

# PAN-OS Device Telemetry Metrics Reference

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# PAN-OS Device Telemetry Overview

This document identifies all of the metrics that PAN-OS can collect and forward to Palo Alto Network's cloud for use by telemetry powered applications. The primary purpose of this document is to identify the privacy considerations for each of the metrics that PAN-OS device telemetry can collect and forward.

The information in this document is relevant only for devices running PAN-OS 10.0 or later.

- Data Collection
- Privacy Levels
- Collection Frequency
- Metrics Usage
- Metrics that can not Identify Anything
- Metrics that Identify a Device
- Metrics that Identify a Network
- Metrics that Identify a User

### **Data Collection**

If device telemetry is configured, and if the device administrator permits it, a Panorama or next-generation firewall will collect and share data with Palo Alto Networks. The Palo Alto Networks device collects this data by running command line interface (CLI) commands and by accessing internal data sources (such as internal log files) that are sometimes, but not always, viewable by device administrators. The device sends this information to Palo Alto Networks Cortex Data Lake as an unstructured bundle of data on specific time intervals. Data bundles contain the raw output from CLI commands, and entire log files.

When Cortex Data Lake receives this data, it parses the data into tables of information that are needed by telemetry powered applications to perform their function(s).



Telemetry powered applications occasionally use the term 'metrics' to identify the data on which they operate. The metrics that these applications refer to is the information that is created after Cortex Data Lake has parsed and stored the raw data that this document calls "metrics". Be aware that if an application is referring to 'metrics', it is really referring to a subset of the data that device telemetry sends to Cortex Data Lake.

This document identifies the raw data that Palo Alto Networks devices send to Cortex Data Lake. The nature of this data, its collection interval, and most importantly the privacy level for each metric is identified by this document's reference pages.

#### Data Collected by Palo Alto Networks for Internal Research Purposes

If **Product Usage** is selected under the telemetry settings, Palo Alto Networks collects data based on user events, such as clicks and device state, to gain insights that help improve future user experience.

Review the PAN-OS Privacy data sheet for more information about our privacy policies.

## **Privacy Levels**

Individual metrics collected by PAN-OS device telemetry have different privacy considerations. That is, the data might contain information that identifies a device, network, or person.

Privacy	Description
Anonymous	The metric cannot be used to identify any specific network, device, or person.
Device	The metric contains information that can identify a specific device. For example, it might contain information such as hostnames or serial numbers. The device that can be identified might not be the device from which the data was collected. It might instead be a remote device for which a next-generation firewall manages network activity.
Network	The metric contains information that can identify a specific network. For example, it might contain subnet or routing information.
User	The metric contains information that can identify a specific user. Palo Alto Networks devices use technology that enables the device to associate network activity with the user who is known to have performed an action (such as log on to a device), or who probably performed the action (because corporate directory sources identify the person as the primary user of a device).

The metrics described in this document are primarily organized by their collection category because the collection and transmission of telemetry data is performed by turning collection categories off and on. To identify metrics grouped by privacy consideration:

- Metrics that can not Identify Anything
- Metrics that Identify a Device
- Metrics that Identify a Network
- Metrics that Identify a User

# Collection Frequency

PAN-OS collects and sends telemetry data on fixed intervals. Collection is defined on a metric by metric basis, and can be one of:

- Every 20 minutes.
- Every hour.
- Daily.

Telemetry is collected into data bundles. Each bundle is an aggregation of all the data collected up to the point of data transmission. These bundles are stored on the device until a transmission event, which occur hourly. When the device successfully sends a bundle to Palo Alto Networks, the device deletes the bundle from its local storage.

# Metrics Usage

It is impossible to predict all the different ways a given metric will be used to solve future problems, but every metric that device telemetrics collects was selected for use in one or two specific use cases. In the interest of transparency, each reference page identifies the main reason or reasons why Palo Alto Networks decided to collect a given metric.

The primary reasons why Palo Alto Networks initially decided to collect a metric are:

Use Case	Description
Application logic	The metric is useful from the perspective of applications that are helping users manage their devices. Many of these metrics were identified by evaluating what the Best Practice Assessment (BPA) tool needs in order to offer its advice. Other metrics were selected because Palo Alto Networks expects them to be useful for future apps that have not yet made it to market.
Product enhancements	The metric contains information that helps Palo Alto Networks understand how customers are using the device. This usage information helps the company understand where it might need to focus product development. It might also help to identify where customer outreach and education needs reinforcement.
Support	The metric contains information that is useful to Palo Alto Networks Technical Support when they are troubleshooting customer issues. By having access to historical data on the hardware's and software's behavior, they can more easily spot the source of issues. This translates into faster response times for customer support tickets.
Threat research	Many of the metrics that device telemetrics collects are legacy metrics. That is, the telemetry feature that existed prior to PAN-OS 10.0 was already collecting this information. The primary usage for this information was and is to help Palo Alto Networks threat researchers identify new network threats so that production firewalls can be rapidly configured (using content updates and other dynamic information changes) to respond to new threats.

### Metrics that can not Identify Anything

The following metrics can not be used to identify anything or anyone, organized by collection category:

#### **Device Health and Performance**

- EDL Capacities
- Security Policy Usage and Hit Count

#### **Product Usage**

- Application Blacklisting
- Data Filtering Profiles
- Data Filtering Profiles by Data Pattern Type
- Decryption SSH Proxy Configuration
- Device Geographic Location
- Device Group and Template Stack Usage
- Device Model Number
- HIP Based Policies
- High Risk URL Filtering Logs
- Known User Security Policy Matching
- Miscellaneous Object Usage Statistics
- Panorama Mode
- Rule Tagging
- Severity Based Log Forwarding
- Timezone and Timestamp
- User Activity Report
- User-ID Mapping Sources
- User-ID to Include or Exclude User Mappings
- XML Configuration Size

#### **Threat Prevention**

• Sanctioned Tag SaaS Usage

## Metrics that Identify a Device

The following metrics can be used to identify a device, organized by collection category:

#### **Device Health and Performance**

- CPU Load Sampling by Firewall Function
- CPU Utilization Statistics
- Chassis Inventory
- Configuration Log Contents
- Content Update Counters
- Crash and Trace Files
- Current Users per GlobalProtect Gateway
- DOS Block Table
- Data-Management Plane Health Heartbeat
- Dataplane Link Utilization
- Device Connection Status
- Device Logging Health
- Fan Speed Measurements
- Forwarding Information Base (FIB) Routing Health
- Front LED State
- Global Counters
- GlobalProtect Client Versions
- GlobalProtect Failure Connections
- GlobalProtect Gateway Connection Protocols
- GlobalProtect Gateway Statistics
- GlobalProtect Gateway Tunnel Rates
- GlobalProtect Operating System Types
- GlobalProtect Portal Connection Failure
- GlobalProtect Portal Connection Success
- GlobalProtect Quarantined Devices
- GlobalProtect Successful Connections
- HA Health Errors
- Hardware Alarms
- Hardware Buffer Statistics
- Hardware Ports
- Hardware System Logs

- Hardware and Software Pools
- High Availability
- High Availability Backup Interfaces
- High Availability Interface 1
- High Availability Interface 2
- IP Address to User Mapping Count
- Ingress Backlogs
- Log Forwarding Data Transfer Speed
- Log Forwarding Generation Rate
- LogDB Quotas
- Logging Rate
- Logging Statistics
- Logging Status
- Managed Devices
- Management to Data Plane Counters
- Maximum Concurrent GlobalProtect Gateway Tunnels
- Maximum Concurrent GlobalProtect Gateway Users
- Memory Pool Utilization Count
- NAT Pool Utilization
- NSX Update Rate
- Octeon Chip Health
- Operational Command History
- PAN-DNS Cache Usage
- PAN-DNS End-to-End Response Time
- PAN-DNS Lookup Timeout
- PAN-OS Counters
- Packet Buffer Protection
- Packet Scheduling Engine Performance
- Panorama HA Health
- Panorama Log Reception Rate
- Panorama Logging Infra Health
- Power Supply Measurements
- QUMRAN Chip Health
- Registered IP Addresses
- Routing Resource
- SMART Disk Information

- SSL Decyrption Memory
- Session Distribution
- Session Information
- Session Table Usage
- Software Buffer Statistics
- Software Log
- Software Update History
- System Alarm History
- System Disk Utilization
- System Jobs
- System RAID
- System Resource Usage
- System State
- Temperature Measurements
- Traffic Blocked as Command and Control
- Traffic Blocked as Malware
- Traffic Blocked as Phishing
- URL Cache Statistics
- User-ID Agent State
- WildFire Statistics and Status
- netstat

#### **Product Usage**

- ACC and Monitor Query History
- Anti-Spyware in Security Policies
- Antivirus in Security Policies
- Any App in Security Policies
- App-ID Adoption in Security Policies
- Application Override Policies
- Asymmetric Network Traffic
- Authentication Policy Usage
- Bidrectional Forwarding Detection Configuration
- Cisco ACI Plugin Configuration
- Credential Phishing Protection Configuration
- Credential Phishing Protection Detection Method
- Credential Phishing in Security Policies
- Custom Reports using Detailed Logs Databases

- Custom Vulnerability and Spyware Signatures
- DAG Security Policies
- DNS Proxy Adoption
- DNS Sinkhole Protection in Security Policies
- DSRI Enabled Security Policies
- Data Filtering in Security Policies
- Destination NAT Session Policies
- Device Power On Hours
- DoS Protection Adoption
- DoS Protection Threshold Frequency
- Dynamic DNS Adoption
- ECMP Load Balancing
- EDL Configuration and Capacity
- File Blocking in Security Policies
- Firewall Resource Protection Adoption
- GlobalProtect Adoption
- GlobalProtect Clientless VPN Adoption
- GlobalProtect IPv6 Usage
- GlobalProtect Mobil App Adoption
- GlobalProtect Split Tunneling Adoption
- GlobalProtect on Linux Endpoints
- HA Heartbeat Backup
- HA Passive Link State
- HA1 and HA2 Backups
- IPSec Tunnel Monitoring
- Large Scale VPN Configuration
- License Entitlements
- Link and Path Monitoring
- Log Collector Group Architecture
- Log Collector Redundancy Adoption
- Log Creation Policies
- Log Forwarding Adoption in Security Policies
- Log Forwarding Auto Tag
- Log Forwarding Profiles in Security Rules
- Log Forwarding Settings
- Log Quotas

- Log Retention Policy
- Logging Enablement in Security Policies
- Most Recent Threat Exceptions for all Threat Signatures
- NAT Configuration
- NSX Automated Security Actions
- NSX Multi-Tenancy Configuration
- NetFlow Adoption
- Number of Custom Reports
- Panorama Plugins
- QoS Configuration
- Region Based Security Policies
- Route Table Size
- Routing Peers
- SNMP Version
- SSL Decrypt Configuration
- Security Policies with File Blocking
- Service Ports and App IDs in Security Policies
- Support Licenses Installed
- Threat Exceptions by Threat ID
- Threat Prevention Policy
- Threatening SaaS Traffic
- URL Category Settings
- URL Filtering in Security Policies
- Unused Predefined Reports
- User-ID Adoption in Security Policies
- VM Monitoring
- VM Plugin Usage Statistics
- VMware NSX Plugin Configuration
- Vulnerability Protection in Security Policies
- WildFire Global Cloud Configuration
- WildFire Virus Threat Logs
- WildFire in Security Policies
- Zone Protection Adoption

#### **Threat Prevention**

- DNS-Related Threat Logs
- Decryption Usage

#### **PAN-OS Device Telemetry Overview**

- Non-Standard Port Usage
- PAN-DNS Threat Logs
- Threat Inspection of Mobile Devices
- Threats Permitted
- Uninspected Network Traffic
- Unknown TCP or UDP Traffic

## Metrics that Identify a Network

The following metrics can be used to identify a network, organized by collection category:

#### **Device Health and Performance**

- Log Receiver Statistics
- PAN-OS REST API Error Response
- PAN-OS REST API Performance Metrics
- PAN-OS XML API Error Response
- PAN-OS XML API Performance Metrics

#### **Product Usage**

- HIP Based Features
- Managed Devices Licenses
- PAN-OS REST API Usage
- PAN-OS XML API Usage

#### Threat Prevention

- Attackers
- Attacking Countries
- Content and Threat Detection State
- Correlated Events
- Correlated Events Details
- Current Application ID Version
- Data Plane Statistics
- Dynamic DNS
- File Identification
- Malware Sites
- Management Plane Statistics
- Parked Domains
- Phishing Sites
- Previous Application ID Version
- Proxy Avoidance and Anonymizers
- Questionable Sites
- System Information
- System Log
- Top Application Usage

- Top Threat IDs
- Unknown Applications by Destination Address
- Unknown Applications by Destination Ports
- Unknown Sites

# Metrics that Identify a User

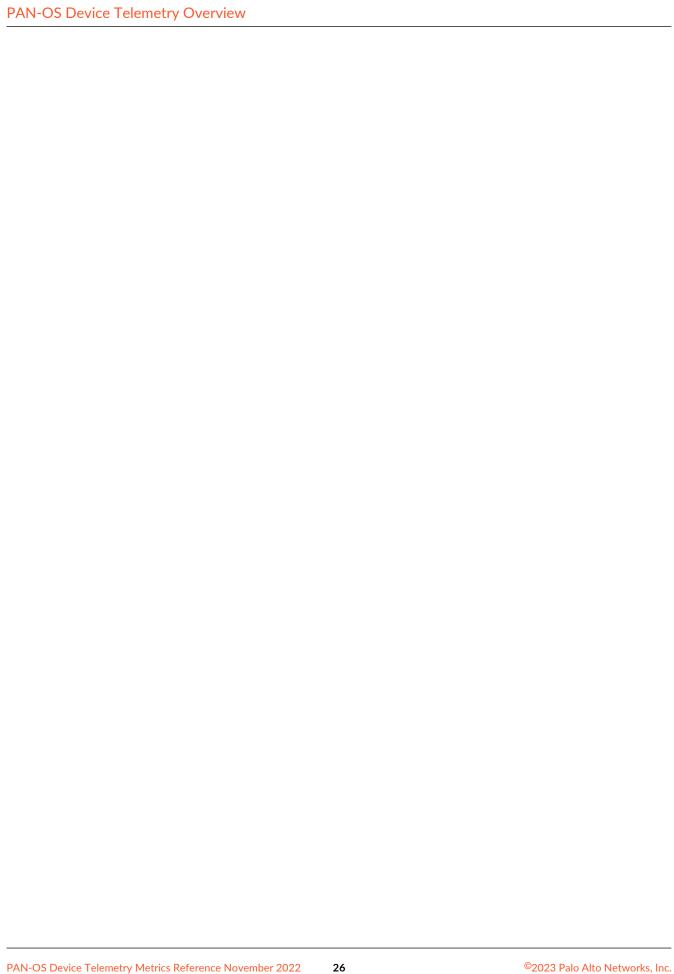
The following metrics can be used to identify a user, organized by collection category:

#### **Device Health and Performance**

- Device Time-Series Data
- GlobalProtect Gateway Connection Details
- GlobalProtect Gateway Connection Performance
- GlobalProtect Gateway Failure Details
- Management and Data Plane Logs

#### **Threat Prevention**

Credential Theft





# **Device Health and Performance Metrics**

Device Health and Performance metrics are used by telemetry powered applications to help you recognize problems with your devices before they become a critical issue. This data can also by used by Palo Alto Networks technical support to efficiently troubleshoot problems with your devices.

- Chassis Inventory
- Configuration Log Contents
- Content Update Counters
- CPU Load Sampling by Firewall Function
- CPU Utilization Statistics
- Crash and Trace Files
- Current Users per GlobalProtect Gateway
- Data-Management Plane Health Heartbeat
- Dataplane Link Utilization
- Device Connection Status
- Device Logging Health
- Device Time-Series Data
- DOS Block Table
- EDL Capacities
- Fan Speed Measurements
- Forwarding Information Base (FIB) Routing Health
- Front LED State
- Global Counters
- GlobalProtect Client Versions
- GlobalProtect Failure Connections
- GlobalProtect Gateway Connection Details
- GlobalProtect Gateway Connection Performance
- GlobalProtect Gateway Connection Protocols
- GlobalProtect Gateway Failure Details
- GlobalProtect Gateway Statistics
- GlobalProtect Gateway Tunnel Rates
- GlobalProtect Operating System Types
- GlobalProtect Portal Connection Failure

- GlobalProtect Portal Connection Success
- GlobalProtect Quarantined Devices
- GlobalProtect Successful Connections
- HA Health Errors
- Hardware Alarms
- Hardware and Software Pools
- Hardware Buffer Statistics
- Hardware Ports
- Hardware System Logs
- High Availability
- High Availability Backup Interfaces
- High Availability Interface 1
- High Availability Interface 2
- Ingress Backlogs
- IP Address to User Mapping Count
- Log Forwarding Data Transfer Speed
- Log Forwarding Generation Rate
- Log Receiver Statistics
- LogDB Quotas
- Logging Rate
- Logging Statistics
- Logging Status
- Managed Devices
- Management and Data Plane Logs
- Management to Data Plane Counters
- Maximum Concurrent GlobalProtect Gateway Tunnels
- Maximum Concurrent GlobalProtect Gateway Users
- Memory Pool Utilization Count
- NAT Pool Utilization
- netstat
- NSX Update Rate
- Octeon Chip Health
- Operational Command History
- Packet Buffer Protection
- Packet Scheduling Engine Performance
- PAN-DNS Cache Usage

- PAN-DNS End-to-End Response Time
- PAN-DNS Lookup Timeout
- PAN-OS Counters
- PAN-OS REST API Error Response
- PAN-OS REST API Performance Metrics
- PAN-OS XML API Error Response
- PAN-OS XML API Performance Metrics
- Panorama HA Health
- Panorama Log Reception Rate
- Panorama Logging Infra Health
- Power Supply Measurements
- QUMRAN Chip Health
- Registered IP Addresses
- Routing Resource
- Security Policy Usage and Hit Count
- Session Distribution
- Session Information
- Session Table Usage
- SMART Disk Information
- Software Buffer Statistics
- Software Log
- Software Update History
- SSL Decyrption Memory
- System Alarm History
- System Disk Utilization
- System Jobs
- System RAID
- System Resource Usage
- System State
- Temperature Measurements
- Traffic Blocked as Command and Control
- Traffic Blocked as Malware
- Traffic Blocked as Phishing
- URL Cache Statistics
- User-ID Agent State
- WildFire Statistics and Status

# **Chassis Inventory**

Collects an inventory of the hardware components installed in the device, including the device model and serial number, individual component serial numbers, and hardware revision numbers.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **Configuration Log Contents**

Shows the configuration changes made to the device over the previous collection interval. These log records identify the changes made to the device, the person who made the change, plus a time stamp for when each configuration change was made.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **Content Update Counters**

Collects internal counter values, including packets sent and received over the reporting interval, number of Enhanced Application Logs (DPI logs) written and their field and byte count, the amount of time spent writing packet diagnostic logs, and so forth.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# **CPU Load Sampling by Firewall Function**

Identifies CPU load caused by specific firewall functions over the collection period.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# **CPU Utilization Statistics**

Collects CPU utilization statistics.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## Crash and Trace Files

Collects crash information and trace files for new features and major PAN-OS version upgrades.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# Current Users per GlobalProtect Gateway

Identifies the number of users connected to the GlobalProtect gateway. Statistic is broken out on a per-customer basis.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# Data-Management Plane Health Heartbeat

Collects heartbeat status between internal device components.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# Dataplane Link Utilization

Collects transmit and receive bandwidth statistics for each dataplane link.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## **Device Connection Status**

Description is not available.

Category	Device Health and Performance
Usage	unknown usage
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8480

# **Device Logging Health**

Description is not available.

Category	Device Health and Performance
Usage	unknown usage
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8480

## **Device Time-Series Data**

Offers time-series data on device utilization, capacity, and performance.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a user.
Frequency	Every One Hour
Introduced	Content version 8284

### **DOS Block Table**

Collects the contents of the device's Denial of Service (DOS) Block Table. This table includes the source IP addresses of hosts that are blocked by the device. The block time, the block's time to live, the information source that caused the device to block the IP, and the ingress zone are also captured.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## **EDL** Capacities

Collects consumption and maximum size limits for various External Dynamic List (EDL) lists on the device. Current usage and maximum list size is collected for IP, Domain, URL, and Predefined-IP lists. The contents of these lists are not collected; rather just the total number of elements in each list is retrieved, as well as the maximum number of elements allowed for the list type.

Category	Device Health and Performance
Usage	This metric can be used for threat research.
Privacy	Cannot identify anything.
Frequency	Every One Hour
Introduced	Content version 8284

# Fan Speed Measurements

Provides the fan speed readings collected over the previous six months.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# Forwarding Information Base (FIB) Routing Health

Collects statistics on FIB data transfer between the management and data planes.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## Front LED State

Collects information on which of the device's LEDs are turned on. Identify's the devices state in the event that it becomes unresponsive.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## **Global Counters**

Collects PAN-OS global counter values that are useful for troubleshooting system issues, such as packets sent and received, sessions allocated and freed, as well as packets dropped, received, and transmitted.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## GlobalProtect Client Versions

For each customer connecting to the device, identifies the GlobalProtect client version that is in use.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## GlobalProtect Failure Connections

Identifies the number of failed connections to the GlobalProtect gateway as a percentage of total number of connection attempts. Statistic is broken out on a per-customer basis.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### GlobalProtect Gateway Connection Details

Provides GlobalProtect gateway connection details, such as the amount of time required to establish a connection, the number of concurrent and unique users of that connection, the length of the connection, the portal used, the operating system and version on which the client is running, the client version, the connection method, the login duration, IP and IPv6 values, and the geographic region in which the connection was established. This information is gathered on a per customer and per connection basis.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a user.
Frequency	Daily
Introduced	Content version 8284

## GlobalProtect Gateway Connection Performance

Provides tunnel latency statistics for the GlobalProtect gateway, including the user who established the tunnel, the portal used for the tunnel, and the number of unique users of the tunnel.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a user.
Frequency	Daily
Introduced	Content version 8284

## GlobalProtect Gateway Connection Protocols

Identifies the number of IPSec/SSL connections to the GlobalProtect gateway. Statistic is broken out on a per-customer basis.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### GlobalProtect Gateway Failure Details

Provides GlobalProtect connection failure details, such as the user who attempted to establish the connection, the portal used, the operating system and version on which the client is running, the client version, the connection method, the login duration, IP and IPv6 values, and the error and error code that is reported by the connection failure. This information is gathered on a per customer, per gateway, and per user basis.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a user.
Frequency	Daily
Introduced	Content version 8284

## GlobalProtect Gateway Statistics

Collects information on the GlobalProtect gateway such as the number of currently connected users.

Category	Device Health and Performance
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# GlobalProtect Gateway Tunnel Rates

Collects information on GlobalProtect Gateways configured for the device, such as the number of successful connections, and the overall performance of the gateway.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# GlobalProtect Operating System Types

Provides statistics on operating system types in use on the endpoints on which GlobalProtect clients are running. The operating system name and release version is collected, as is the number of endpoints running each operating system.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## GlobalProtect Portal Connection Failure

Identifies the number of unsuccessful connections to the GlobalProtect portal as a percentage of total number of connection attempts. Statistic is broken out on a per-customer basis, and by failure reason.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## **GlobalProtect Portal Connection Success**

Identifies the number of successful connections to the GlobalProtect portal as a percentage of total number of connection attempts. Statistic is broken out on a per-customer basis.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# GlobalProtect Quarantined Devices

Identifies the number of endpoints that the device has in GlobalProtect quarantine. Statistic is broken out on a per-customer basis, and by quarantine reason.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## GlobalProtect Successful Connections

Identifies the number of successful connections to the GlobalProtect infrastructure, as a percentage of the total number of connection attempts.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## **HA** Health Errors

Description is not available.

Category	Device Health and Performance
Usage	unknown usage
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8480

# Hardware Alarms

Identifies hardware alarms that have been repeatedly seen over the collection period.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## Hardware and Software Pools

Collects general hardware and software pool statistics.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## **Hardware Buffer Statistics**

Collects hardware buffer usage statistics.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## **Hardware Ports**

Collects the hardware ports used by the device's various network interfaces.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# Hardware System Logs

Collects system logs that are related to the most recent hardware-related system activity.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every One Hour
Introduced	Content version 8284

# High Availability

Collects the device's high availability pairing information.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# High Availability Backup Interfaces

Collects configuration information about the first and second interfaces used for the device high availability configuration.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# High Availability Interface 1

Collects configuration and usage information on the first interface used for the device's High Availability (HA) configuration. The data collected includes the interface's IP address, MAC address, and transmit and receive statistics.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# High Availability Interface 2

Collects configuration and usage information on the second interface used for the device's High Availability (HA) configuration. The data collected includes the interface's IP address, MAC address, and transmit and receive statistics.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# Ingress Backlogs

Captures the top five network sessions that are consuming at least 2% of packet buffers.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# IP Address to User Mapping Count

Identifies the total number of IP addresses that are mapped to a user account.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## Log Forwarding Data Transfer Speed

Identifies the data transfer speed for log forwarding. If the device supports it, this also indicates whether the high speed log forwarding mode is turned on.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## Log Forwarding Generation Rate

Identifies the rate at which log records are generated on the device.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### Log Receiver Statistics

Collects resource information for the log receiver daemon, such as the incoming log rate, the number of logs written by the daemon, number of logs written for each log type (traffic, threat, sctp, and so forth), number of corrupted packets, and URL cache counts. Also collects statistics on log external forwarding, such as the number of logs (for a given type) that are in the send queue, the send count, drop count, and send rate.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a network.
Frequency	Every 20 minutes
Introduced	Content version 8284

## LogDB Quotas

For each log type (traffic, threat, system, and so forth), collects the the amount of disk space used as a percentage of the disk space quota configured for the log type, as well as the number of bytes consumed by the log type. Retention period for each log type is also collected, as well as the maximum quota configured for each log type.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every One Hour
Introduced	Content version 8284

# Logging Rate

Identifies the rate at which logs are being generated on the device.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## **Logging Statistics**

Collects statistics how how fast the device is creating logs, log send and failure rates, the number of traffic and threat logs created during the reporting interval, and so forth.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### **Logging Status**

Collects information about the recent logs created on the device. This information is broken out by log type (for example, threat or traffic), and includes logging activity such as the time that the last log was created, when it was forwarded to a log collector, and so forth.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## Managed Devices

Collected from Panorama devices only. Shows all the next-generation firewalls managed by the Panorama instance, and their connection state.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Management and Data Plane Logs

Collects internal logs written by the device's management and data planes. These logs contain time-series data on system utilization, capacity, and performance.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a user.
Frequency	Daily
Introduced	Content version 8284

## Management to Data Plane Counters

Shows transmission counters between the device management and data planes, including bytes sent and received, packets dropped, and so forth.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### Maximum Concurrent GlobalProtect Gateway Tunnels

Identifies the number of tunnels concurrently in use on the GlobalProtect gateway. Statistic is broken out on a per-customer basis.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### Maximum Concurrent GlobalProtect Gateway Users

Identifies the maximum number of users concurrently connected to the GlobalProtect gateway. Statistic is broken out on a per-customer basis.

Category	Device Health and Performance
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# Memory Pool Utilization Count

Collects utilization statistics on the various memory pools and buffers in use on the device.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### **NAT Pool Utilization**

Collect Network Address Translation Table (NAT) memory pool utilization, including the usable and used shared memory size, and the size of the NAT pool both in bytes and as a percentage of full.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### netstat

Collects the netstat output (network statistics) for the device. This shows all the TCP/IP connections that are established or in-progress.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## **NSX Update Rate**

Collects the rate at which the vmware\_nsx plugin is collecting IP address information for use in updating Dynamic Address Groups (DAGs).

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# Octeon Chip Health

Collects information about the Octeon chip in the device, including error conditions, internal counter states, and pause or discard conditions.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# **Operational Command History**

Collects the most recent operational commands issued on the device.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **Packet Buffer Protection**

Captures the current state of the device's packet buffer protection, which is a feature that protects the device from flood attacks.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## Packet Scheduling Engine Performance

Collects maximum and average processing times for the packet scheduling engine.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## PAN-DNS Cache Usage

Identifies the PAN-DNS cache usage. Metrics are collected on the average, min, and max usage, as well as the median age of cache entries.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Every One Hour
Introduced	Content version 8284

### PAN-DNS End-to-End Response Time

Provides the end-to-end response time for when the device queries the Palo Alto Networks Cloud-Delivered DNS signature service. Used to determine whether block policies are ever not enforced on the device because the query timeout value has been reached.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **PAN-DNS Lookup Timeout**

Indicates whether the default timeout value for the Palo Alto Networks Cloud-Delivered DNS signature service has been changed on the device.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **PAN-OS Counters**

Collects PAN-OS global counter values that are useful for troubleshooting system issues, such as packets sent and received, sessions allocated and freed, as well as packets dropped, received, and transmitted.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## PAN-OS REST API Error Response

Identifies the frequency of REST API error returns for the device.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

### **PAN-OS REST API Performance Metrics**

Provides REST API performance metrics, such as the number of requests per second served by the device, and the average response time to service a REST API request.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## PAN-OS XML API Error Response

Identifies the frequency of XML API error returns for the device.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

### **PAN-OS XML API Performance Metrics**

Provides XML API performance metrics, such as the number of requests per second served by the device, and the average response time to service an XML API request.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

### Panorama HA Health

Description is not available.

Category	Device Health and Performance
Usage	unknown usage
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8480

## Panorama Log Reception Rate

Identifies the rate at which Panorama is receiving and storing log records.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# Panorama Logging Infra Health

Description is not available.

Category	Device Health and Performance
Usage	unknown usage
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8480

## **Power Supply Measurements**

Provides power output history for each power supply on the device. Also shows power interrupts, and failovers to secondary power supplies.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **QUMRAN Chip Health**

Collects information about the QUMRAN chip in the device, including error conditions, internal counter states, and pause or discard conditions.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## Registered IP Addresses

Identifies the IP addresses registered with the firewall, and the tags that are applied to those IP addresses.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### Routing Resource

Collects routing resource usage, including all routes configured for the device, total IPV4 and IPV6 routes, total number of routes by type (Static, Connect, OSPF, and so forth), and the maximum routes allowed.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## Security Policy Usage and Hit Count

Identifies stale or unused security policies. Also identifies the policies that are used the most.

Category	Device Health and Performance
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

### Session Distribution

Collects information on network sessions organized by dataplane. For each dataplane, statistics are collected on the number of active sessions, number of dispatched sessions (that is, number of sessions the dataplane processed), and the dispatched rate per second. These counters are reset only at device reboot.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### **Session Information**

Collects session statistics for each dataplane, such as the maximum number of supported sessions, the number of active sessions broken down by session type (TCP, HTTP, SCTP, and so forth), session timeout values, and so forth.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### Session Table Usage

Collects session statistics for each dataplane, such as the maximum number of supported sessions, the number of active sessions broken down by session type (TCP, HTTP, SCTP, and so forth), session timeout values, and so forth. Also collects system information, such as model number, hostname, MAC and IP address, amount of device uptime, software versions and release dates.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### **SMART Disk Information**

Collects information on disk drive performance and health using the Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T) data.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### Software Buffer Statistics

Collects software buffer usage statistics.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### Software Log

Captures logging output related to device boot up activity. Contains information on installing updated software packages and their installation location, filesystem mounts, and commands run during package installation and device boot up. Occaisonally might contain warnings related to missing "best practice" configuration advice, such as a missing user/group which forces the system to use "root" instead.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Software Update History

Collects the last update date, time, and status (Success or Failure) for the software loaded on the device, including the device operating system.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## SSL Decyrption Memory

Collects usage statistics on the SSL decryption cache.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## System Alarm History

Collects the most recent system alarm log records. These identify error conditions with the device hardware or operating system.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## System Disk Utilization

Collects utilization information for each disk partition on the device. Includes partition size, amount used, and amount available. The partition mount location is also collected.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## **System Jobs**

Collects information on all software jobs run on the device during the reporting interval, including the job's status, as well as timestamps on when the job was queued, and when it completed.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## System RAID

Collects details on each of the drives installed in the device's RAID (if any). For each partition configured for the device, collects the status of each relevant disk drive, as well as its sync status.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## System Resource Usage

Collects total memory utilization, as well as system resource (CPU and memory) utilization for all processes currently running on the device.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### System State

Collects the device's current state, including the device's model number. This information includes internal statistics on buffers, memory, device telemetry collection and send statistics, disk quotas, and so forth.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Temperature Measurements

Provides the hardware temperature readings collected for the reporting interval.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Traffic Blocked as Command and Control

Contains URL logs of traffic that was blocked because it was categorized as malware command and control traffic. This helps identify how much of the device's traffic is being blocked as command and control.

Category	Device Health and Performance
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Traffic Blocked as Malware

Contains URL logs of traffic that was blocked because it was categorized as malware. This helps identify how much of the device's traffic is being blocked as malware.

Category	Device Health and Performance
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Traffic Blocked as Phishing

Contains URL logs of traffic that was blocked because it was categorized as phishing. This helps identify how much of the device's traffic is being blocked as phishing.

Category	Device Health and Performance
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## **URL Cache Statistics**

Collects performance information on the URL categorization cache.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### **User-ID Agent State**

Shows the User-ID agent connection activity for each server (such as Active Directory, Microsoft Exchange) that the agent is configured to use. Collected activity includes statistics such as connections tried, succeeded, and failed; messages sent and received; send, receive, and failure information by connection type (User IP Mapping, Group Messages, HIP report, and so forth).

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every One Hour
Introduced	Content version 8284

### WildFire Statistics and Status

Collects WildFire connection and configuration status for both public and private cloud. This includes the cloud server address, whether a license for that cloud service is configured for the device, service route IP address, upload status, and so forth. File size limits are also collected, as is public and private cloud forwarding info such as the total number of files forwarded, number of failed forwarding attempts, number of cloud queries, and so forth. Also collects WildFire forwarding counters, error counters, reset counters, resource meters, and the size of forwarding queues.

Category	Device Health and Performance
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every One Hour
Introduced	Content version 8284





# **Product Usage Metrics**

Product usage metrics are used to help you get the greatest possible benefit from your Palo Alto Networks devices. These metrics can be used by telemetry powered applications to identify usage areas where your device configuration does not meet best practice advice. These metrics can also be used by Palo Alto Networks to identify product features that require additional development, documentation, or education support.

- ACC and Monitor Query History
- Anti-Spyware in Security Policies
- Antivirus in Security Policies
- Any App in Security Policies
- App-ID Adoption in Security Policies
- Application Blacklisting
- Application Override Policies
- Asymmetric Network Traffic
- Authentication Policy Usage
- Bidrectional Forwarding Detection Configuration
- Cisco ACI Plugin Configuration
- Credential Phishing in Security Policies
- Credential Phishing Protection Configuration
- Credential Phishing Protection Detection Method
- Custom Reports using Detailed Logs Databases
- Custom Vulnerability and Spyware Signatures
- DAG Security Policies
- Data Filtering in Security Policies
- Data Filtering Profiles
- Data Filtering Profiles by Data Pattern Type
- Decryption SSH Proxy Configuration
- Destination NAT Session Policies
- Device Geographic Location
- Device Group and Template Stack Usage
- Device Model Number
- Device Power On Hours
- DNS Proxy Adoption
- DNS Sinkhole Protection in Security Policies
- DoS Protection Adoption

- DoS Protection Threshold Frequency
- DSRI Enabled Security Policies
- Dynamic DNS Adoption
- ECMP Load Balancing
- EDL Configuration and Capacity
- File Blocking in Security Policies
- Firewall Resource Protection Adoption
- GlobalProtect Adoption
- GlobalProtect Clientless VPN Adoption
- GlobalProtect IPv6 Usage
- GlobalProtect Mobil App Adoption
- GlobalProtect on Linux Endpoints
- GlobalProtect Split Tunneling Adoption
- HA Heartbeat Backup
- HA Passive Link State
- HA1 and HA2 Backups
- High Risk URL Filtering Logs
- HIP Based Features
- HIP Based Policies
- IPSec Tunnel Monitoring
- Known User Security Policy Matching
- Large Scale VPN Configuration
- License Entitlements
- Link and Path Monitoring
- Log Collector Group Architecture
- Log Collector Redundancy Adoption
- Log Creation Policies
- Log Forwarding Adoption in Security Policies
- Log Forwarding Auto Tag
- Log Forwarding Profiles in Security Rules
- Log Forwarding Settings
- Log Quotas
- Log Retention Policy
- Logging Enablement in Security Policies
- Managed Devices Licenses
- Miscellaneous Object Usage Statistics

- Most Recent Threat Exceptions for all Threat Signatures
- NAT Configuration
- NetFlow Adoption
- NSX Automated Security Actions
- NSX Multi-Tenancy Configuration
- Number of Custom Reports
- PAN-OS REST API Usage
- PAN-OS XML API Usage
- Panorama Mode
- Panorama Plugins
- QoS Configuration
- Region Based Security Policies
- Route Table Size
- Routing Peers
- Rule Tagging
- Security Policies with File Blocking
- Service Ports and App IDs in Security Policies
- Severity Based Log Forwarding
- SNMP Version
- SSL Decrypt Configuration
- Support Licenses Installed
- Threat Exceptions by Threat ID
- Threat Prevention Policy
- Threatening SaaS Traffic
- Timezone and Timestamp
- Unused Predefined Reports
- URL Category Settings
- URL Filtering in Security Policies
- User Activity Report
- User-ID Adoption in Security Policies
- User-ID Mapping Sources
- User-ID to Include or Exclude User Mappings
- User Interface Interaction
- VM Monitoring
- VM Plugin Usage Statistics
- VMware NSX Plugin Configuration

### **Product Usage Metrics**

- Vulnerability Protection in Security Policies
- WildFire Global Cloud Configuration
- WildFire in Security Policies
- WildFire Virus Threat Logs
- XML Configuration Size
- Zone Protection Adoption

### ACC and Monitor Query History

Collects logs created by performing queries in the Application Control Center. For each query performed, information is logged such as the query used, the cache hits and misses, the time taken to perform the query, the number of documents examined in the course of the query, the log database used, and the aggregate values returned as a result of the query.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Anti-Spyware in Security Policies

Identifies the percentage of security policies that allow traffic, and which also have an attached Anti-Spyware security profile.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Antivirus in Security Policies

Identifies the percentage of security policies that allow traffic, and which also have an attached Antivirus security profile.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Any App in Security Policies

Identifies the total number and percentage of security policies that have 'App' set to 'ANY'. This indicates whether there are security policies on the device that require refinement.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# App-ID Adoption in Security Policies

Identifies the total number and percentage of currently enabled security policies that specify an App-ID.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **Application Blacklisting**

Identifies whether application management is using a blacklist or whitelist approach, and whether the device is using application filters.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

## **Application Override Policies**

Identifies the number of application override policies that use service ports but not the signature **Pattern Match** operator in their custom application definition.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Asymmetric Network Traffic

Identifies the percentage of the network traffic seen by the firewall that is either one-way or asymmetric (one direction of the traffic flow is not being seen by the firewall).

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **Authentication Policy Usage**

Identifies the number of authentication policies that are configured for the firewall whose authentication enforcement is something other than the default web-form or default browser-challenge methods.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Bidrectional Forwarding Detection Configuration

Captures Bidirectional Forwarding Detection (BFD) configuration, including whether it is being used for static routes, timers and timer configuration, and for what protocols is it enabled.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Cisco ACI Plugin Configuration

Collects the following Panorama configuration information for the Cisco ACI plugin:

- Number of monitored APIC clusters.
- Number of notify groups.
- Number of physical and VM-Series firewalls found under Panorama management.
- Number of virtual systems (vsys) configured for each firewall.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## **Credential Phishing in Security Policies**

Identifies the percentage of security policies that allow traffic, and which also enables Credential Phishing prevention.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **Credential Phishing Protection Configuration**

Indicates whether Credential Phishing Protection is configured for the firewall, and whether it is configured to alert or block. Also identifies the URL categories for which Credential Phishing Protection is enabled.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Credential Phishing Protection Detection Method

Identifies the most commonly used **User Credential Detection** method which is selected for the URL Filtering profile that is used for Credential Phishing Prevention.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Custom Reports using Detailed Logs Databases

Indicate how many custom reports are based on the detailed logs databases.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **Custom Vulnerability and Spyware Signatures**

Provides a count of custom vulnerability and spyware signatures on the device. Offers insight into custom signature usage, as well as device memory consumption.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **DAG Security Policies**

Identifies the number of security policies that use Dynamic Address Groups (DAGs), and the frequency by which the DAGs change.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Data Filtering in Security Policies

Identifies the percentage of security policies that allow traffic, and which also have an attached Data Filtering security profile.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## **Data Filtering Profiles**

Indicates whether data filtering profiles are in use on the next-generation firewall.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

### Data Filtering Profiles by Data Pattern Type

Identifies the most frequently used data pattern type (predefined, file properties, regular expression, and so forth) used by the firewall's data filtering profiles.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

## **Decryption SSH Proxy Configuration**

Indicates whether SSH Proxy is configured for the firewall so that it can decrypt SSH connections.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

### **Destination NAT Session Policies**

Identifies the session distribution algorithm that is used by Destination NAT policies. Also collects the session count per IP address used by these policies.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# Device Geographic Location

Identifies the geographic location of the device.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

### Device Group and Template Stack Usage

Identifies the number of device groups and templates stacks configured for the device. Also identifies the number of templates used in each template stack.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

### **Device Model Number**

Identifies the device's model number.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

### **Device Power On Hours**

Identifies the number of hours the device has been powered on.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## **DNS Proxy Adoption**

Indicates whether the device is configured to be a DNS proxy.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# DNS Sinkhole Protection in Security Policies

Identifies the percentage of security policies that allow traffic, and which also enable DNS Sinkhole protection.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **DoS Protection Adoption**

Indicates whether DoS Protection Profiles are in use on the device, and whether the profile type is using Aggregate or Classified protection. Also identifies the current flood protection threshold setting.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## **DoS Protection Threshold Frequency**

Indicates how frequently the thresholds set for DoS Protection Profiles are reached on the device.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

### **DSRI** Enabled Security Policies

Identifies the number of security policies that enable the Disable Server Response Inspection (DSRI) option.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **Dynamic DNS Adoption**

Indicates whether Dynamic DNS (DDNS) is configured for the device, and collects configuration information such as the interfaces for which DDNS is configured, and the DDNS provider.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **ECMP Load Balancing**

Identifies the load balancing algorithm configured for Equal Cost Multiple Path (ECMP) processing. Also identifies whether the algorithm is providing an evenly balanced session distribution across the routes.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **EDL Configuration and Capacity**

Identifies the number of EDL lists configured for the device, the number of lists used in security policies, and the amount of EDL capacity in use on the device.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## File Blocking in Security Policies

Identifies the percentage of security policies that allow traffic, and which also have an attached File Blocking security profile.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Firewall Resource Protection Adoption

Indicates whether a DoS Protection Profile that uses the Resource Protection mechanism is configured for the firewall. Also provides the resource protection thresholds that are in use, and the frequency at which they are reached.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## GlobalProtect Adoption

Indicates whether the device is part of a GlobalProtect deployment.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## GlobalProtect Clientless VPN Adoption

Indicates whether the GlobalProtect deployment is configured to use Clientless VPN.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## GlobalProtect IPv6 Usage

Indicates whether GlobalProtect is deployed on a network that uses IPv6.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## GlobalProtect Mobil App Adoption

Indicates whether the GlobalProtect clients that are connecting to the device are running on mobile devices.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### GlobalProtect on Linux Endpoints

Indicates whether the GlobalProtect devices that are connecting to the device are running on a Linux endpoint.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## GlobalProtect Split Tunneling Adoption

Indicates whether split tunneling is configured for the GlobalProtect gateway.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### HA Heartbeat Backup

Indicates whether Heartbeat Backup is enabled for the device High Availability configuration.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **HA Passive Link State**

Indicates whether the Link State for the passive firewall in an active/passive HA configuration is set to 'Auto'.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## HA1 and HA2 Backups

Indicates whether backups are configured for the HA1 and/or HA2 links for the device High Availability configuration.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## High Risk URL Filtering Logs

Contains URL filtering logs that are from the Command and Control and High Risk categories.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

### **HIP Based Features**

Identifies the Host Information Profile (HIP) features that are used by the firewall's HIP-based security policies.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

### **HIP Based Policies**

Identifies the percentage of security policies that are using host information (that is, are HIP-based).

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

## **IPSec Tunnel Monitoring**

Indicates whether tunnel monitoring is enabled for the IPSec tunnels configured for the device.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Known User Security Policy Matching

Identifies whether security policies are matching users through the policy's known-user option.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

## Large Scale VPN Configuration

Captures Large Scale VPN configuration, including the number of satellites deployed, whether access or dynamic routes are being used, which ECMP is enabled, and whether tunnel monitoring is enabled.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### License Entitlements

Collects information on all the licenses installed on the device, such as the license name, serial number, and dates of issue and expiration.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every One Hour
Introduced	Content version 8284

## Link and Path Monitoring

Indicates whether the firewall is using link or path monitoring for HA failover.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Log Collector Group Architecture

Provides details on how Panorama log collector groups are structured, such as whether there is more than one group, and how many collectors are in each group. Also identifies the preference list for the collectors in each group.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Log Collector Redundancy Adoption

Identifies whether redundancy is enable for Panorama log collector groups.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Log Creation Policies

Identifies the policies for which logging is enabled, whether traffic logs are generated at session end or session start time, and whether logging occurs for decryption failure.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Log Forwarding Adoption in Security Policies

Identifies the total number and percentage of currently enabled security policies for which log forwarding is specified.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Log Forwarding Auto Tag

Indicates whether log forwarding profiles on the device have auto tagging turned on.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# Log Forwarding Profiles in Security Rules

Identifies the percentage of security rules that are configured with a log forwarding profile. Also identifies the percentage of forwarding methods that are in use on the device (syslog, email, HTTP, and so forth).

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Log Forwarding Settings

Identifies the log types (traffic, threat, and so forth) that are being forwarded to an external collector, and the forwarding mechanism in use for each log type (syslog, email, HTTP, and so forth).

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Log Quotas

Identifies the storage space allocated on the device to each log type.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Log Retention Policy

Identifies the retention policy for each log type generated by the device. That is, indicates how long is each log type stored on the device.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Logging Enablement in Security Policies

Identifies the total number and percentage of currently enabled security policies for which logging is enabled.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Managed Devices Licenses

Collects information on all the licenses installed on each device (firewall) managed by Panorama. For each license, collects the license name, license description, and expiration date.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a network.
Frequency	Every One Hour
Introduced	Content version 8284

### Miscellaneous Object Usage Statistics

Provides miscellaneous object usage statistics, including:

- Total number configured for the firewall of each of the following:
  - policies by type (for example, security policies, application override policies, and so forth)
  - address objects
  - External Dynamic Lists (EDLs)
  - service objects
  - · custom applications
  - virtual routers
  - administrators
  - servers by type (syslog, SNMP, HTTP, email, and so forth)
- types of administrators and their roles

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

### Most Recent Threat Exceptions for all Threat Signatures

Identifies the most recently created threat exceptions for all threat signatures (vulnerability, spyware, and antivirus). Collects the date and time, and the PAN-OS content version in use when the exception was created.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## **NAT Configuration**

Collects Network Address Translation (NAT) configuration information, such as how many NAT rules are configured for the device, the hit count for each such rule, and the NAT types in use. If Destination NAT is in use, indicates whether dynamic IP is being used.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## **NetFlow Adoption**

Identifies whether NetFlow record exports are configured for the device.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **NSX Automated Security Actions**

Identifes the number of threats successfully prevented using NSX Automated Security Actions.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## NSX Multi-Tenancy Configuration

Collects NSX multi-tenancy information such as zone and service profile mappings, and the number of zones created per tenant.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Number of Custom Reports

Identifies the number of custom reports that have been created on the Panorama device.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## PAN-OS REST API Usage

Indicates whether the PAN-OS REST APIs are in use on the device, and the frequency by which the device is responding to REST API requests.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## PAN-OS XML API Usage

Indicates whether the PAN-OS XML APIs are in use on the device, and the frequency by which the device is responding to XML API requests.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

### Panorama Mode

Identifies the Panorma modes implemented for the device. Also identifies the Panorama model, and the hypervisor configured for the device.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

## Panorama Plugins

Identifies the plugins used by the Panorama device to access private and public cloud products.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **QoS Configuration**

Identifies whether Quality of Service (QoS) is used on the device, and collects configuration information about it such as the number of QoS policies in use, the number of security policies that have QoS classification, whether QoS is enabled on subinterfaces, the maximum egress bandwidth rate for the device, and the guaranteed bandwidth settings.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Region Based Security Policies

Identifies the percentage of security policies that are configured to block specific regions.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### Route Table Size

Identifies the size of the routing table in terms of the number of entries for the Routing Information Base (RIB) and the Forwarding Information Base (FIB).

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## **Routing Peers**

Identifies the number of routing peers per protocol.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# Rule Tagging

Description is not available.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

## Security Policies with File Blocking

Identifies whether file blocking is used in security policies. For each file type, indicates whether it is set to alert, block, or continue.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Service Ports and App IDs in Security Policies

Identifies the number of security policies that specify service ports and app IDs.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# Severity Based Log Forwarding

Indicates whether the device is configured to forward system logs with a severity of **Critical** using either the email or syslog formats. Also indicates if Wildfire logs with a Malicious verdict are emailed to security administrators.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

## **SNMP Version**

Identifies whether SNMP is enabled for the device, and if it is what version of SNMP is in use.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# SSL Decrypt Configuration

Collects SSL decryption configuration information, such as whether SSL is disabled, certificate status and URL category query timeout values, whether CRL/OCSP are verified, and so forth.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Every One Hour
Introduced	Content version 8284

# **Support Licenses Installed**

Description is not available.

Category	Product Usage
Usage	unknown usage
Privacy	Can identify a device.
Frequency	Every One Hour
Introduced	Content version 8480

## Threat Exceptions by Threat ID

Identifies the threat exceptions that exist on the device for all threat signatures (vulnerability, spyware, and antivirus). This information is collected as a list of threat IDs.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **Threat Prevention Policy**

For vulnerability, spyware, and antivirus policies, identifies whether a default, strict, or custom profile is in use.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# Threatening SaaS Traffic

Identifies the percentage of SaaS application traffic that the firewall is categorizing as threatening in some way. For example, because the traffic appears to be generated by a virus or spyware.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# Timezone and Timestamp

Collects the timezone and timestamps of current PAN-OS configurations.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Cannot identify anything.
Frequency	Every 20 minutes
Introduced	Content version 8310

# **Unused Predefined Reports**

Identifies which Panorama predefine reports are not being used.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **URL Category Settings**

Indicates which URL categories are configured to allow, alert, or block traffic.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **URL Filtering in Security Policies**

Identifies the percentage of security policies that allow traffic, and which also have an attached URL Filtering security profile.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **User Activity Report**

Indicates whether User Activity reports were generated on the device during the collection interval.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

## User-ID Adoption in Security Policies

Identifies the percentage of security policies that specify a User-ID (that is, that enable user- and group-based policy enforcement). Also identifies the total number of security policies that specify a User-ID.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## **User-ID Mapping Sources**

Identifies the sources that the firewall is using to map user IDs (such as through Active Directory, or Global Protect, and so forth). A count is also kept of the number of user IDs that are mapped using any given source.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

# User-ID to Include or Exclude User Mappings

Indicates whether networks are included/excluded in user mappings when configuring User-ID.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

## User Interface Interaction

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support and engineering teams to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	After any user interaction is made with the Palo Alto Networks user interface.
Introduced	PAN-OS 11.0.1 , PAN-OS 10.2.4 , and PAN-OS 10.1.10

# **VM** Monitoring

Identifies the VM environments and VM information sources monitored by the device.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# VM Plugin Usage Statistics

Shows usage details and statistics for the VM plugin throughout managed firewalls on Panorama.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8310

## **VMware NSX Plugin Configuration**

Collects the following Panorama configuration information for the VMware NSX plugin:

- Number of NSX Managers found under Service Managers.
- Number of service definitions.
- Number of notify groups.
- Number of physical and VM-Series firewalls found under Panorama management.
- Number of NSX security groups.
- Percentage of NSX security groups mapped to Panorama Dynamic Access Groups (DAGs).
- Number of NSX security groups configured with "Direct to VM-Series" steering rules.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## **Vulnerability Protection in Security Policies**

Identifies the percentage of security policies that allow traffic, and which also have an attached Vulnerability Protection security profile.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# WildFire Global Cloud Configuration

Indicates whether WildFire Global Cloud is enabled for the device. Also identifies the maximum file size that the device is allowed to forward to WildFire.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## WildFire in Security Policies

Identifies the percentage of security policies that allow traffic, and which also have a WildFire Analysis profile applied to it.

Category	Product Usage
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# WildFire Virus Threat Logs

Contains threat logs where the threat type is *wildfire-virus*. This means that the traffic has been confirmed by WildFire to have been generated by a virus.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# XML Configuration Size

Identifies the average and maximum size of the XML configuration document seen for the device.

Category	Product Usage
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

## **Zone Protection Adoption**

Identifies the percentage of zones and security policies that have zone protection enabled using Zone Protection Profiles. Also identifies the specific types of zone protection that are configured for the Zone Protection profiles (Flood, Reconnaissance, and so forth). Also identifies the connections-per-second (CPS) threshold rate that is set when Flood protection is used, and the frequency at which this threshold is reached.

Category	Product Usage
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

Product Usage Metrics		



## **Threat Prevention Metrics**

Data collected for threat prevention metrics is used by threat researchers to for threat intelligence purposes. They use this to provide enhanced intrusion prevention, to evaluate threat signatures, and to improve malware detection within PAN-DB URL filtering, DNS-based command-and-control (C2) signatures, and WildFire.

- Attackers
- Attacking Countries
- Content and Threat Detection State
- Correlated Events
- Correlated Events Details
- Credential Theft
- Current Application ID Version
- Data Plane Statistics
- Decryption Usage
- DNS-Related Threat Logs
- Dynamic DNS
- File Identification
- Malware Sites
- Management Plane Statistics
- Non-Standard Port Usage
- PAN-DNS Threat Logs
- Parked Domains
- Phishing Sites
- Previous Application ID Version
- Proxy Avoidance and Anonymizers
- Questionable Sites
- Sanctioned Tag SaaS Usage
- System Information
- System Log
- Threat Inspection of Mobile Devices
- Threats Permitted
- Top Application Usage
- Top Threat IDs
- Uninspected Network Traffic
- Unknown Applications by Destination Address

## **Threat Prevention Metrics**

- Unknown Applications by Destination Ports
- Unknown Sites
- Unknown TCP or UDP Traffic

## **Attackers**

Collects information from threat logs that are identified as network attacks due to spyware, virus, or software vulnerability. Collects the attacker's IP address and port. Also records the threat ID, app, and action the device took due to this attack.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

# **Attacking Countries**

Retrieves a count of network attacks by country using threat summary logs where the threat is due to a virus, spyware, or software vulnerability.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## Content and Threat Detection State

Collects information about the device's Content and Threat Detection (CTD) engine state. This information includes version information, including the latest version of threat, app, virus, WildFire, and WildFire Public Cloud that is in use by the device. Also include engine configuration status such as whether the bloom filter is in use, query time out values, how many packets are sent for threat packet captures, and other similar settings of internal interest to CTD. Data usage totals (CTD and Custom Allocator) are also captured.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## **Correlated Events**

Collects information from correlated event logs that were generated by the device over the previous six hours. This information includes the correlated object ID and name that was matched.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## **Correlated Events Details**

Retrieves information from correlated event logs that were generated by the device over the previous six hours. Details include the object ID and name that was matched, as well as the device serial number where the log was generated.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## **Credential Theft**

Collects information on the firewall's credential theft policy usage. Examines URL logs for traffic where credentials are presented, and collects information about the username, destination zone, the action the firewall took in response to the traffic, the application in use, and the URL used for the traffic. Also identifies the security and profiles used by the firewall to determine the action that it took for this traffic.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a user.
Frequency	Daily
Introduced	Content version 8284

# **Current Application ID Version**

Collects the current version of Application IDs installed on the firewall.

Category	Threat Prevention
Usage	This metric can be used for threat research. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## **Data Plane Statistics**

Collects information about the device's data plane processing behavior. This information includes the average and maximum percentage busy that the data plane has been over the reporting interval; the number of network sessions and amount of data transferred; configuration settings such as whether the administrator should be notified for an App block, or whether Wildfire blocked file forwarding is turned on; statistics for resource monitoring, maximum sessions, and average packet buffer size; session timeout settings, and global counter values such as the number of packets received, number of sessions discarded, and the amount of data generated for DPI (enhanced application) logs. Also includes information on memory and software pool sizes, and resources consumed by internal applications.

Category	Threat Prevention
Usage	This metric can be used for threat research. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

# **Decryption Usage**

Identifies the percentage of total traffic that is using SSL. Also identifies the percentage of total SSL traffic that the firewall is decrypting.

Category	Threat Prevention
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

# **DNS-Related Threat Logs**

Contains threat logs where the threat category was related to DNS.

Category	Threat Prevention
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

## Dynamic DNS

Collects information on traffic generated by devices using dynamically assigned IP addresses, which are obtained using a Dynamic DNS service. The information is collected from URL logs, and includes information from the HTTP referer, X-Forwarded-For, and user-agent fields. The requested URI is also collected.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

### File Identification

Contains information about file data that has been transferred across the network. Information includes the file name, the app that is performing the transfer, the action that the firewall took in response to this data, and the threat ID applied to the data.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

### Malware Sites

Collects information on traffic generated by sites known to support malware. (For example, command and control sites.) The information is collected from URL logs, and includes information from the HTTP referer, X-Forwarded-For, and user-agent fields. The requested URI is also collected.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## Management Plane Statistics

Collects information about the device's management plane state. This includes information egarding internal processes running on the plane, overall memory and swap space usage, filesystem utilization percentages, and min and max CPU utilization.

Category	Threat Prevention
Usage	This metric can be used for threat research. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## Non-Standard Port Usage

Identifies the apps using ports that are non-standard for them (the app's standard port is defined by App-ID). Also collects information about each identified app: the number of network sessions, number of unique users, the amount of data transferred, the destination port, and the app's risk.

Category	Threat Prevention
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **PAN-DNS Threat Logs**

Contains threat logs where the threat category is dns-cloud. That is, threat logs based on information retrieved from Palo Alto Networks Cloud-Delivered DNS signature service.

Category	Threat Prevention
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **Parked Domains**

Collects information on traffic to and from parked domains -- that is, domains which do not have a web or email server associated with them. The information is collected from URL logs, and includes information from the HTTP referer, X-Forwarded-For, and user-agent fields. The requested URI is also collected.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## **Phishing Sites**

Collects information on traffic involving phishing sites. The information is collected from URL logs, and includes information from the HTTP referer, X-Forwarded-For, and user-agent fields. The requested URI is also collected.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

# Previous Application ID Version

Collects the previous version of Application IDs installed on the firewall.

Category	Threat Prevention
Usage	This metric can be used for threat research. This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## Proxy Avoidance and Anonymizers

Collects information on traffic coming from URLs and services often used to bypass content filtering products. The information is collected from URL logs, and includes information from the HTTP referer, X-Forwarded-For, and user-agent fields. The requested URI is also collected.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

### **Questionable Sites**

Collects information on traffic involving questionable sites or grayware. This traffic may not be an outright threat, but it might degrade a device's performance or have other potental security risks. The information is collected from URL logs, and includes information from the HTTP referer, X-Forwarded-For, and user-agent fields. The requested URI is also collected.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

# Sanctioned Tag SaaS Usage

Indicates whether the Sanctioned tag is being applied to applications.

Category	Threat Prevention
Usage	This metric can be used by applications.
Privacy	Cannot identify anything.
Frequency	Daily
Introduced	Content version 8284

# **System Information**

Collects system information, such as model number, hostname, MAC and IP address, amount of device uptime, software versions and release dates.

Category	Threat Prevention
Usage	This metric can be used by Palo Alto Networks Technical Support.
Privacy	Can identify a network.
Frequency	Every One Hour
Introduced	Content version 8284

## System Log

Collects system logs generated by the device over the previous six hours. These logs are written by various PAN-OS subsystems (URL filtering, WildFire, etc), and usually include messages about events that occured in the subsystem (a network connection was made, a cert was not successfully installed, and so forth). Each log line includes timestamp information and the device hostname where the log was generated. Log lines will also frequently include IP addresses, hostnames, and ports with which the device interacted over the network.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Every One Hour
Introduced	Content version 8284

## Threat Inspection of Mobile Devices

Identifies the percentage of network traffic generated by remote devices (such as laptops) and BYOD devices (such as personal smartphones) that is sent to WildFire for inspection, and is protected by Vulnerability, Antivirus, and Anti-Spyware security profiles.

Category	Threat Prevention
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

### **Threats Permitted**

Identifies threatening network traffic the firewall failed to block. Collects threat summary log records where the threat type was virus, vulnerability, wildfire-virus, or spyware; the threat severity was greater than or equal to medium; and the firewall's action was only to raise an alert.

Category	Threat Prevention
Usage	This metric can be used by applications. This metric can be used for threat research.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

# **Top Application Usage**

Identifies the most frequently used applications seen on the network. The name of the top apps as well as the total number of bytes in each session are collected. Only traffic logs written as the result of the end of a network session are used.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

# Top Threat IDs

Retrieves a count of the most frequent threat IDs seen in threat logs where the threat is due to a virus, spyware, or software vulnerability.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

# Uninspected Network Traffic

Identifies the percentage of the network traffic that is not being inspected by the firewall.

Category	Threat Prevention
Usage	This metric can be used by applications.
Privacy	Can identify a device.
Frequency	Every 20 minutes
Introduced	Content version 8284

## Unknown Applications by Destination Address

Collects information from traffic logs that involve TCP or UDP traffic, but the application cannot be identified. The traffic's destination IP, as well as the number of total bytes in the session are collected. Only traffic logs written as the result of the end of a network session are used.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

## Unknown Applications by Destination Ports

Collects information from traffic logs that involve TCP or UDP traffic, but the application cannot be identified. The traffic's destination port, as well as the number of total bytes in the session are collected. Only traffic logs written as the result of the end of a network session are used.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

### **Unknown Sites**

Collects information traffic involving sites that have not yet been identified by PAN-DB. The information is collected from URL logs, and includes information from the HTTP referer, X-Forwarded-For, and user-agent fields. The requested URI is also collected.

Category	Threat Prevention
Usage	This metric can be used for threat research.
Privacy	Can identify a network.
Frequency	Daily
Introduced	Content version 8284

### Unknown TCP or UDP Traffic

Identifies the percentage of the network traffic that is using TCP or UDP, and the responsible app is not recognized by the firewall.

Category	Threat Prevention
Usage	This metric can be used by applications. This metric can be used by Palo Alto Networks to investigate future feature enhancements.
Privacy	Can identify a device.
Frequency	Daily
Introduced	Content version 8284

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