                                                               |
|-------------------------------------------------------------------------------|
| RAD General Information:                                                      |
|                                                                               |
| RAD Statistics Up Time        N/A                                             |
|                                                                               |
| Name                              APPI        AB        AV      URLF        |
| Found in LDB                       N/A       N/A       N/A         0        |
| Sent to Site                         0         0         0         0        |
| Round Trip (ms)                      0         0         0         0        |
| hit count                            0         0         0         0        |
```

```
| miss count                          0         0         0         0        |
| error count                         0         0         0         0        |
| cache size (bytes)                  0         0         0     2,088        |
| max cache size (bytes)              0         0         0     2,088        |
| cache total host records            0         0         0        14        |
| max cache total host records        0         0         0        14        |
| avg family size                     0         0         0         5        |
| max family size                     0         0         0         0        |
| time out connections                0         0         0         0        |
|-------------------------------------------------------------------------------|
```

Software-blades

The **Software-blades** view shows statistics about these blades:

- VPN
- IDA
- DLP

VPN

The **VPN** view shows a detailed list of statistics about the VPN software blade.

```
|-------------------------------------------------------------------------------|
| Software-blades.VPN                                    08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| General:                                                                      |
|                                                                               |
| Encrypted Packets                          0                                  |
| Decrypted Packets                          0                                  |
| Encryption Errors                          0                                  |
| Decryption errors                          0                                  |
| ----------------------------------------------------------------------------- |
| IKE SAs:                                                                      |
|                                                                               |
| Max concurrent SAs                         0                                  |
| Max concurrent SAs init by me              0                                  |
| Max concurrent SAs init by peer            0                                  |
| Concurrent SAs                             0                                  |
| Concurrent SAs initiated by me             0                                  |
| Concurrent SAs initiated by peer           0                                  |
| Total SAs                                  0                                  |
| Total SAs initiated by me                  0                                  |
| Total SAs initiated by peer                0                                  |
| Max concurrent SA negotiations             0                                  |
| Total SAs attempts                         0                                  |
| Total SAs attempts init by me              0                                  |
| Total SAs attempts init by peer            0                                  |
| ----------------------------------------------------------------------------- |
| IKE errors:                                                                   |
|                                                                               |
| No response from peer                      0                                  |
| Total failures (initiator errors)          0                                  |
| Total failures (responder errors)          0                                  |
| ----------------------------------------------------------------------------- |
| Compression:                                                                  |
|                                                                               |
| Bytes before compression                   0                                  |
| Bytes after compression                    0                                  |
| Bytes compression overhead                 0                                  |
| Bytes non compressed                       0                                  |
| Packets compressed                         0                                  |
| Packets non compressible                   0                                  |
| ----------------------------------------------------------------------------- |
| IPsec SAs:                                                                    |
|                                                                               |
| Total Inbound SAs                          0                                  |
| Total outbound SAs                         0                                  |
| ----------------------------------------------------------------------------- |
| IPsec errors:                                                                 |
|                                                                               |
| ESP decryption errors                      0                                  |
| Authentication errors                      0                                  |
```

```
| Replay errors                                0                          |
| Unknown SPI errors                           0                          |
| Compression errors                           0                          |
|                                                                         |
|-------------------------------------------------------------------------|
```

IDA

The **IDA** view shows basic Identity Awareness statistics, both basic statistics and some more technical data. Login statistics shows the number of successful logins, segmented by the authentication method. The number of successful and unsuccessful LDAP requests can be seen, and segmentation of events per domain controller.

```
|-------------------------------------------------------------------------|
| Software-blades.IDA                                 08Jun2014 10:56:58  |
|-------------------------------------------------------------------------|
| Authentication:                                                         |
|                                                                         |
| Authenticated Users [Total]                              61             |
| Authenticated Users [Kerberos]                            0             |
| Authenticated Machines [Kerberos]                         0             |
| Authenticated Users [User name and password]              0             |
| Authenticated Users [AD Query]                           59             |
| Authenticated Machines [AD Query]                         2             |
| Unauthenticated Guests                                    0             |
| ----------------------------------------------------------------------- |
| Entity count by identity sources:                                       |
|                                                                         |
| Agent                                                     0             |
| CaptivePortal                                             0             |
| AD Query                                                 61             |
| ----------------------------------------------------------------------- |
| Login statistic:                                                        |
|                                                                         |
| Successful User Logins [Kerberos]                         0             |
| Successful Machine Logins [Kerberos]                      0             |
| Successful User Logins [User name and password]           0             |
| Successful User Logins [AD Query]                     1,159             |
| Successful Machine Logins [AD Query]                     24             |
| Unsuccessful User Logins [Kerberos]                       0             |
| Unsuccessful Machine Logins [Kerberos]                    0             |
| Unsuccessful User Logins [User name and password]         0             |
| Users With Anti-Spoofing Protection                       0             |
| ----------------------------------------------------------------------- |
| LDAP:                                                                   |
|                                                                         |
| Successful LDAP Queries                               5,874             |
| Unsuccessful LDAP Queries                                 0             |
| ----------------------------------------------------------------------- |
| Pep servers:                                                            |
|                                                                         |
| Name          Status Disconnections IsLocal                             |
| Thirteen           0              0 Yes                                 |
| ----------------------------------------------------------------------- |
| Domain controllers:                                                     |
|                                                                         |
| Name                 IP            Status    Events                     |
| ab.checkpoint.com    192.168.1.1        0       912                     |
| ----------------------------------------------------------------------- |
| Kernel information:                                                     |
|                                                                         |
| Kbuf memory used by sessions (bytes)                 22,342             |
| Kbuf memory used by supersessions (bytes)            15,401             |
| Kbuf memory used by client_db (bytes)                26,842             |
| ----------------------------------------------------------------------- |
| PDP session objects:                                                    |
|                                                                         |
| Basic Sessions                                            0             |
| Super Sessions                                            0             |
|                                                                         |
|-------------------------------------------------------------------------|
```

DLP

The **DLP** view shows general Data Loss Prevention blade statistics.

```
|-------------------------------------------------------------------------------|
| VPN                                                        08Jun2014 10:56:58 |
|-------------------------------------------------------------------------------|
| General:                                                                      |
|                                                                               |
| Total scanned messages        4,729                                           |
| License status                Valid DLP license                               |
| Bypass status                 Inactive                                        |
| Last install policy status    Success                                         |
| RAM Disk utilized space (%)   0                                               |
| ----------------------------------------------------------------------------- |
| Traffic:                                                                      |
|                                                                               |
| Protocol         Scanned messages        Incidents                            |
| SMTP                         0                0                           |
| HTTP                     4,756                0                           |
| FTP                          0                0                           |
| ----------------------------------------------------------------------------- |
| UserCheck:                                                                    |
|                                                                               |
| Connected clients                             0                               |
| ----------------------------------------------------------------------------- |
| Quarantine:                                                                   |
|                                                                               |
| Discarded from quarantine by user             0                               |
| Quarantine expired                            0                               |
| Sent from quarantine                          0                               |
| Number of Messages                            0                               |
| Size of messages                              0 MB                            |
| Free space                                1,406 MB                            |
| ----------------------------------------------------------------------------- |
| Connection to Mail Relay:                                                     |
|                                                                               |
| Queue length                                  0                               |
| Number of errors                              0                               |
| Emails in queue older than 1 hour             0                               |
| Size of emails in queue                       0 MB                            |
| Free space for queue                        437 MB                            |
| ----------------------------------------------------------------------------- |
| Queues:                                                                       |
|                                                                               |
|         Mime Parser       DLP        File convert         Fingerprint         |
|                   0         0                   0                   0         |
| ----------------------------------------------------------------------------- |
| Health:                                                                       |
|                                                                               |
| Operational status   All DLP subsystems are operating normally                |
|                                                                               |
|-------------------------------------------------------------------------------|
```