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TABLE OF CONTENTS

Introduction	4
Understanding datasets and macros	4
Dataset Reference List	5
Macro Reference List	363
Change Log	366

Introduction

This document provides information about the various types of FortiAnalyzer datasets.

Understanding datasets and macros

FortiAnalyzer datasets are collections of log messages from monitored devices.

Charts in FortiAnalyzer are generated based on the datasets. To create a chart, you can use the predefined datasets, or you can create your own custom datasets by querying the log messages in the SQL database on the FortiAnalyzer unit. Both predefined and custom datasets can be cloned, but only custom datasets can be deleted. You can also view the SQL query for a dataset, and test the query against specific devices or log arrays.

You can create custom reports that contain macros that are created based on predefined and custom datasets. Macros are used to dynamically display the device log data as text in a report. They can be embedded within a text field of a paragraph in a report layout in XML format. Macros display a single value, such as a user name, highest session count, or highest bandwidth, and so on.

For more information about how to create datasets, charts, and macros, see the FortiAnalyzer Administration Guide.

Dataset Reference List

The following tables list the datasets included with FortiAnalyzer. The tables contain the name, SQL query syntax, and log category for each dataset.

Dataset Name	Description	Log Category
Traffic-Bandwidth-Summary-Day-Of- Month	Traffic bandwidth timeline	traffic

```
select
 $flex timescale(timestamp) as hodex,
 sum(traffic out) as traffic out,
 sum(traffic in) as traffic in
from
```

###(select timestamp, sum(bandwidth) as bandwidth, sum(traffic out) as traffic out, sum (traffic_in) as traffic_in from ###base(/*tag:rpt_base_t_bndwdth_sess*/select \$flex_ timestamp as timestamp, dvid, srcip, dstip, epid, euid, coalesce(nullifna(`user`), nullifna (`unauthuser`), ipstr(`srcip`)) as user_src, service, count(*) as sessions, sum(coalesce (sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce (sentdelta, sentbyte, 0)) as traffic out, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in from $\lceil \log - traffic$ where filter and $\lceil \log f \log (1 \mid 32) > 0 \rceil$ group by timestamp, dvid, srcip, dstip, epid, euid, user src, service /*SkipSTART*/order by timestamp desc/*SkipEND*/)base### base query group by timestamp order by bandwidth desc)### t where \$filter-drilldown group by hodex having sum(traffic_out+traffic_in)>0 order by hodex

Dataset Name	Description	Log Category
Session-Summary-Day-Of-Month	Number of session timeline	traffic

```
select
 $flex timescale(timestamp) as hodex,
  sum(sessions) as sessions
```

###(select timestamp, sum(sessions) as sessions from ###base(/*tag:rpt base t bndwdth sess*/select \$flex timestamp as timestamp, dvid, srcip, dstip, epid, euid, coalesce(nullifna (`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user src, service, count(*) as sessions, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in from \$log-traffic where \$filter and (logflag&(1|32)>0) group by timestamp, dvid, srcip, dstip, epid, euid, user src, service /*SkipSTART*/order by timestamp desc/*SkipEND*/)base### base query group by timestamp order by sessions desc)### t where \$filter-drilldown group by hodex order by hodex

Dataset Name	Description	Log Category
Top-Users-By-Bandwidth	Bandwidth application top users by bandwidth usage	traffic

```
select
 coalesce(
   nullifna(`user`),
   nullifna(`unauthuser`),
```

```
ipstr(`srcip`)
  ) as user_src,
  sum(
    coalesce(sentdelta, sentbyte, 0) + coalesce(rcvddelta, rcvdbyte, 0)
  ) as bandwidth,
  sum(
    coalesce(rcvddelta, rcvdbyte, 0)
  ) as traffic in,
    coalesce(sentdelta, sentbyte, 0)
  ) as traffic out,
  count(*) as sessions
from
  $log
where
  $filter
  and (
    logflag & (1 | 32) > 0
group by
  user_src
having
  sum(
    coalesce(sentdelta, sentbyte, 0) + coalesce(rcvddelta, rcvdbyte, 0)
 ) > 0
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
Top-App-By-Bandwidth	Top applications by bandwidth usage	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
  sum(sessions) as sessions
from
  ###(select app_group_name(app) as app_group, appcat, service, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic_out, count(*)
as sessions from $log where $filter and (logflag&(1|32)>0) and nullifna(app) is not null
group by app_group, appcat, service order by bandwidth desc)### t group by app_group having
sum(bandwidth)>0 order by bandwidth desc
```

Dataset Name	Description	Log Category
Top-User-Source-By-Sessions	Top user source by session count	traffic

```
select
  user_src,
  sum(sessions) as sessions
from
  ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
```

count(*) as sessions from \$log where \$filter and (logflag&1>0) group by user_src order by sessions desc) ### t group by user_src order by sessions desc

Dataset Name	Description	Log Category
Top-App-By-Sessions	Top applications by session count	traffic

```
select
  app_group,
  sum(sessions) as sessions
from
```

###(select app_group_name(app) as app_group, appcat, service, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log where \$filter and (logflag&(1|32)>0) and nullifna(app) is not null
group by app_group, appcat, service order by bandwidth desc)### t group by app_group order
by sessions desc

Dataset Name	Description	Log Category
Top-Destination-Addresses-By- Sessions	Top destinations by session count	traffic

```
select
  coalesce(
   nullifna(
     root_domain(hostname)
   ),
   ipstr(dstip)
  ) as domain,
  count(*) as sessions
from
  $log
where
 $filter
  and (
   logflag&1>0
group by
  domain
order by
  sessions desc
```

Dataset Name	Description	Log Category
Top-Destination-Addresses-By-Bandwidth	Top destinations by bandwidth usage	traffic

```
select
  coalesce(
    nullifna(
       root_domain(hostname)
    ),
    ipstr(dstip)
) as domain,
  sum(
```

```
coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) as bandwidth,
  sum(
    coalesce(rcvdbyte, 0)
  ) as traffic in,
  sum(
   coalesce(sentbyte, 0)
  ) as traffic out
from
  $log
where
  $filter
  and (
   logflag&1>0
  and coalesce (
   nullifna(
      root domain (hostname)
   ipstr(`dstip`)
  ) is not null
group by
  domain
having
  sum (
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) > 0
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
DHCP-Summary-By-Port	Event top dhcp summary	event

```
drop
   table if exists rpt_tmptbl_1;
drop
   table if exists rpt_tmptbl_2;
drop
   table if exists rpt_tmptbl_3; create temporary table rpt_tmptbl_1 as
select
   devintf,
   mac
from
```

###(select concat(interface, '.', devid) as devintf, mac from \$log where \$last3day_period
\$filter and logid_to_int(logid) = 26001 and dhcp_msg = 'Ack' group by devintf, mac)### t
group by devintf, mac; create temporary table rpt_tmptbl_2 as select devintf, mac from ###
(select concat(interface, '.', devid) as devintf, mac from \$log where \$filter and logid_to_
int(logid) = 26001 and dhcp_msg = 'Ack' group by devintf, mac)### t group by devintf, mac;
create temporary table rpt_tmptbl_3 as select distinct on (1) devintf, cast(used*100.0/total
as decimal(18,2)) as percent_of_allocated_ip from ###(select distinct on (devintf) concat
(interface, '.', devid) as devintf, used, total, itime from \$log where \$filter and logid_to_
int(logid)=26003 and total>0 /*SkipSTART*/order by devintf, itime desc/*SkipEND*/)### t
order by devintf, itime desc; select t1.devintf as interface, percent_of_allocated_ip, new_
cli_count from rpt_tmptbl_3 t1 inner join (select devintf, count(mac) as new_cli_count from
rpt_tmptbl_2 where not exists (select 1 from rpt_tmptbl_1 where rpt_tmptbl_2.mac=rpt_tmptbl_

1.mac) group by devintf) t2 on t1.devintf=t2.devintf order by interface, percent_of_ allocated_ip desc

Dataset Name	Description	Log Category
Top-Wifi-Client-By-Bandwidth	Traffic top WiFi client by bandwidth usage	traffic

```
select
 user src,
 srcssid,
 devtype new,
 hostname mac,
 sum (bandwidth) as bandwidth
   select
     user src,
     srcssid,
     get_devtype(srcswversion, osname, devtype) as devtype_new,
     hostname mac,
     sum (bandwidth) as bandwidth
      ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user
src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce (nullifna
(`srcname`), `srcmac`) as hostname mac, max(srcswversion) as srcswversion, max(osname) as
osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from $log-traffic where $filter
and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user src, ap,
srcintf, srcssid, srcmac, hostname mac /*SkipSTART*/order by bandwidth desc, subtotal
desc/*SkipEND*/)### t group by user src, srcssid, devtype new, hostname mac having sum
(bandwidth)>0 union all select user src, ssid as srcssid, null as devtype new, stamac as
hostname mac, sum(bandwidth) as bandwidth from ###(select $flex timestamp as timestamp,
stamac, stamac as srcmac, ap, ssid, ssid as srcssid, user src, sum(coalesce(sentdelta, 0))
as sentdelta, sum(coalesce(rcvddelta, 0)) as rcvddelta, sum(coalesce(sentdelta, 0)+coalesce
(rcvddelta, 0)) as bandwidth from (select itime, stamac, ap, ssid, coalesce(`user`, ipstr
(`srcip`)) as user src, sentbyte-lag(coalesce(sentbyte, 0)) over (partition by stamac order
by itime) as sentdelta, rcvdbyte-lag(coalesce(rcvdbyte, 0)) over (partition by stamac order
by itime) as rcvddelta from $log-event where $filter and subtype='wireless' and stamac is
not null and ssid is not null and action in ('sta-wl-bridge-traffic-stats', 'reassoc-req',
'assoc-req')) as t group by timestamp, stamac, ap, ssid, user src /*SkipSTART*/order by
bandwidth desc/*SkipEND*/)### t where user_src is not null group by user_src, ssid, devtype_
new, stamac having sum(bandwidth)>0) t group by user_src, srcssid, devtype_new, hostname_mac
order by bandwidth desc
```

Dataset Name	Description	Log Category
Traffic-History-By-Active-User	Traffic history by active user	traffic

```
select
  $flex_timescale(timestamp) as hodex,
  count(
    distinct(user_src)
  ) as total_user
from
```

###(select timestamp, user_src, sum(sessions) as sessions from ###base(/*tag:rpt_base_t_
bndwdth sess*/select \$flex timestamp as timestamp, dvid, srcip, dstip, epid, euid, coalesce

(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, service, count(*) as
sessions, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as
bandwidth, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in from \$log-traffic where \$filter and (logflag&(1|32)>0) group by
timestamp, dvid, srcip, dstip, epid, euid, user_src, service /*SkipSTART*/order by timestamp
desc/*SkipEND*/)base### base_query group by timestamp, user_src order by sessions desc)### t
where \$filter-drilldown group by hodex order by hodex

Dataset Name	Description	Log Category
Top-Allowed-Websites-By-Requests	UTM top allowed web sites by request	traffic

```
select
 hostname,
 catdesc,
  count(*) as requests
  $log
where
 $filter
  and (
    logflag&1>0
  and utmevent in (
    'webfilter', 'banned-word', 'web-content',
    'command-block', 'script-filter'
  and hostname is not null
   utmaction not in ('block', 'blocked')
   or action != 'deny'
group by
 hostname,
 catdesc
order by
 requests desc
```

Dataset Name	Description	Log Category
Top-50-Websites-By-Bandwidth	Webfilter top allowed web sites by bandwidth usage	webfilter

```
select
  domain,
  string_agg(distinct catdesc, ', ') as agg_catdesc,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out
from
```

###(select coalesce(nullifna(hostname), ipstr(`dstip`)) as domain, catdesc, sum(coalesce
(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in,
sum(coalesce(sentbyte, 0)) as traffic_out from \$log-traffic where \$filter and (logflag&1>0)
and utmaction!='blocked' and (countweb>0 or ((logver is null or logver<502000000) and
(hostname is not null or utmevent in ('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by domain, catdesc having sum(coalesce(sentbyte,</pre>

0)+coalesce(rcvdbyte, 0))>0 /*SkipSTART*/order by bandwidth desc/*SkipEND*/)### t group by domain, catdesc order by bandwidth desc

Dataset Name	Description	Log Category
Top-Blocked-Websites	UTM top blocked web sites by request	traffic

```
select
 hostname,
 count(*) as requests
from
  $log
where
 $filter
  and (
    logflag&1>0
  and utmevent in (
    'webfilter', 'banned-word', 'web-content',
    'command-block', 'script-filter'
  and hostname is not null
  and (
   utmaction in ('block', 'blocked')
   or action = 'deny'
group by
 hostname
order by
 requests desc
```

Dataset Name	Description	Log Category
Top-Web-Users-By-Request	UTM top web users by request	traffic

```
select
  user_src,
  devtype_new,
  srcname,
  sum(requests) as requests
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
get_devtype(srcswversion, osname, devtype) as devtype_new, srcname, action, utmaction, sum
(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as
traffic_in, sum(coalesce(sentbyte, 0)) as traffic_out, count(*) as requests from \$log where
\$filter and (logflag&l>0) and utmevent in ('webfilter', 'banned-word', 'web-content',
'command-block', 'script-filter') group by user_src, devtype_new, srcname, action, utmaction
order by requests desc)### t group by user_src, devtype_new, srcname order by requests desc

Dataset Name	Description	Log Category
Top-Allowed-WebSites-By-Bandwidth	UTM top allowed websites by bandwidth usage	traffic

```
select appid, hostname,
```

```
catdesc,
  sum (
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) as bandwidth,
    coalesce(rcvdbyte, 0)
  ) as traffic in,
  sum(
   coalesce(sentbyte, 0)
 ) as traffic out
from
  $10a
where
  $filter
  and (
   logflag&1>0
  and utmevent in (
    'webfilter', 'banned-word', 'web-content',
    'command-block', 'script-filter'
  and hostname is not null
group by
  appid,
 hostname,
  catdesc
having
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) > 0
order by
 bandwidth desc
```

Dataset Name	Description	Log Category
Top-Blocked-Web-Users	UTM top blocked web users	traffic

```
select
  user_src,
  devtype_new,
  srcname,
  sum(requests) as requests
from
  ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
get_devtype(srcswversion, osname, devtype) as devtype_new, srcname, action, utmaction, sum
  (coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as
traffic_in, sum(coalesce(sentbyte, 0)) as traffic_out, count(*) as requests from $log where
$filter and (logflag&1>0) and utmevent in ('webfilter', 'banned-word', 'web-content',
  'command-block', 'script-filter') group by user_src, devtype_new, srcname, action, utmaction
  order by requests desc)### t where (utmaction in ('block', 'blocked') or action='deny')
group by user src, devtype new, srcname order by requests desc
```

Dataset Name	Description	Log Category
Top-20-Web-Users-By-Bandwidth	Webfilter top web users by bandwidth usage	webfilter

```
select
  coalesce(
    f_user,
    euname,
    ipstr(`srcip`)
) as user_src,
  coalesce(
    epname,
    ipstr(`srcip`)
) as ep_src,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user, srcip, (case when
epid<1024 then null else epid end) as ep_id, (case when euid<1024 then null else euid end)
as eu_id, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce
(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_out from \$log-traffic
where \$filter and (logflag&1>0) and (countweb>0 or ((logver is null or logver<502000000) and
(hostname is not null or utmevent in ('webfilter', 'banned-word', 'web-content', 'commandblock', 'script-filter')))) group by f_user, srcip, ep_id, eu_id having sum(coalesce
(sentbyte, 0)+coalesce(rcvdbyte, 0))>0 /*SkipSTART*/order by bandwidth desc/*SkipEND*/)###
t1 left join \$ADOM_ENDPOINT t2 on t1.ep_id=t2.epid left join \$ADOM_ENDUSER t3 on t1.eu_
id=t3.euid group by user_src, ep_src order by bandwidth desc

Dataset Name	Description	Log Category
Top-Web-Users-By-Bandwidth	UTM top web users by bandwidth usage	traffic

```
select
  user_src,
  devtype_new,
  srcname,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
get_devtype(srcswversion, osname, devtype) as devtype_new, srcname, action, utmaction, sum
(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as
traffic_in, sum(coalesce(sentbyte, 0)) as traffic_out, count(*) as requests from \$log where
\$filter and (logflag&1>0) and utmevent in ('webfilter', 'banned-word', 'web-content',
'command-block', 'script-filter') group by user_src, devtype_new, srcname, action, utmaction
order by requests desc)### t group by user_src, devtype_new, srcname having sum(bandwidth)>0
order by bandwidth desc

Dataset Name	Description	Log Category
Top-Video-Streaming-Websites-By-Bandwidth	UTM top video streaming websites by bandwidth usage	traffic

```
select
  appid,
  hostname,
  sum(
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
```

```
) as bandwidth,
  sum (
   coalesce(rcvdbyte, 0)
  ) as traffic in,
   coalesce(sentbyte, 0)
  ) as traffic out
  $log
where
  $filter
  and (
   logflag&1>0
  and catdesc in ('Streaming Media and Download')
group by
  appid,
 hostname
having
  sum(
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) > 0
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
Top-Email-Senders-By-Count	Default top email senders by count	traffic

```
select
  user_src,
  sum(requests) as requests
from
  ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
service, count(*) as requests from $log where $filter and (logflag&1>0) group by user_src,
service order by requests desc)### t where service in ('smtp', 'SMTP', '25/tcp', '587/tcp',
'smtps', 'SMTPS', '465/tcp') group by user src order by requests desc
```

Dataset Name	Description	Log Category
Top-Email-Receivers-By-Count	Default email top receivers by count	traffic

```
select
  user_src,
  sum(requests) as requests
from
  ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
service, count(*) as requests from $log where $filter and (logflag&1>0) group by user_src,
service order by requests desc)### t where service in ('pop3', 'POP3', '110/tcp', 'imap',
'IMAP', '143/tcp', 'imaps', 'IMAPS', '993/tcp', 'pop3s', 'POP3S', '995/tcp') group by user_
src order by requests desc
```

Dataset Name	Description	Log Category
Top-Email-Senders-By-Bandwidth	Default email top senders by bandwidth usage	traffic

```
select
  coalesce(
   nullifna(`user`),
   nullifna(`unauthuser`),
   ipstr(`srcip`)
  ) as user src,
  sum(
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and (
   logflag&1>0
  and service in (
    'smtp', 'SMTP', '25/tcp', '587/tcp',
    'smtps', 'SMTPS', '465/tcp'
group by
 user_src
having
  sum(
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) > 0
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
Top-Email-Receivers-By-Bandwidth	Default email top receivers by bandwidth usage	traffic

```
select
 coalesce(
  nullifna(`user`),
  nullifna(`unauthuser`),
   ipstr(`srcip`)
 ) as user_src,
 sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) as bandwidth
from
 $log
where
 $filter
 and (
   logflag&1>0
 and service in (
   'pop3', 'POP3', '110/tcp', 'imap',
   'IMAP', '143/tcp', 'imaps', 'IMAPS',
   '993/tcp', 'pop3s', 'POP3S', '995/tcp'
 )
group by
 user_src
```

```
having
  sum(
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  )> 0
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
Top-Malware-By-Name	UTM top virus	virus

```
select
  virus,
  max(virusid_s) as virusid,
  (
    case when virus like 'Riskware%' then 'Spyware' when virus like 'Adware%' then 'Adware'
else 'Virus' end
  ) as malware_type,
  sum(totalnum) as totalnum
from
```

###(select virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*) as totalnum
from \$log where \$filter and (eventtype is null or logver>=502000000) and nullifna(virus) is
not null group by virus, virusid_s /*SkipSTART*/order by totalnum desc/*SkipEND*/)### t
group by virus, malware_type order by totalnum desc

Dataset Name	Description	Log Category
Top-Virus-By-Name	UTM top virus	virus

```
select
  virus,
  max(virusid_s) as virusid,
  (
    case when virus like 'Riskware%' then 'Spyware' when virus like 'Adware%' then 'Adware'
else 'Virus' end
  ) as malware_type,
  sum(totalnum) as totalnum
from
```

###(select virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*) as totalnum
from \$log where \$filter and (eventtype is null or logver>=502000000) and nullifna(virus) is
not null group by virus, virusid_s /*SkipSTART*/order by totalnum desc/*SkipEND*/)### t
group by virus, malware type order by totalnum desc

Dataset Name	Description	Log Category
Top-Virus-Victim	UTM top virus user	virus

```
select
  user_src,
  sum(totalnum) as totalnum
from
```

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, eventtype, logver,
virus, count(*) as totalnum from \$log where \$filter group by user_src, eventtype, logver,
virus /*SkipSTART*/order by totalnum desc/*SkipEND*/)### t where (eventtype is null or
logver>=502000000) and nullifna(virus) is not null group by user src order by totalnum desc

Dataset Name	Description	Log Category
Top-Attack-Source	UTM top attack source	attack

```
select
  user_src,
  sum(totalnum) as totalnum
from
  ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, eventtype, logver,
count(*) as totalnum from $log where $filter group by user_src, eventtype, logver
/*SkipSTART*/order by totalnum desc/*SkipEND*/)### t group by user_src order by totalnum
desc
```

Dataset Name	Description	Log Category
Top-Attack-Victim	UTM top attack dest	attack

```
select
 victim,
 count(*) as totalnum
from
   select
       CASE WHEN direction = 'incoming' THEN srcip ELSE dstip END
     ) as victim
   from
     $log
   where
     $filter
 ) t
where
 victim is not null
group by
 victim
order by
 totalnum desc
```

Dataset Name	Description	Log Category
Top-Static-IPSEC-Tunnels-By-Bandwidth	Top static IPsec tunnels by bandwidth usage	event

```
select
  vpn_name,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out
from
  (
   select
    devid,
    vd,
    remip,
    tunnelid,
    vpn_name,
```

```
case when min(s time) = max(e time) then max(max traffic in) else max(max traffic
in) - min(min traffic in) end
      ) as traffic in,
        case when min(s time) = max(e time) then max(max traffic out) else max(max traffic
out) - min(min traffic out) end
      ) as traffic out,
        case when min(s time) = max(e time) then max(max traffic in) + max(max traffic out)
else max(max traffic in) - min(min traffic in) + max(max traffic out) - min(min traffic out)
     ) as bandwidth
   from
      ###(select devid, vd, remip, vpn trim(vpntunnel) as vpn name, tunnelid, tunnelip, max
(coalesce (sentbyte, 0)) as max traffic out, max(coalesce (rcvdbyte, 0)) as max traffic in,
max(coalesce(rcvdbyte, 0)+coalesce(sentbyte, 0)) as max traffic, min(coalesce(sentbyte, 0))
as min traffic out, min(coalesce(rcvdbyte, 0)) as min traffic in, min(coalesce(dtime, 0)) as
s time, max(coalesce(dtime, 0)) as e time from $log where $filter and subtype='vpn' and
tunneltype like 'ipsec%' and nullifna(vpntunnel) is not null and action in ('tunnel-stats',
'tunnel-down') and tunnelid is not null group by devid, vd, remip, vpn_name, tunnelid,
tunnelip order by max traffic desc) ### t where (tunnelip is null or tunnelip='0.0.0.0')
group by devid, vd, remip, vpn name, tunnelid) tt group by vpn name having sum(traffic
in+traffic out)>0 order by bandwidth desc
```

Dataset Name	Description	Log Category
Top-SSL-VPN-Tunnel-Users-By-Bandwidth	Top SSL VPN tunnel users by bandwidth usage	event

```
select
 user src,
 remip as remote ip,
 from dtime(
  min(s time)
 ) as start_time,
 sum (bandwidth) as bandwidth,
  sum(traffic in) as traffic in,
 sum(traffic out) as traffic out
from
   select
     devid,
     vd,
     remip,
     user src,
     tunnelid,
     min(s time) as s time,
     max(e time) as e time,
        case when min(s_time) = max(e_time) then max(max_traffic_in) + max(max_traffic_out)
else max(max traffic in) - min(min traffic in) + max(max traffic out) - min(min traffic out)
end
      ) as bandwidth,
        case when min(s time) = max(e time) then max(max traffic in) else max(max traffic
```

```
in) - min(min traffic in) end
      ) as traffic in,
        case when min(s time) = max(e time) then max(max traffic out) else max(max traffic
out) - min(min traffic out) end
      ) as traffic out
      ###(select devid, vd, remip, coalesce(nullifna(`user`), ipstr(`remip`)) as user src,
tunnelid, tunneltype, max(coalesce(duration,0)) as max duration, min(coalesce(duration,0))
as min duration, min(coalesce(dtime, 0)) as s time, max(coalesce(dtime, 0)) as e time, min
(coalesce(sentbyte, 0)) as min traffic out, min(coalesce(rcvdbyte, 0)) as min traffic in,
max(coalesce(sentbyte, 0)) as max traffic out, max(coalesce(rcvdbyte, 0)) as max traffic in,
max(coalesce(rcvdbyte, 0)+coalesce(sentbyte, 0)) as max traffic from $log where $filter and
subtype='vpn' and tunneltype like 'ssl%' and action in ('tunnel-stats', 'tunnel-down',
'tunnel-up') and coalesce(nullifna(`user`), ipstr(`remip`)) is not null and tunnelid is not
null group by devid, vd, user src, remip, tunnelid, tunneltype order by max traffic desc) ###
t where tunneltype='ssl-tunnel' group by devid, vd, user src, remip, tunnelid) tt where
bandwidth>0 group by user src, remote ip order by bandwidth desc
```

Dataset NameDescriptionLog CategoryTop-Dial-Up-IPSEC-Tunnels-By-BandwidthTop dial up IPsec tunnels by bandwidth usageevent

```
select
 vpn name,
 sum (bandwidth) as bandwidth,
 sum(traffic in) as traffic in,
 sum(traffic out) as traffic out
from
    select
     devid,
     vd,
     tunnelid,
     remip,
     vpn name,
       case when min(s time) = max(e time) then max(max traffic in) else max(max traffic
in) - min(min traffic in) end
     ) as traffic in,
        case when min(s time) = max(e time) then max(max traffic out) else max(max traffic
out) - min(min traffic out) end
      ) as traffic out,
        case when min(s time) = max(e time) then max(max traffic in) + max(max traffic out)
else max(max traffic in) - min(min traffic in) + max(max traffic out) - min(min traffic out)
     ) as bandwidth
    from
      ###(select devid, vd, remip, vpn trim(vpntunnel) as vpn name, tunnelid, tunnelip, max
(coalesce(sentbyte, 0)) as max traffic out, max(coalesce(rcvdbyte, 0)) as max traffic in,
max(coalesce(rcvdbyte, 0)+coalesce(sentbyte, 0)) as max traffic, min(coalesce(sentbyte, 0))
as min_traffic_out, min(coalesce(rcvdbyte, 0)) as min_traffic_in, min(coalesce(dtime, 0)) as
s time, max(coalesce(dtime, 0)) as e time from $log where $filter and subtype='vpn' and
```

tunneltype like 'ipsec%' and nullifna(vpntunnel) is not null and action in ('tunnel-stats', 'tunnel-down') and tunnelid is not null group by devid, vd, remip, vpn_name, tunnelid, tunnelip order by max_traffic desc)### t where not (tunnelip is null or tunnelip='0.0.0.0') group by devid, vd, remip, vpn_name, tunnelid) tt group by vpn_name having sum(traffic_out+traffic_in)>0 order by bandwidth desc

```
Dataset NameDescriptionLog CategoryTop-Dial-Up-IPSEC-Users-By-BandwidthTop dial up IPsec users by bandwidth usageevent
```

```
select
  coalesce(
    xauthuser_agg,
   user agg,
   ipstr(`remip`)
  ) as user src,
  remip,
  from dtime(
   min(s time)
  ) as start time,
  sum (bandwidth) as bandwidth,
  sum(traffic in) as traffic in,
  sum(traffic out) as traffic out
from
    select
      devid,
      string_agg(distinct xauthuser_agg, ' ') as xauthuser_agg,
      string agg(distinct user agg, ' ') as user_agg,
      remip,
      tunnelid,
      min(s time) as s time,
      max(e time) as e time,
       case when min(s time) = max(e time) then max(max traffic in) + max(max traffic out)
else max(max traffic in) - min(min traffic in) + max(max traffic out) - min(min traffic out)
end
      ) as bandwidth,
        case when min(s time) = max(e time) then max(max traffic in) else max(max traffic
in) - min(min traffic in) end
      ) as traffic in,
      (
        case when min(s time) = max(e time) then max(max traffic out) else max(max traffic
out) - min(min traffic out) end
      ) as traffic out
    from
      ###(select devid, vd, remip, nullifna(`xauthuser`) as xauthuser agg, nullifna(`user`)
as user_agg, tunnelid, min(coalesce(dtime, 0)) as s_time, max(coalesce(dtime, 0)) as e_time,
max(coalesce(duration,0)) as max duration, min(coalesce(duration,0)) as min duration, min
(coalesce(sentbyte, 0)) as min traffic out, min(coalesce(rcvdbyte, 0)) as min traffic in,
max(coalesce(sentbyte, 0)) as max_traffic out, max(coalesce(rcvdbyte, 0)) as max traffic in,
\max(\text{coalesce}(\text{rcvdbyte, 0}) + \text{coalesce}(\text{sentbyte, 0})) as \max_{\text{traffic from $log where $filter and }}
subtype='vpn' and tunneltype like 'ipsec%' and not (tunnelip is null or tunnelip='0.0.0.0')
```

and action in ('tunnel-stats', 'tunnel-down', 'tunnel-up') and tunnelid is not null and tunnelid!=0 group by devid, vd, remip, xauthuser_agg, user_agg, tunnelid order by max_traffic desc)### t group by devid, vd, remip, tunnelid) tt where bandwidth>0 group by user_src, remip order by bandwidth desc

Dataset Name	Description	Log Category
Top-Dial-Up-IPSEC-Users-By- Duration	Top dial up IPsec users by duration	event

```
select
 coalesce(
   xauthuser_agg,
   user agg,
   ipstr(`remip`)
 ) as user src,
 from dtime(
  min(s time)
 ) as start time,
 sum(duration) as duration,
 sum (bandwidth) as bandwidth,
  sum(traffic in) as traffic in,
  sum(traffic out) as traffic out
from
   select
     devid,
     vd.
      string_agg(distinct xauthuser_agg, ' ') as xauthuser_agg,
     string agg(distinct user agg, ' ') as user agg,
     tunnelid,
     min(s time) as s time,
     max(e time) as e time,
        case when min(s_time) = max(e_time) then max(max_duration) else max(max_duration) -
min(min duration) end
      ) as duration,
        case when min(s time) = max(e time) then max(max traffic in) + max(max traffic out)
else max(max traffic in) - min(min traffic in) + max(max traffic out) - min(min traffic out)
      ) as bandwidth,
       case when min(s time) = max(e time) then max(max traffic in) else max(max traffic
in) - min(min traffic in) end
      ) as traffic in,
        case when min(s time) = max(e time) then max(max traffic out) else max(max traffic
out) - min(min traffic_out) end
     ) as traffic out
    from
      ###(select devid, vd, remip, nullifna(`xauthuser`) as xauthuser agg, nullifna(`user`)
as user_agg, tunnelid, min(coalesce(dtime, 0)) as s_time, max(coalesce(dtime, 0)) as e_time,
max(coalesce(duration,0)) as max_duration, min(coalesce(duration,0)) as min_duration, min
(coalesce(sentbyte, 0)) as min_traffic_out, min(coalesce(rcvdbyte, 0)) as min_traffic_in,
```

max(coalesce(sentbyte, 0)) as max_traffic_out, max(coalesce(rcvdbyte, 0)) as max_traffic_in,
max(coalesce(rcvdbyte, 0)+coalesce(sentbyte, 0)) as max_traffic from \$log where \$filter and
subtype='vpn' and tunneltype like 'ipsec%' and not (tunnelip is null or tunnelip='0.0.0.0')
and action in ('tunnel-stats', 'tunnel-down', 'tunnel-up') and tunnelid is not null and
tunnelid!=0 group by devid, vd, remip, xauthuser_agg, user_agg, tunnelid order by max_
traffic desc)### t group by devid, vd, remip, tunnelid) tt where bandwidth>0 group by user_
src order by duration desc

Dataset Name	Description	Log Category
Top-SSL-VPN-Web-Mode-Users-By-Bandwidth	Top SSL VPN web mode users by bandwidth usage	event

```
select
 user src,
 remip as remote_ip,
 from dtime(
  min(s time)
  ) as start time,
  sum (bandwidth) as bandwidth,
  sum(traffic in) as traffic in,
  sum(traffic out) as traffic out
    select
     devid,
      vd,
      user src,
      remip,
      tunnelid,
      min(s time) as s time,
      max(e_time) as e_time,
        case when min(s time) = max(e time) then max(max traffic in) + max(max traffic out)
else max(max_traffic_in) - min(min_traffic_in) + max(max_traffic_out) - min(min_traffic_out)
end
      ) as bandwidth,
       case when min(s time) = max(e time) then max(max traffic in) else max(max traffic
in) - min(min traffic in) end
      ) as traffic in,
        case when min(s time) = max(e time) then max(max traffic out) else max(max traffic
out) - min(min traffic out) end
      ) as traffic out
      ###(select devid, vd, remip, coalesce(nullifna(`user`), ipstr(`remip`)) as user src,
tunnelid, tunneltype, max(coalesce(duration,0)) as max duration, min(coalesce(duration,0))
as min duration, min(coalesce(dtime, 0)) as s time, max(coalesce(dtime, 0)) as e time, min
(coalesce(sentbyte, 0)) as min traffic out, min(coalesce(rcvdbyte, 0)) as min traffic in,
max(coalesce(sentbyte, 0)) as max_traffic_out, max(coalesce(rcvdbyte, 0)) as max_traffic_in,
max(coalesce(rcvdbyte, 0)+coalesce(sentbyte, 0)) as max traffic from $log where $filter and
subtype='vpn' and tunneltype like 'ssl%' and action in ('tunnel-stats', 'tunnel-down',
'tunnel-up') and coalesce(nullifna(`user`), ipstr(`remip`)) is not null and tunnelid is not
null group by devid, vd, user_src, remip, tunnelid, tunneltype order by max_traffic desc)###
```

t group by devid, vd, user_src, remip, tunnelid) tt where bandwidth>0 group by user_src, remote ip order by bandwidth desc

Dataset Name	Description	Log Category
Top-SSL-VPN-Web-Mode-Users-By- Duration	Top SSL VPN web mode users by duration	event

```
select
 user src,
  remip as remote ip,
  from dtime(
   min(s_time)
  ) as start time,
  sum(duration) as duration
from
  (
    select
     devid,
     vd,
     user src,
     remip,
      tunnelid,
      min(s time) as s_time,
       case when min(s time) = max(e time) then max(max duration) else max(max duration) -
min(min duration) end
      ) as duration
    from
```

###(select devid, vd, remip, coalesce(nullifna(`user`), ipstr(`remip`)) as user_src,
tunnelid, tunneltype, max(coalesce(duration,0)) as max_duration, min(coalesce(duration,0))
as min_duration, min(coalesce(dtime, 0)) as s_time, max(coalesce(dtime, 0)) as e_time, min
(coalesce(sentbyte, 0)) as min_traffic_out, min(coalesce(rcvdbyte, 0)) as min_traffic_in,
max(coalesce(sentbyte, 0)) as max_traffic_out, max(coalesce(rcvdbyte, 0)) as max_traffic_in,
max(coalesce(rcvdbyte, 0)+coalesce(sentbyte, 0)) as max_traffic from \$log where \$filter and
subtype='vpn' and tunneltype like 'ssl%' and action in ('tunnel-stats', 'tunnel-down',
'tunnel-up') and coalesce(nullifna(`user`), ipstr(`remip`)) is not null and tunnelid is not
null group by devid, vd, user_src, remip, tunnelid, tunneltype order by max_traffic desc)###
t where tunneltype='ssl-web' group by devid, vd, user_src, remip, tunnelid) tt group by
user_src, remote_ip order by duration desc

Dataset Name	Description	Log Category
Top-SSL-VPN-Users-By-Duration	Top SSL VPN users by duration	event

```
select
  user_src,
  tunneltype,
  sum(duration) as duration,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out
from
  (
   select
   devid,
```

```
vd,
      remip,
      user src,
      tunneltype,
      tunnelid,
        case when min(s time) = max(e time) then max(max duration) else max(max duration) -
min(min duration) end
      ) as duration,
       case when min(s time) = max(e time) then max(max traffic in) else max(max traffic
in) - min(min traffic in) end
      ) as traffic in,
        case when min(s time) = max(e time) then max(max traffic out) else max(max traffic
out) - min(min traffic out) end
      ) as traffic out,
        case when min(s time) = max(e time) then max(max traffic in) + max(max traffic out)
else max(max traffic in) - min(min traffic in) + max(max traffic_out) - min(min_traffic_out)
      ) as bandwidth
    from
      ###(select devid, vd, remip, coalesce(nullifna(`user`), ipstr(`remip`)) as user src,
tunnelid, tunneltype, max(coalesce(duration,0)) as max_duration, min(coalesce(duration,0))
as min duration, min(coalesce(dtime, 0)) as s time, max(coalesce(dtime, 0)) as e time, min
(coalesce(sentbyte, 0)) as min traffic out, min(coalesce(rcvdbyte, 0)) as min traffic in,
max(coalesce(sentbyte, 0)) as max traffic out, max(coalesce(rcvdbyte, 0)) as max traffic in,
max(coalesce(rcvdbyte, 0)+coalesce(sentbyte, 0)) as max traffic from $log where $filter and
subtype='vpn' and tunneltype like 'ssl%' and action in ('tunnel-stats', 'tunnel-down',
'tunnel-up') and coalesce(nullifna(`user`), ipstr(`remip`)) is not null and tunnelid is not
null group by devid, vd, user src, remip, tunnelid, tunneltype order by max_traffic desc)###
t group by devid, vd, remip, user src, tunnelid, tunneltype) tt where bandwidth>0 group by
user src, tunneltype order by duration desc
```

Dataset Name	Description	Log Category
vpn-Top-Dial-Up-VPN-Users-By- Duration	Top dial up VPN users by duration	event

```
select
 coalesce(
   xauthuser agg,
   user agg,
   ipstr(`remip`)
  ) as user src,
 t type as tunneltype,
 from dtime(
  min(s time)
 ) as start time,
 sum(duration) as duration,
 sum(bandwidth) as bandwidth,
  sum(traffic in) as traffic in,
 sum(traffic out) as traffic out
from
  (
```

```
select
      devid.
      vd,
      string agg(distinct xauthuser agg, ' ') as xauthuser agg,
      string agg(distinct user agg, ' ') as user agg,
      tunnelid,
      min(s time) as s time,
      max(e time) as e time,
        case when min(s time) = max(e time) then max(max duration) else max(max duration) -
min(min duration) end
      ) as duration,
        case when min(s time) = max(e time) then max(max traffic in) + max(max traffic out)
else max(max traffic in) - min(min traffic in) + max(max traffic out) - min(min traffic out)
end
      ) as bandwidth,
        case when min(s time) = max(e time) then max(max traffic in) else max(max traffic
in) - min(min traffic in) end
      ) as traffic in,
        case when min(s_time) = max(e_time) then max(max_traffic_out) else max(max_traffic_
out) - min(min_traffic_out) end
      ) as traffic out
    from
      ###(select devid, vd, remip, nullifna(`xauthuser`) as xauthuser agg, nullifna(`user`)
as user agg, (case when tunneltype like 'ipsec%' then 'ipsec' else tunneltype end) as t
type, tunnelid, tunnelip, min(coalesce(dtime, 0)) as s time, max(coalesce(dtime, 0)) as e
time, max(coalesce(duration,0)) as max duration, min(coalesce(duration,0)) as min duration,
min(coalesce(sentbyte, 0)) as min traffic out, min(coalesce(rcvdbyte, 0)) as min traffic in,
max(coalesce(sentbyte, 0)) as max traffic out, max(coalesce(rcvdbyte, 0)) as max traffic in,
max(coalesce(rcvdbyte, 0)+coalesce(sentbyte, 0)) as max traffic, sum((case when
action='tunnel-up' then 1 else 0 end)) as tunnelup from $log where $filter and subtype='vpn'
and (tunneltype like 'ipsec%' or tunneltype like 'ssl%') and action in ('tunnel-up',
'tunnel-stats', 'tunnel-down') and tunnelid is not null and tunnelid!=0 group by xauthuser
agg, user agg, devid, vd, remip, t type, tunnelid, tunnelip order by max traffic desc) ### t
where (t type like 'ssl%' or (t type like 'ipsec%' and not (tunnelip is null or
tunnelip='0.0.0.0'))) group by devid, vd, remip, t type, tunnelid) tt where bandwidth>0
group by user src, tunneltype order by duration desc
```

```
Dataset Name
                                      Description
                                                                                             Log Category
vpn-User-Login-history
                                      VPN user login history
                                                                                             event
```

```
$flex timescale(timestamp) as hodex,
  sum(tunnelup) as total num
from
   select
     timestamp,
     devid,
     vd,
```

```
remip,
  tunnelid,
 max(tunnelup) as tunnelup,
 max(traffic in) as traffic in,
 max(traffic out) as traffic out
from
```

###(select \$flex timestamp as timestamp, devid, vd, remip, tunnelid, max((case when action='tunnel-up' then 1 else 0 end)) as tunnelup, max(coalesce(sentbyte, 0)) as traffic out, max(coalesce(rcvdbyte, 0)) as traffic in from \$log where \$filter and subtype='vpn' and (tunneltype like 'ipsec%' or tunneltype like 'ssl%') and action in ('tunnel-up', 'tunnelstats', 'tunnel-down') and tunnelid is not null group by timestamp, devid, vd, remip, tunnelid /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t group by timestamp, devid, vd, remip, tunnelid having max(tunnelup) > 0 and max(traffic in)+max(traffic out)>0) t group by hodex order by total num desc

Dataset Name	Description	Log Category
vpn-Failed-Login-Atempts	VPN failed logins	event

```
select
 f user,
 tunneltype,
 sum(total num) as total num
 \#\#\# (select coalesce(nullifna(`xauthuser`), `user`) as f_user, tunneltype, count(*) as
total num from $log where $filter and subtype='vpn' and (tunneltype='ipsec' or left
(tunneltype, 3)='ssl') and action in ('ssl-login-fail', 'ipsec-login-fail') and coalesce
(nullifna(`xauthuser`), nullifna(`user`)) is not null group by f user, tunneltype)### t
group by f user, tunneltype order by total num desc
```

Dataset Name	Description	Log Category
vpn-Authenticated-Logins	VPN authenticated logins	event

```
select
 coalesce(
   xauthuser agg,
   user agg,
   ipstr(`remip`)
 ) as f user,
  t type as tunneltype,
 from dtime(
   min(s time)
  ) as start time,
  sum(total num) as total num,
  sum(duration) as duration
from
   select
     string agg(distinct xauthuser agg, ' ') as xauthuser agg,
     string_agg(distinct user_agg, ' ') as user_agg,
      t type,
     devid,
     vd,
      remip,
     tunnelid,
```

```
min(s time) as s time,
      max(e time) as e time,
        case when min(s time) = max(e time) then max(max duration) else max(max duration) -
min(min duration) end
      ) as duration,
        case when min(s time) = max(e time) then max(max traffic in) + max(max traffic out)
else max(max traffic in) - min(min traffic in) + max(max traffic out) - min(min traffic out)
      ) as bandwidth,
       case when min(s time) = max(e time) then max(max traffic in) else max(max traffic
in) - min(min traffic in) end
      ) as traffic in,
        case when min(s time) = max(e time) then max(max traffic out) else max(max traffic
out) - min(min traffic out) end
      ) as traffic out,
      sum(tunnelup) as total num
    from
      ###(select devid, vd, remip, nullifna(`xauthuser`) as xauthuser agg, nullifna(`user`)
as user agg, (case when tunneltype like 'ipsec%' then 'ipsec' else tunneltype end) as t
type, tunnelid, tunnelip, min(coalesce(dtime, 0)) as s time, max(coalesce(dtime, 0)) as e
time, max(coalesce(duration,0)) as max duration, min(coalesce(duration,0)) as min duration,
min(coalesce(sentbyte, 0)) as min traffic out, min(coalesce(rcvdbyte, 0)) as min traffic in,
max(coalesce(sentbyte, 0)) as max traffic out, max(coalesce(rcvdbyte, 0)) as max traffic in,
max(coalesce(rcvdbyte, 0)+coalesce(sentbyte, 0)) as max traffic, sum((case when
action='tunnel-up' then 1 else 0 end)) as tunnelup from $log where $filter and subtype='vpn'
and (tunneltype like 'ipsec%' or tunneltype like 'ssl%') and action in ('tunnel-up',
'tunnel-stats', 'tunnel-down') and tunnelid is not null and tunnelid!=0 group by xauthuser
agg, user agg, devid, vd, remip, t type, tunnelid, tunnelip order by max traffic desc) ### t
group by t type, devid, vd, remip, tunnelid having max(tunnelup) > 0) tt where bandwidth>0
group by f user, tunneltype order by total num desc
```

Dataset Name	Description	Log Category
vpn-Traffic-Usage-Trend-VPN- Summary	VPN traffic usage trend	event

```
select
  hodex,
  sum(ssl_traffic_bandwidth) as ssl_bandwidth,
  sum(ipsec_traffic_bandwidth) as ipsec_bandwidth
from
  (
    select
    $flex_timescale(timestamp) as hodex,
    devid,
    vd,
    remip,
    tunnelid,
    (
        case when t_type like 'ssl%' then (
        case when min(s_time) = max(e_time) then max(max_traffic_in) + max(max_traffic_out)
else max(max_traffic_in) - min(min_traffic_in) + max(max_traffic_out) - min(min_traffic_out)
```

```
end
        ) else 0 end
      ) as ssl traffic bandwidth,
        case when t type like 'ipsec%' then (
          case when min(s time) = max(e time) then max(max traffic in) + max(max traffic out)
else max(max traffic in) - min(min traffic in) + max(max traffic out) - min(min traffic out)
        ) else 0 end
      ) as ipsec traffic bandwidth,
      min(s time) as s time,
      max(e time) as e time
      ###(select $flex timestamp as timestamp, devid, vd, remip, tunnelid, (case when
tunneltype like 'ipsec%' then 'ipsec' else tunneltype end) as t type, (case when
action='tunnel-up' then 1 else 0 end) as tunnelup, max(coalesce(sentbyte, 0)) as max
traffic out, max(coalesce(rcvdbyte, 0)) as max traffic in, min(coalesce(sentbyte, 0)) as
min traffic out, min(coalesce(rcvdbyte, 0)) as min traffic in, min(coalesce(dtime, 0)) as s
time, max(coalesce(dtime, 0)) as e time from $log where $filter and subtype='vpn' and
(tunneltype like 'ipsec%' or tunneltype like 'ssl%') and action in ('tunnel-up', 'tunnel-
stats', 'tunnel-down') and tunnelid is not null and tunnelid!=0 group by timestamp, devid,
vd, remip, t type, tunnelid, action /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t
group by hodex, devid, t type, vd, remip, tunnelid) tt group by hodex order by hodex
```

Dataset Name	Description	Log Category
Top-S2S-IPSEC-Tunnels-By-Bandwidth-and-Availability	Top S2S IPsec tunnels by bandwidth usage and avail	event

```
select
 vpntunnel,
 tunneltype,
 sum(traffic out) as traffic out,
 sum(traffic in) as traffic in,
 sum (bandwidth) as bandwidth,
 sum(uptime) as uptime
from
   select
     vpntunnel,
     tunneltype,
     tunnelid,
     devid,
      sum(sent end - sent beg) as traffic out,
     sum(rcvd end - rcvd beg) as traffic in,
     sum(
       sent end - sent beg + rcvd end - rcvd beg
      ) as bandwidth,
     sum(duration end - duration beg) as uptime
      ###(select tunnelid, tunneltype, vpntunnel, devid, vd, min(coalesce(sentbyte, 0)) as
sent beg, max(coalesce(sentbyte, 0)) as sent end, min(coalesce(rcvdbyte, 0)) as rcvd beg,
max(coalesce(rcvdbyte, 0)) as rcvd end, min(coalesce(duration, 0)) as duration beg, max
(coalesce(duration, 0)) as duration_end from $log where $filter and subtype='vpn' and
action='tunnel-stats' and tunneltype like 'ipsec%' and (tunnelip is null or
```

tunnelip='0.0.0.0') and nullifna(`user`) is null and tunnelid is not null and tunnelid!=0 group by tunnelid, tunneltype, vpntunnel, devid, vd /*SkipSTART*/order by tunnelid/*SkipEND*/)### t group by vpntunnel, tunneltype, tunnelid, devid, vd order by bandwidth desc) t where bandwidth>0 group by vpntunnel, tunneltype order by bandwidth desc

```
Dataset NameDescriptionLog CategoryTop-Dialup-IPSEC-By-Bandwidth-and-AvailabilityTop dialup IPsec users by bandwidth usage and availevent
```

```
select
 user src,
 remip,
 sum(traffic out) as traffic out,
 sum(traffic in) as traffic in,
 sum (bandwidth) as bandwidth,
 sum(uptime) as uptime
from
  (
   select
     user src,
     remip,
     tunnelid,
     devid,
     sum(sent end - sent beg) as traffic out,
     sum(rcvd end - rcvd beg) as traffic in,
       sent end - sent beg + rcvd end - rcvd beg
      ) as bandwidth,
      sum(duration end - duration beg) as uptime
   from
      ###(select tunnelid, coalesce(nullifna(`xauthuser`), nullifna(`user`), ipstr(`remip`))
as user src, remip, devid, vd, min(coalesce(sentbyte, 0)) as sent beg, max(coalesce
(sentbyte, 0)) as sent end, min(coalesce(rcvdbyte, 0)) as rcvd beg, max(coalesce(rcvdbyte,
0)) as rovd end, min(coalesce(duration, 0)) as duration beg, max(coalesce(duration, 0)) as
duration end from $log where $filter and subtype='vpn' and action='tunnel-stats' and
tunneltype like 'ipsec%' and not (tunnelip is null or tunnelip='0.0.0.0') and tunnelid is
not null and tunnelid!=0 group by tunnelid, user src, remip, devid, vd /*SkipSTART*/order by
tunnelid/*SkipEND*/)### t group by user src, remip, tunnelid, devid, vd order by bandwidth
desc) t where bandwidth>0 group by user src, remip order by bandwidth desc
```

Dataset NameDescriptionLog CategoryTop-SSL-Tunnel-Mode-By-Bandwidth-
and-AvailabilityTop SSL tunnel users by bandwidth usage and avail
event

```
select
  user_src,
  remote_ip,
  sum(traffic_out) as traffic_out,
  sum(traffic_in) as traffic_in,
  sum(bandwidth) as bandwidth,
  sum(uptime) as uptime
from
  (
```

```
select
  user_src,
  remip as remote_ip,
  tunnelid,
  devid,
  vd,
  sum(sent_end - sent_beg) as traffic_out,
  sum(rcvd_end - rcvd_beg) as traffic_in,
  sum(
    sent_end - sent_beg + rcvd_end - rcvd_beg
) as bandwidth,
  sum(duration_end - duration_beg) as uptime
from
```

###(select tunnelid, tunneltype, coalesce(nullifna(`user`), ipstr(`remip`)) as user_
src, remip, devid, vd, min(coalesce(sentbyte, 0)) as sent_beg, max(coalesce(sentbyte, 0)) as
sent_end, min(coalesce(rcvdbyte, 0)) as rcvd_beg, max(coalesce(rcvdbyte, 0)) as rcvd_end,
min(coalesce(duration, 0)) as duration_beg, max(coalesce(duration, 0)) as duration_end from
\$log where \$filter and subtype='vpn' and action='tunnel-stats' and coalesce(nullifna
(`user`), ipstr(`remip`)) is not null and tunnelid is not null group by tunnelid,
tunneltype, user_src, remip, devid, vd /*SkipSTART*/order by tunnelid/*SkipEND*/)### t where
tunneltype in ('ssl-tunnel', 'ssl') group by user_src, remote_ip, tunnelid, devid, vd order
by bandwidth desc) t where bandwidth>0 group by user_src, remote_ip order by bandwidth desc

Dataset Name	Description	Log Category
Top-SSL-Web-Mode-By-Bandwidth-and-Availability	Top SSL web users by bandwidth usage and avail	event

```
select
 user src,
 remote ip,
 sum(traffic_out) as traffic_out,
 sum(traffic in) as traffic in,
  sum (bandwidth) as bandwidth,
 sum (uptime) as uptime
from
    select
     user src,
     remip as remote ip,
     tunnelid,
     devid,
     vd.
     sum(sent end - sent beg) as traffic out,
     sum(rcvd end - rcvd_beg) as traffic_in,
        sent end - sent beg + rcvd end - rcvd beg
      ) as bandwidth,
      sum(duration end - duration beg) as uptime
      ###(select tunnelid, tunneltype, coalesce(nullifna(`user`), ipstr(`remip`)) as user_
src, remip, devid, vd, min(coalesce(sentbyte, 0)) as sent beg, max(coalesce(sentbyte, 0)) as
sent end, min(coalesce(rcvdbyte, 0)) as rcvd beg, max(coalesce(rcvdbyte, 0)) as rcvd end,
min(coalesce(duration, 0)) as duration beg, max(coalesce(duration, 0)) as duration end from
$log where $filter and subtype='vpn' and action='tunnel-stats' and coalesce(nullifna
(`user`), ipstr(`remip`)) is not null and tunnelid is not null group by tunnelid,
```

tunneltype, user src, remip, devid, vd /*SkipSTART*/order by tunnelid/*SkipEND*/)### t where tunneltype='ssl-web' group by user_src, remote_ip, tunnelid, devid, vd having sum(sent_endsent_beg+rcvd_end-rcvd_beg)>0 order by bandwidth desc) t where bandwidth>0 group by user_ src, remote ip order by bandwidth desc

```
Dataset Name
                                    Description
                                                                                        Log Category
Admin-Login-Summary
                                    Event admin login summary
                                                                                        event
```

```
select
 f user,
 ui,
  sum(login) as total num,
  sum(login duration) as total duration,
  sum(config_change) as total_change
from
    select
      `user` as f_user,
      ui,
       case when logid to int(logid) = 32001 then 1 else 0 end
      ) as login,
       case when logid to int(logid) = 32003 then duration else 0 end
      ) as login duration,
       case when logid to int(logid) = 32003
       and state is not null then 1 else 0 end
      ) as config change
    from
      $log
    where
      $filter
      and nullifna(`user`) is not null
      and logid to int(logid) in (32001, 32003)
  ) t
group by
  f user,
having
 sum(login) + sum(config_change) > 0
order by
 total num desc
```

Dataset Name	Description	Log Category
Admin-Login-Summary-By-Date	Event admin login summary by date	event

```
select
 $flex_timescale(timestamp) as dom,
 sum(total num) as total num,
 sum(total change) as total change
 ###(select timestamp, sum(login) as total_num, sum(config_change) as total_change from
(select $flex_timestamp as timestamp, (case when logid_to_int(logid)=32001 then 1 else 0
```

end) as login, (case when logid_to_int(logid)=32003 and state is not null then 1 else 0 end) as config_change from \$log where \$filter and logid_to_int(logid) in (32001, 32003)) t group by timestamp having sum(login)+sum(config_change)>0 /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t group by dom order by dom

Dataset Name	Description	Log Category
Admin-Failed-Login-Summary	Event admin failed login summary	event

```
select
  `user` as f_user,
  ui,
  count(status) as total_failed
from
  $log
where
  $filter
  and nullifna(`user`) is not null
  and logid_to_int(logid) = 32002
group by
  ui,
  f_user
order by
  total failed desc
```

Dataset Name	Description	Log Category
System-Summary-By-Severity	Event system summary by severity	event

```
select
  severity_tmp as severity,
  sum(count) as total_num
from
```

###(select coalesce(nullifna(logdesc), msg) as msg_desc, (case when level in ('critical',
'alert', 'emergency') then 'Critical' when level='error' then 'High' when level='warning'
then 'Medium' when level='notice' then 'Low' else 'Info' end) as severity_tmp, count(*) as
count from \$log where \$filter and subtype='system' group by msg_desc, severity_tmp
/*SkipSTART*/order by count desc/*SkipEND*/)### t group by severity order by total num desc

Dataset Name	Description	Log Category
System-Summary-By-Date	Event system summary by date	event

```
select
   $flex_timescale(timestamp) as dom,
   sum(critical) as critical,
   sum(high) as high,
   sum(medium) as medium

from
   ###(select $flex_timestamp as timestamp, sum(case when level in ('critical', 'alert',
'emergency') then 1 else 0 end) as critical, sum(case when level = 'error' then 1 else 0
end) as high, sum(case when level = 'warning' then 1 else 0 end) as medium from $log where
$filter and subtype='system' group by timestamp /*SkipSTART*/order by timestamp
desc/*SkipEND*/)### t group by dom order by dom
```

Dataset Name	Description	Log Category
Important-System-Summary-By-Date	Event system summary by date	event

```
select
 $flex timescale(timestamp) as dom,
 sum(critical) as critical,
 sum(high) as high,
 sum (medium) as medium
```

###(select \$flex timestamp as timestamp, sum(case when level in ('critical', 'alert', 'emergency') then 1 else 0 end) as critical, sum(case when level = 'error' then 1 else 0 end) as high, sum(case when level = 'warning' then 1 else 0 end) as medium from \$log where \$filter and subtype='system' group by timestamp /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t group by dom order by dom

Dataset Name	Description	Log Category
System-Critical-Severity-Events	Event system critical severity events	event

```
select
 msg desc as msg,
 severity tmp as severity,
 sum(count) as counts
```

###(select coalesce(nullifna(logdesc), msg) as msg desc, (case when level in ('critical', 'alert', 'emergency') then 'Critical' when level='error' then 'High' when level='warning' then 'Medium' when level='notice' then 'Low' else 'Info' end) as severity tmp, count(*) as count from \$log where \$filter and subtype='system' group by msg desc, severity tmp /*SkipSTART*/order by count desc/*SkipEND*/)### t where severity tmp='Critical' group by msq, severity tmp order by counts desc

Dataset Name	Description	Log Category
System-High-Severity-Events	Event system high severity events	event

```
select
 msg desc as msg,
  severity tmp as severity,
  sum(count) as counts
from
```

###(select coalesce(nullifna(logdesc), msg) as msg desc, (case when level in ('critical', 'alert', 'emergency') then 'Critical' when level='error' then 'High' when level='warning' then 'Medium' when level='notice' then 'Low' else 'Info' end) as severity tmp, count(*) as count from \$log where \$filter and subtype='system' group by msg desc, severity tmp /*SkipSTART*/order by count desc/*SkipEND*/)### t where severity tmp='High' group by msg, severity tmp order by counts desc

Dataset Name	Description	Log Category
System-Medium-Severity-Events	Event system medium severity events	event

```
select
 msg_desc as msg,
 severity_tmp as severity,
  sum(count) as counts
```

from

###(select coalesce(nullifna(logdesc), msg) as msg_desc, (case when level in ('critical',
'alert', 'emergency') then 'Critical' when level='error' then 'High' when level='warning'
then 'Medium' when level='notice' then 'Low' else 'Info' end) as severity_tmp, count(*) as
count from \$log where \$filter and subtype='system' group by msg_desc, severity_tmp
/*SkipSTART*/order by count desc/*SkipEND*/)### t where severity_tmp='Medium' group by msg,
severity_tmp order by counts desc

Dataset Name	Description	Log Category
utm-drilldown-Top-Traffic-Summary	UTM drilldown traffic summary	traffic

```
select
   srcip,
   srcname
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
srcip, srcname, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log
where \$filter and (logflag&1>0) group by user_src, srcip, srcname order by bandwidth
desc)### t where \$filter-drilldown group by srcip, srcname

Dataset Name	Description	Log Category
utm-drilldown-Top-User-Destination	UTM drilldown top user destination	traffic

```
select
  appid,
  app,
  dstip,
  sum(sessions) as sessions,
  sum(bandwidth) as bandwidth
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
appid, app, dstip, count(*) as sessions, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth from \$log where \$filter and (logflag&1>0) and dstip is not null and nullifna(app)
is not null group by user_src, appid, app, dstip having sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0))>0 order by bandwidth desc)### t where \$filter-drilldown group by appid, app,
dstip order by bandwidth desc

Dataset Name	Description	Log Category
utm-drilldown-Email-Senders-	UTM drilldown email senders summary	traffic
Summary		

```
select
  sum(requests) as requests,
  sum(bandwidth) as bandwidth
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
sender, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth
from \$log where \$filter and (logflag&1>0) and service in ('smtp', 'SMTP', '25/tcp',
'587/tcp', 'smtps', 'SMTPS', '465/tcp') group by user_src, sender order by requests desc)###
t where \$filter-drilldown

Dataset Name	Description	Log Category
utm-drilldown-Email-Receivers- Summary	UTM drilldown email receivers summary	traffic

select
 sum(requests) as requests,
 sum(bandwidth) as bandwidth

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
recipient, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth from \$log where \$filter and (logflag&1>0) and recipient is not null and service in
('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps', 'IMAPS', '993/tcp', 'pop3s',
'POP3S', '995/tcp') group by user_src, recipient order by requests desc)### t where \$filterdrilldown

Dataset Name	Description	Log Category
utm-drilldown-Top-Email-Recipients- By-Bandwidth	UTM drilldown top email recipients	traffic

select
 recipient,
 sum(bandwidth) as bandwidth
from

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
recipient, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth from \$log where \$filter and (logflag&1>0) and recipient is not null and service in
('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps', 'IMAPS', '993/tcp', 'pop3s',
'POP3S', '995/tcp') group by user_src, recipient order by requests desc)### t where \$filterdrilldown group by recipient having sum(bandwidth)>0 order by bandwidth desc

Dataset Name	Description	Log Category
utm-drilldown-Top-Email-Senders-By- Bandwidth	UTM drilldown top email senders	traffic

select
 sender,
 sum(bandwidth) as bandwidth
from

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
sender, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth
from \$log where \$filter and (logflag&1>0) and service in ('smtp', 'SMTP', '25/tcp',
'587/tcp', 'smtps', 'SMTPS', '465/tcp') group by user_src, sender order by requests desc)###
t where \$filter-drilldown and sender is not null group by sender having sum(bandwidth)>0
order by bandwidth desc

Dataset Name	Description	Log Category
utm-drilldown-Top-Allowed-Websites- By-Bandwidth	UTM drilldown top allowed web sites by bandwidth	traffic

select appid,

```
hostname, sum(bandwidth) as bandwidth
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
appid, hostname, (case when utmaction in ('block', 'blocked') then 1 else 0 end) as blocked,
sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log-traffic where
\$filter and (logflag&1>0) and (countweb>0 or ((logver is null or logver<502000000) and
(hostname is not null or utmevent in ('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) and hostname is not null group by user_src, appid, hostname,
blocked order by bandwidth desc)### t where \$filter-drilldown and blocked=0 group by appid,
hostname order by bandwidth desc</pre>

Dataset Name	Description	Log Category
utm-drilldown-Top-Blocked-Websites- By-Request	UTM drilldown top blocked web sites by request	webfilter

```
select
  appid,
  hostname,
  sum(requests) as requests
```

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, 0 as appid, hostname,
(case when action='blocked' then 1 else 0 end) as blocked, count(*) as requests from \$log
where \$filter and (eventtype is null or logver>=502000000) and hostname is not null group by
user_src, appid, hostname, blocked order by requests desc)### t where \$filter-drilldown and
blocked=1 group by appid, hostname order by requests desc

Dataset Name	Description	Log Category
utm-drilldown-Top-Virus-By-Name	UTM drilldown top virus	virus

```
select
  virus,
  sum(totalnum) as totalnum
from
```

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, virus, count(*) as
totalnum from \$log where \$filter and (eventtype is null or logver>=502000000) and nullifna
(virus) is not null group by user_src, virus order by totalnum desc)### t where \$filterdrilldown group by virus order by totalnum desc

Dataset Name	Description	Log Category
utm-drilldown-Top-Attacks	UTM drilldown top attacks by name	attack

```
select
  attack,
  sum(attack_count) as attack_count
from
```

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, attack, count(*) as
attack_count from \$log where \$filter and nullifna(attack) is not null group by user_src,
attack order by attack_count desc)### t where \$filter-drilldown group by attack order by
attack count desc

Dataset Name	Description	Log Category
utm-drilldown-Top-Vulnerability	UTM drilldown top vulnerability by name	netscan

select
 vuln,
 sum(totalnum) as totalnum
from

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, vuln, count(*) as
totalnum from \$log where \$filter and action='vuln-detection' and vuln is not null group by
user_src, vuln order by totalnum desc)### t where \$filter-drilldown group by vuln order by
totalnum desc

Dataset Name	Description	Log Category
utm-drilldown-Top-App-By-Bandwidth	UTM drilldown top applications by bandwidth usage	traffic

select
 appid,
 app,
 sum(bandwidth) as bandwidth
from

###(select user_src, appid, app, appcat, apprisk, sum(bandwidth) as bandwidth, sum
(sessions) as sessions from ###base(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip,
epid, euid, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
appid, app, appcat, apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta,
rcvdbyte, 0)) as bandwidth, count(*) as sessions from \$log-traffic where \$filter and
(logflag&(1|32)>0) and nullifna(app) is not null group by dvid, srcip, dstip, epid, euid,
user_src, appid, app, appcat, apprisk order by sessions desc)base### t group by user_src,
appid, app, appcat, apprisk /*SkipSTART*/order by sessions desc, bandwidth
desc/*SkipEND*/)### t where \$filter-drilldown group by appid, app having sum(bandwidth)>0
order by bandwidth desc

Dataset Name	Description	Log Category
utm-drilldown-Top-App-By-Sessions	UTM drilldown top applications by session count	traffic

select
 appid,
 app,
 sum(sessions) as sessions
from

###(select user_src, appid, app, appcat, apprisk, sum(bandwidth) as bandwidth, sum
(sessions) as sessions from ###base(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip,
epid, euid, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
appid, app, appcat, apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta,
rcvdbyte, 0)) as bandwidth, count(*) as sessions from \$log-traffic where \$filter and
(logflag&(1|32)>0) and nullifna(app) is not null group by dvid, srcip, dstip, epid, euid,
user_src, appid, app, appcat, apprisk order by sessions desc)base### t group by user_src,
appid, app, appcat, apprisk /*SkipSTART*/order by sessions desc, bandwidth
desc/*SkipEND*/)### t where \$filter-drilldown group by appid, app order by sessions desc

Dataset Name	Description	Log Category
Top5-Users-By-Bandwidth	UTM drilldown top users by bandwidth usage	traffic

```
select
 coalesce(
   nullifna(`user`),
   nullifna(`unauthuser`),
   ipstr(`srcip`)
  ) as dldn user,
  count(*) as session,
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) as bandwidth,
  sum(
   coalesce(sentbyte, 0)
  ) as traffic out,
 sum(
   coalesce(rcvdbyte, 0)
  ) as traffic in
from
  $log
where
 $filter
  and (
   logflag&1>0
group by
  dldn_user
having
 sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) > 0
order by
 bandwidth desc
```

Dataset Name	Description	Log Category
bandwidth-app-Top-App-By- Bandwidth-Sessions	Top applications by bandwidth usage	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
  sum(sessions) as sessions
from
  ###(select app_group_name(app) as app_group, appcat, service, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from $log where $filter and (logflag&(1|32)>0) and nullifna(app) is not null
group by app_group, appcat, service order by bandwidth desc)### t group by app_group having
sum(bandwidth)>0 order by bandwidth desc
```

Dataset Name	Description	Log Category
bandwidth-app-Category-By- Bandwidth	Application risk application usage by category	traffic

```
select
  appcat,
  sum(bandwidth) as bandwidth
from
  ###(select appid, app, appcat, apprisk, sum(bandwidth) as bandwidth, sum(sessions) as
sessions from ###base(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip, epid, euid,
coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app,
appcat, apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as
bandwidth, count(*) as sessions from $log-traffic where $filter and (logflag&(1|32)>0) and
nullifna(app) is not null group by dvid, srcip, dstip, epid, euid, user_src, appid, app,
appcat, apprisk order by sessions desc)base### t group by appid, app, appcat, apprisk
/*SkipSTART*/order by sessions desc, bandwidth desc/*SkipEND*/)### t where $filter-drilldown
and nullifna(appcat) is not null group by appcat order by bandwidth desc
```

Dataset Name	Description	Log Category
bandwidth-app-Top-Users-By- Bandwidth-Sessions	Bandwidth application top users by bandwidth usage	traffic

```
select
 coalesce(
   nullifna(`user`),
    nullifna(`unauthuser`),
   ipstr(`srcip`)
  ) as user src,
    coalesce(sentdelta, sentbyte, 0) + coalesce(rcvddelta, rcvdbyte, 0)
  ) as bandwidth,
  sum (
    coalesce(rcvddelta, rcvdbyte, 0)
  ) as traffic in,
  sum(
   coalesce(sentdelta, sentbyte, 0)
  ) as traffic out,
  count(*) as sessions
from
  $log
where
  $filter
 and (
    logflag & (1 | 32) > 0
group by
 user src
having
   coalesce(sentdelta, sentbyte, 0) + coalesce(rcvddelta, rcvdbyte, 0)
 ) > 0
order by
 bandwidth desc
```

Dataset Name	Description	Log Category
bandwidth-app-Traffic-By-Active-User- Number	Bandwidth application traffic by active user number	traffic

```
select
   $flex_timescale(timestamp) as hodex,
   count(
      distinct(user_src)
   ) as total_user
from
   ###(select $flex_timestamp as timestamp, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as user_src from $log where $filter and (logflag&(1|32)>0)
group by timestamp, user src order by timestamp desc)### t group by hodex order by hodex
```

Dataset Name	Description	Log Category
bandwidth-app-Top-Dest-By- Bandwidth-Sessions	Bandwidth application top dest by bandwidth usage sessions	traffic

```
select
 coalesce(
   nullifna(
     root domain(hostname)
    ipstr(`dstip`)
  ) as domain,
   coalesce(sentdelta, sentbyte, 0) + coalesce(rcvddelta, rcvdbyte, 0)
  ) as bandwidth,
   coalesce(rcvddelta, rcvdbyte, 0)
 ) as traffic_in,
 sum(
   coalesce(sentdelta, sentbyte, 0)
  ) as traffic out,
  count(*) as sessions
from
  $log
where
 $filter
 and (
   logflag &(1 | 32)> 0
group by
 domain
order by
 bandwidth desc
```

Dataset Name	Description	Log Category
bandwidth-app-Top-Policies-By- Bandwidth-Sessions	Top policies by bandwidth and sessions	traffic

```
select
  coalesce(
    pol.name,
    cast(policyid as text)
) as polid,
  sum(bandwidth) as bandwidth,
  sum(traffic in) as traffic in,
```

```
sum(traffic_out) as traffic_out,
sum(sessions) as sessions
from
   ###(select policyid, poluuid, sum(coalesce(rcvdbyte, 0) + coalesce(sentbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out, count(*) as sessions from $log where $filter and (logflag&1>0) group by policyid,
poluuid order by bandwidth desc)### t1 left join $ADOMTBL_PLHD_POLINFO pol on
t1.poluuid=pol.uuid group by polid order by bandwidth desc
```

Dataset Name	Description	Log Category
bandwidth-app-Traffic-Statistics	Bandwidth application traffic statistics	traffic

```
table if exists rpt tmptbl 1; create temporary table rpt tmptbl 1(
   total sessions varchar(255),
    total bandwidth varchar(255),
   ave session varchar(255),
   ave_bandwidth varchar(255),
   active date varchar(255),
   total users varchar(255),
   total app varchar(255),
   total dest varchar(255)
  ); insert into rpt tmptbl 1 (
   total sessions, total bandwidth,
   ave session, ave bandwidth
select
 format numeric no decimal (
   sum(sessions)
  ) as total sessions,
 bandwidth unit(
   sum(bandwidth)
  ) as total bandwidth,
  format numeric no decimal(
   cast(
     sum(sessions) / $days num as decimal(18, 0)
  ) as ave_session,
 bandwidth unit(
     sum(bandwidth) / $days_num as decimal(18, 0)
 ) as ave bandwidth
  ###(select count(*) as sessions, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta,
rcvdbyte, 0)) as bandwidth from $log where $filter and (logflag&(1|32)>0))### t; update rpt_
tmptbl 1 set active date=t1.dom from (select dom, sum(sessions) as sessions from ###(select
$DAY OF MONTH as dom, count(*) as sessions from $log where $filter and (logflag&(1|32)>0)
group by dom order by sessions desc)### t group by dom order by sessions desc limit 1) as
t1; update rpt tmptbl 1 set total users=t2.totalnum from (select format numeric no decimal
(count(distinct(user src))) as totalnum from ###(select coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as user src, count(*) as count from $log where $filter and
(\log f \log (1|32)>0) group by user src order by count desc)### t) as t2; update rpt tmptbl 1
```

set total_app=t3.totalnum from (select format_numeric_no_decimal(count(distinct(app_grp)))
as totalnum from ###(select app group name(app) as app grp, count(*) as count from \$log

where \$filter and (logflag&(1|32)>0) and nullifna(app) is not null group by app_grp order by count desc)### t) as t3; update rpt_tmptbl_1 set total_dest=t4.totalnum from (select format_numeric_no_decimal(count(distinct(dstip))) as totalnum from ###(select dstip, count(*) as count from \$log where \$filter and (logflag&(1|32)>0) and dstip is not null group by dstip order by count desc)### t) as t4; select 'Total Sessions' as summary, total_sessions as stats from rpt_tmptbl_1 union all select 'Total Bytes Transferred' as summary, total_bandwidth as stats from rpt_tmptbl_1 union all select 'Most Active Date By Sessions' as summary, active_date as stats from rpt_tmptbl_1 union all select 'Total Users' as summary, total_users as stats from rpt_tmptbl_1 union all select 'Total Applications' as summary, total_app as stats from rpt_tmptbl_1 union all select 'Total Destinations' as summary, total_dest as stats from rpt_tmptbl_1 union all select 'Average Sessions Per Day' as summary, ave_session as stats from rpt_tmptbl_1 union all select 'Average Bytes Per Day' as summary, ave_session as stats from rpt_tmptbl_1 union all select 'Average Bytes Per Day' as summary, ave_bandwidth as stats from rpt_tmptbl_1 union all select 'Average Bytes Per Day' as

Dataset Name	Description	Log Category
Score-Summary-For-All-Users- Devices	Reputation score summary for all users devices	traffic

```
select
  $flex_timescale(timestamp) as hodex,
  sum(scores) as scores
from
```

###(select \$flex_timestamp as timestamp, sum(crscore%65536) as scores, count(*) as
totalnum from \$log where \$filter and (logflag&1>0) and crscore is not null group by
timestamp having sum(crscore%65536)>0 order by timestamp desc)### t group by hodex order by
hodex

Dataset Name	Description	Log Category
Number-Of-Incidents-For-All-Users-	Reputation number of incidents for all users devices	traffic
Devices		

```
select
  $flex_timescale(timestamp) as hodex,
  sum(scores) as scores,
  sum(totalnum) as totalnum
from
```

###(select \$flex_timestamp as timestamp, sum(crscore%65536) as scores, count(*) as
totalnum from \$log where \$filter and (logflag&1>0) and crscore is not null group by
timestamp having sum(crscore%65536)>0 order by timestamp desc)### t group by hodex order by
hodex

Dataset Name	Description	Log Category
Top-Users-By-Reputation-Scores	Reputation top users by scores	traffic

```
select
  coalesce(
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  sum(crscore % 65536) as scores
from
  $log
```

```
where
   $filter
   and (
      logflag&1>0
)
   and crscore is not null
group by
   user_src
having
   sum(crscore % 65536)> 0
order by
   scores desc
```

Dataset Name	Description	Log Category
Top-Devices-By-Reputation-Scores	Reputation top devices by scores	traffic

```
select
 max(
  get_devtype(srcswversion, osname, devtype)
 ) as devtype new,
 coalesce(
   nullifna(`srcname`),
   nullifna(`srcmac`),
   ipstr(`srcip`)
 ) as dev src,
 sum(crscore % 65536) as scores
from
 $log
where
 $filter
 and (
   logflag&1>0
 and crscore is not null
group by
 dev src
having
 sum(crscore % 65536)> 0
order by
 scores desc
```

Dataset Name	Description	Log Category
Top-Users-With-Increased-Scores	Reputation top users with increased scores	traffic

```
drop
   table if exists rpt_tmptbl_1;
drop
   table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
   f_user,
   sum(sum_rp_score) as sum_rp_score
from
   ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as f_user,
sum(crscore%65536) as sum_rp_score from $log where $pre_period $filter and (logflag&1>0) and
```

crscore is not null group by f_user having sum(crscore%65536)>0 order by sum_rp_score desc)### t group by f_user; create temporary table rpt_tmptbl_2 as select f_user, sum(sum_rp_score) as sum_rp_score from ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as f_user, sum(crscore%65536) as sum_rp_score from \$log where \$filter and (logflag&1>0) and crscore is not null group by f_user having sum(crscore%65536)>0 order by sum_rp_score desc)### t group by f_user; select t1.f_user, sum(t1.sum_rp_score) as t1_sum_score, sum(t2.sum_rp_score) as t2_sum_score, (sum(t2.sum_rp_score)-sum(t1.sum_rp_score)) as delta from rpt_tmptbl_1 as t1 inner join rpt_tmptbl_2 as t2 on t1.f_user=t2.f_user where t2.sum_rp_score > t1.sum_rp_score group by t1.f_user_order by delta desc

Dataset Name	Description	Log Category
Top-Devices-With-Increased-Scores	Reputation top devices with increased scores	traffic

```
drop
  table if exists rpt_tmptbl_1;
  table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
 f device,
 devtype new,
 sum(sum rp score) as sum rp score
  ###(select coalesce(nullifna(`srcname`), nullifna(`srcmac`), ipstr(`srcip`)) as f device,
qet devtype(srcswversion, osname, devtype) as devtype new, sum(crscore%65536) as sum rp
score from $log where $pre period $filter and (logflag&1>0) and crscore is not null group by
f device, devtype new having sum(crscore%65536)>0 order by sum rp score desc)### t group by
f device, devtype new; create temporary table rpt tmptbl 2 as select f device, devtype new,
sum(sum rp score) as sum rp score from ###(select coalesce(nullifna(`srcname`), nullifna
(`srcmac`), ipstr(`srcip`)) as f device, get devtype(srcswversion, osname, devtype) as
devtype new, sum(crscore%65536) as sum rp score from $log where $filter and (logflag&1>0)
and crscore is not null group by f device, devtype new having sum(crscore%65536)>0 order by
sum rp score desc) ### t group by f device, devtype new; select t1.f device, t1.devtype new ,
sum(t1.sum_rp_score) as t1_sum_score, sum(t2.sum_rp_score) as t2_sum_score, (sum(t2.sum_rp_
score)-sum(t1.sum rp score)) as delta from rpt tmptbl 1 as t1 inner join rpt tmptbl 2 as t2
on t1.f device=t2.f device and t1.devtype new=t2.devtype new where t2.sum rp score > t1.sum
```

Dataset Name	Description	Log Category
Attacks-By-Severity	Threat attacks by severity	attack

rp score group by t1.f device, t1.devtype new order by delta desc

```
select
  (
    case when severity = 'critical' then 'Critical' when severity = 'high' then 'High' when
severity = 'medium' then 'Medium' when severity = 'low' then 'Low' when severity = 'info'
then 'Info' end
  ) as severity,
  count(*) as totalnum
from
  $log
where
  $filter
group by
  severity
```

order by totalnum desc

Dataset Name	Description	Log Category
Top-Attacks-Detected	Threat top attacks detected	attack

```
select
 attack,
 attackid,
 cve,
 severity,
 sum(attack count) as attack count
  ###(select attack, attackid, t1.severity, cve, (case when t1.severity = 'critical' then 1
when t1.severity = 'high' then 2 when t1.severity = 'medium' then 3 when t1.severity =
'low' then 4 else 5 end) as severity level, count(*) as attack count from $log t1 left join
(select name, cve, vuln_type from ips_mdata) t2 on t1.attack=t2.name where $filter and
nullifna(attack) is not null group by attack, attackid, t1.severity, severity_level, cve
/*SkipSTART*/order by severity_level, attack_count desc/*SkipEND*/)### t group by attack,
```

Dataset Name	Description	Log Category
Top-Attacks-Blocked	Threat top attacks blocked	attack

attackid, severity, severity level, cve order by severity level, attack count desc

```
select
 attack,
 count(*) as attack count
  $log
where
  $filter
  and nullifna(attack) is not null
 and action not in ('detected', 'pass session')
group by
 attack
order by
  attack count desc
```

Dataset Name	Description	Log Category
Top-Virus-Source	Threat top virus source	virus

```
select
 source,
 hostname,
 sum(totalnum) as totalnum
```

###(select source, ipstr(`victim`) as hostname, sum(totalnum) as totalnum from (select (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source, (CASE WHEN direction='incoming' THEN srcip ELSE dstip END) as victim, count(*) as totalnum from \$log where \$filter and (eventtype is null or logver>=502000000) and nullifna(virus) is not null group by source, victim) t group by source, hostname /*SkipSTART*/order by totalnum desc/*SkipEND*/)### t group by source, hostname order by totalnum desc

Dataset Name	Description	Log Category
Intrusion-in-Last-7-Days	Threat intrusion timeline	attack

select

\$flex_timescale(timestamp) as hodex,
sum(totalnum) as totalnum

(select $flex_timestamp$ as timestamp, count(*) as totalnum from postamp where filter group by timestamp /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t group by hodex order by hodex

Dataset Name	Description	Log Category
Virus-Time-Line	Threat virus timeline	virus

select

\$flex_datetime(timestamp) as hodex,
sum(totalnum) as totalnum

from

(select $flex_timestamp$ as timestamp, count(*) as totalnum from flog where flet and (eventtype is null or logver>=502000000) and nullifna(virus) is not null group by timestamp flet to flet t

Dataset Name	Description	Log Category
Top-Spyware-Victims	Threat top spyware victims	virus

select

user_src,
sum(totalnum) as totalnum

from

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, virus, count(*) as
totalnum from \$log where \$filter group by user_src, virus /*SkipSTART*/order by totalnum
desc/*SkipEND*/)### t where virus like 'Riskware%' group by user src order by totalnum desc

Dataset Name	Description	Log Category
Top-Spyware-by-Name	Threat top spyware by name	virus

select virus,

max(virusid_s) as virusid,

sum(totalnum) as totalnum

from

###(select filename, analyticscksum, service, fsaverdict, dtype, coalesce(nullifna
(`user`), ipstr(`srcip`)) as user_src, virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*) as totalnum from \$log where \$filter group by filename, analyticscksum, service,
fsaverdict, dtype, user_src, virus, virusid_s /*SkipSTART*/order by totalnum
desc/*SkipEND*/)### t where virus like 'Riskware%' group by virus order by totalnum desc

Dataset Name	Description	Log Category
Top-Spyware-Source	Threat top spyware source	traffic

```
select
    srcip,
    hostname,
    sum(totalnum) as totalnum
from
    ###(select srcip, hostname, virus, count(*) as totalnum from $log where $filter and
(logflag&1>0) group by srcip, hostname, virus order by totalnum desc)### t where virus like
'Riskware%' group by srcip, hostname order by totalnum desc
```

Dataset Name	Description	Log Category
Spyware-Time-Line	Threat spyware timeline	virus

```
select
  $flex_timescale(timestamp) as hodex,
  sum(totalnum) as totalnum
from
```

###(select \$flex_timestamp as timestamp, virus, count(*) as totalnum from \$log where \$filter group by timestamp, virus /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where virus like 'Riskware%' group by hodex order by hodex

Dataset Name	Description	Log Category
Top-Adware-Victims	Threat top adware victims	virus

```
select
  user_src,
  sum(totalnum) as totalnum
from
```

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, virus, count(*) as
totalnum from \$log where \$filter group by user_src, virus /*SkipSTART*/order by totalnum
desc/*SkipEND*/)### t where virus like 'Adware%' group by user_src order by totalnum desc

Dataset Name	Description	Log Category
Top-Adware-by-Name	Threat top adware by name	virus

```
select
  virus,
  max(virusid_s) as virusid,
  sum(totalnum) as totalnum
from
```

###(select filename, analyticscksum, service, fsaverdict, dtype, coalesce(nullifna
(`user`), ipstr(`srcip`)) as user_src, virus, virusid_to_str(virusid, eventtype) as virusid_
s, count(*) as totalnum from \$log where \$filter group by filename, analyticscksum, service,
fsaverdict, dtype, user_src, virus, virusid_s /*SkipSTART*/order by totalnum
desc/*SkipEND*/)### t where virus like 'Adware%' group by virus order by totalnum desc

Dataset Name	Description	Log Category
Top-Adware-Source	Threat top adware source	traffic

```
select
  srcip,
  hostname,
  sum(totalnum) as totalnum
```

from

###(select srcip, hostname, virus, count(*) as totalnum from \$log where \$filter and
(logflag&1>0) group by srcip, hostname, virus order by totalnum desc)### t where virus like
'Adware%' group by srcip, hostname order by totalnum desc

Dataset Name	Description	Log Category
Adware-Time-Line	Threat adware timeline	virus

```
select
  $flex_timescale(timestamp) as hodex,
  sum(totalnum) as totalnum
from
```

###(select \$flex_timestamp as timestamp, virus, count(*) as totalnum from \$log where
\$filter group by timestamp, virus /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t
where virus like 'Adware%' group by hodex order by hodex

Dataset Name	Description	Log Category
Intrusions-Timeline-By-Severity	Threat intrusions timeline by severity	attack

```
select
```

```
$flex_timescale(timestamp) as timescale,
sum(critical) as critical,
sum(high) as high,
sum(medium) as medium,
sum(low) as low,
sum(info) as info
```

###(select \$flex_timestamp as timestamp, sum(case when severity = 'critical' then 1 else 0
end) as critical, sum(case when severity = 'high' then 1 else 0 end) as high, sum(case when
severity = 'medium' then 1 else 0 end) as medium, sum(case when severity in ('notice',
'low') then 1 else 0 end) as low, sum(case when severity = 'info' or severity = 'debug' then
1 else 0 end) as info from \$log where \$filter group by timestamp /*SkipSTART*/order by
timestamp desc/*SkipEND*/)### t group by timescale order by timescale

Dataset Name	Description	Log Category
Important-Intrusions-Timeline-By- Severity	Threat intrusions timeline by severity	attack

```
select
```

```
$flex_timescale(timestamp) as timescale,
sum(critical) as critical,
sum(high) as high,
sum(medium) as medium,
sum(low) as low,
sum(info) as info
```

###(select \$flex_timestamp as timestamp, sum(case when severity = 'critical' then 1 else 0
end) as critical, sum(case when severity = 'high' then 1 else 0 end) as high, sum(case when
severity = 'medium' then 1 else 0 end) as medium, sum(case when severity in ('notice',
'low') then 1 else 0 end) as low, sum(case when severity = 'info' or severity = 'debug' then
1 else 0 end) as info from \$log where \$filter group by timestamp /*SkipSTART*/order by
timestamp desc/*SkipEND*/)### t group by timescale order by timescale

Dataset Name	Description	Log Category
Top-Intrusions-By-Types	Threat top intrusions by types	attack

```
select
 vuln_type,
 count(*) as totalnum
from
 $log t1
 left join (
   select
     name,
     cve,
     vuln_type
   from
     ips mdata
 ) t2 on t1.attack = t2.name
where
 $filter
 and vuln_type is not null
group by
 vuln_type
order by
 totalnum desc
```

Dataset Name	Description	Log Category
Critical-Severity-Intrusions	Threat critical severity intrusions	attack

```
select
 attack,
 attackid,
 cve,
 vuln type,
 count(*) as totalnum
from
 $log t1
 left join (
   select
     name,
     cve,
     vuln_type
    from
     ips_mdata
 ) t2 on t1.attack = t2.name
where
  $filter
 and tl.severity = 'critical'
 and nullifna(attack) is not null
group by
 attack,
 attackid,
 cve,
 vuln_type
order by
  totalnum desc
```

Dataset Name	Description	Log Category
High-Severity-Intrusions	Threat high severity intrusions	attack

```
select
 attack,
 attackid,
 vuln_type,
 cve,
 count(*) as totalnum
from
 $log t1
 left join (
   select
     name,
     cve,
     vuln_type
   from
     ips_mdata
 ) t2 on t1.attack = t2.name
where
  $filter
 and t1.severity = 'high'
 and nullifna(attack) is not null
group by
 attack,
 attackid,
 vuln_type,
 cve
order by
 totalnum desc
```

Dataset Name	Description	Log Category
Medium-Severity-Intrusions	Threat medium severity intrusions	attack

```
select
 attack,
 vuln_type,
 cve,
 count(*) as totalnum
 $log t1
 left join (
   select
     name,
     cve,
     vuln type
   from
     ips_mdata
 ) t2 on t1.attack = t2.name
where
 $filter
 and t1.severity = 'medium'
 and nullifna(attack) is not null
group by
```

```
attack,
vuln_type,
cve
order by
totalnum desc
```

Dataset Name	Description	Log Category
Top-Intrusion-Victims	Threat top intrusion victims	attack

```
select
  victim,
  sum(cri_num) as critical,
  sum(high_num) as high,
  sum(med_num) as medium,
  sum(cri_num + high_num + med_num) as totalnum
from
```

###(select (CASE WHEN direction='incoming' THEN srcip ELSE dstip END) as victim, sum((case
when severity='critical' then 1 else 0 end)) as cri_num, sum(case when severity='high' then
1 else 0 end) as high_num, sum(case when severity='medium' then 1 else 0 end) as med_num
from \$log where \$filter and severity in ('critical', 'high', 'medium') group by victim)### t
group by victim order by totalnum desc

Dataset Name	Description	Log Category
Top-Intrusion-Sources	Threat top intrusion sources	attack

```
select
  source,
  sum(cri_num) as critical,
  sum(high_num) as high,
  sum(med_num) as medium,
  sum(cri_num + high_num + med_num) as totalnum
from
```

###(select (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source, sum(case
when severity='critical' then 1 else 0 end) as cri_num, sum(case when severity='high' then 1
else 0 end) as high_num, sum(case when severity='medium' then 1 else 0 end) as med_num from
\$log where \$filter and severity in ('critical', 'high', 'medium') group by source)### t
group by source order by totalnum desc

Dataset Name	Description	Log Category
Top-Blocked-Intrusions	Threat top blocked intrusions	attack

```
select
  attack,
  attackid,
  (
    case when severity = 'critical' then 'Critical' when severity = 'high' then 'High' when
severity = 'medium' then 'Medium' when severity = 'low' then 'Low' when severity = 'info'
then 'Info' end
  ) as severity_name,
  sum(totalnum) as totalnum,
  vuln_type,
  (
    case when severity = 'critical' then 0 when severity = 'high' then 1 when severity =
```

```
'medium' then 2 when severity = 'low' then 3 when severity = 'info' then 4 else 5 end
) as severity_number
from
  ###(select attack, attackid, t1.severity, count(*) as totalnum, vuln_type, action from
$log t1 left join (select name, cve, vuln_type from ips_mdata) t2 on t1.attack=t2.name where
$filter and nullifna(attack) is not null group by attack, attackid, t1.severity, vuln_type,
action order by totalnum desc)### t where action not in ('detected', 'pass_session') group
by attack, attackid, severity, vuln type order by severity number, totalnum desc
```

Dataset Name	Description	Log Category
Top-Monitored-Intrusions	Threat top monitored intrusions	attack

```
select
 attack,
 attackid,
   case when severity = 'critical' then 'Critical' when severity = 'high' then 'High' when
severity = 'medium' then 'Medium' when severity = 'low' then 'Low' when severity = 'info'
then 'Info' end
 ) as severity name,
 sum (totalnum) as totalnum,
 vuln type,
   case when severity = 'critical' then 0 when severity = 'high' then 1 when severity =
'medium' then 2 when severity = 'low' then 3 when severity = 'info' then 4 else 5 end
 ) as severity number
from
 ###(select attack, attackid, t1.severity, count(*) as totalnum, vuln type, action from
$log t1 left join (select name, cve, vuln type from ips mdata) t2 on t1.attack=t2.name where
$filter and nullifna(attack) is not null group by attack, attackid, t1.severity, vuln type,
```

Dataset Name	Description	Log Category
Attacks-Over-HTTP-HTTPs	Threat attacks over HTTP HTTPs	attack

action order by totalnum desc) ### t where action in ('detected', 'pass session') group by

attack, attackid, severity, vuln type order by severity number, totalnum desc

```
select
 attack,
 attackid,
   case when severity = 'critical' then 'Critical' when severity = 'high' then 'High' when
severity = 'medium' then 'Medium' when severity = 'low' then 'Low' when severity = 'info'
then 'Info' end
 ) as severity,
 count(*) as totalnum,
   case when severity = 'critical' then 0 when severity = 'high' then 1 when severity =
'medium' then 2 when severity = 'low' then 3 when severity = 'info' then 4 else 5 end
 ) as severity number
from
 $log
where
 $filter
 and severity in ('critical', 'high', 'medium')
```

```
and upper(service) in ('HTTP', 'HTTPS')
group by
  attack,
  attackid,
  severity,
  severity_number
order by
  severity_number,
  totalnum desc
```

Dataset Name	Description	Log Category
default-AP-Detection-Summary-by- Status-OffWire	Default access point detection summary by status off- wire	event

```
select
  (
    case apstatus when 1 then 'rogue' when 2 then 'accepted' when 3 then 'suppressed' else
'others' end
  ) as ap_full_status,
    count(*) as totalnum
from
  (
    select
    apstatus,
    bssid,
    ssid
    from
```

###(select apstatus, bssid, ssid, onwire, count(*) as subtotal from \$log where \$filter
and apstatus is not null and apstatus!=0 and bssid is not null and logid_to_int(logid) in
(43527, 43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570, 43571, 43582, 43583, 43584,
43585) group by apstatus, bssid, ssid, onwire order by subtotal desc)### t where onwire='no'
group by apstatus, bssid, ssid) t group by ap_full_status order by totalnum desc

Dataset Name	Description	Log Category
default-AP-Detection-Summary-by- Status-OffWire_table	Default access point detection summary by status off- wire	event

```
select
  (
    case apstatus when 1 then 'rogue' when 2 then 'accepted' when 3 then 'suppressed' else
'others' end
  ) as ap_full_status,
    count(*) as totalnum

from
  (
    select
    apstatus,
    bssid,
    ssid
    from
```

###(select apstatus, bssid, ssid, onwire, count(*) as subtotal from \$log where \$filter and apstatus is not null and apstatus!=0 and bssid is not null and logid_to_int(logid) in (43527, 43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570, 43571, 43582, 43583, 43584,

43585) group by apstatus, bssid, ssid, onwire order by subtotal desc) ### t where onwire='no' group by apstatus, bssid, ssid) t group by ap_full_status order by totalnum desc

Dataset Name	Description	Log Category
default-AP-Detection-Summary-by- Status-OnWire	Default access point detection summary by status on- wire	event

```
select
    case apstatus when 1 then 'rogue' when 2 then 'accepted' when 3 then 'suppressed' else
'others' end
 ) as ap_full_status,
 count(*) as totalnum
from
    select
     apstatus,
     bssid,
     ssid
    from
```

###(select apstatus, bssid, ssid, onwire, count(*) as subtotal from \$log where \$filter and apstatus is not null and apstatus!=0 and bssid is not null and logid to int(logid) in (43527, 43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570, 43571, 43582, 43583, 43584, 43585) group by apstatus, bssid, ssid, onwire order by subtotal desc)### t where onwire='yes' group by apstatus, bssid, ssid) t group by ap full status order by totalnum desc

Dataset Name	Description	Log Category
default-AP-Detection-Summary-by- Status-OnWire_table	Default access point detection summary by status on- wire	event

```
select
   case apstatus when 1 then 'rogue' when 2 then 'accepted' when 3 then 'suppressed' else
'others' end
 ) as ap full status,
 count(*) as totalnum
from
   select
     apstatus,
     bssid,
     ssid
      ###(select apstatus, bssid, ssid, onwire, count(*) as subtotal from $log where $filter
```

and apstatus is not null and apstatus!=0 and bssid is not null and logid to int(logid) in (43527, 43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570, 43571, 43582, 43583, 43584, 43585) group by apstatus, bssid, ssid, onwire order by subtotal desc) ### t where onwire='yes' group by apstatus, bssid, ssid) t group by ap full status order by totalnum desc

Dataset Name	Description	Log Category
default-Managed-AP-Summary	Default managed access point summary	event

```
select
  (
   case when (
      action like '%join%'
     and logid to int(logid) in (43522, 43551)
   ) then 'Authorized' else 'Unauthorized' end
  ) as ap status,
  count(*) as totalnum
from
  $log
where
 $filter
  and logid to int(logid) in (43522, 43551)
group by
 ap status
order by
 totalnum desc
```

Dataset Name	Description	Log Category
default-Managed-AP-Summary_table	Default managed access point summary	event

```
select
   case when (
     action like '%join%'
     and logid to int(logid) in (43522, 43551)
   ) then 'Authorized' else 'Unauthorized' end
 ) as ap status,
 count(*) as totalnum
from
 $log
where
 $filter
 and logid to int(logid) in (43522, 43551)
group by
 ap_status
order by
 totalnum desc
```

Dataset Name	Description	Log Category
default-Unclassified-AP-Summary	Default unclassified access point summary	event

```
select
  (
    case onwire when 'no' then 'off-wire' when 'yes' then 'on-wire' else 'others' end
) as ap_status,
  count(*) as totalnum

from
  ###(select onwire, ssid, bssid, count(*) as subtotal from $log where $filter and
apstatus=0 and bssid is not null and logid_to_int(logid) in (43521, 43525, 43527, 43563,
43564, 43565, 43566, 43569, 43570, 43571, 43582, 43583, 43584, 43585) group by onwire, ssid,
bssid order by subtotal desc)### t group by ap_status order by totalnum desc
```

Dataset Name	Description	Log Category
default-Unclassified-AP-Summary_ table	Default unclassified access point summary	event

```
select
  (
    case onwire when 'no' then 'off-wire' when 'yes' then 'on-wire' else 'others' end
) as ap_status,
  count(*) as totalnum
from
  ###(select onwire, ssid, bssid, count(*) as subtotal from $log where $filter and
apstatus=0 and bssid is not null and logid_to_int(logid) in (43521, 43525, 43527, 43563,
43564, 43565, 43566, 43569, 43570, 43571, 43582, 43583, 43584, 43585) group by onwire, ssid,
bssid order by subtotal desc)### t group by ap status order by totalnum desc
```

Dataset Name	Description	Log Category
default-selected-AP-Details-OffWire	Default selected access point details off-wire	event

```
select
   case apstatus when 0 then 'unclassified' when 1 then 'rogue' when 2 then 'accepted' when
3 then 'suppressed' else 'others' end
 ) as ap full status,
 devid,
 vd,
 ssid,
 bssid,
 manuf,
 rssi,
 channel,
 radioband,
 from dtime(
   min(first seen)
 ) as first seen,
 from dtime(
   max(last seen)
  ) as last seen,
 detectionmethod,
 itime,
 onwire as on wire
  ###(select apstatus, devid, vd, ssid, bssid, manuf, rssi, channel, radioband, min(dtime)
```

###(select apstatus, devid, vd, ssid, bssid, manuf, rssi, channel, radioband, min(dtime)
as first_seen, max(dtime) as last_seen, detectionmethod, itime, onwire from \$log where
\$filter and apstatus is not null and bssid is not null and logid_to_int(logid) in (43521,
43563, 43564, 43565, 43566, 43569, 43570, 43571) group by apstatus, devid, vd, ssid, bssid,
manuf, rssi, channel, radioband, detectionmethod, itime, onwire order by itime desc)### t
where onwire='no' group by ap_full_status, devid, vd, ssid, bssid, manuf, rssi, channel,
radioband, detectionmethod, itime, onwire, apstatus order by itime desc

Dataset Name	Description	Log Category
default-selected-AP-Details-OnWire	Default selected access point details on-wire	event

```
select
   case apstatus when 0 then 'unclassified' when 1 then 'rogue' when 2 then 'accepted' when
3 then 'suppressed' else 'others' end
 ) as ap full status,
 devid,
 vd,
  ssid,
 bssid,
 manuf,
 rssi,
 channel,
 radioband,
 from dtime(
  min(first seen)
  ) as first seen,
 from dtime(
  max(last seen)
  ) as last seen,
 detectionmethod,
 itime,
 onwire as on wire
  ###(select apstatus, devid, vd, ssid, bssid, manuf, rssi, channel, radioband, min(dtime)
as first seen, max(dtime) as last seen, detectionmethod, itime, onwire from $log where
$filter and apstatus is not null and bssid is not null and logid to int(logid) in (43521,
43563, 43564, 43565, 43566, 43569, 43570, 43571) group by apstatus, devid, vd, ssid, bssid,
manuf, rssi, channel, radioband, detectionmethod, itime, onwire order by itime desc)### t
where onwire='yes' group by ap full status, devid, vd, ssid, bssid, manuf, rssi, channel,
```

Dataset Name	Description	Log Category
event-Wireless-Client-Details	Event wireless client details	event

```
drop
   table if exists rpt_tmptbl_1; create temporary table rpt_tmptbl_1 as
select
   ip,
   lmac,
   sn,
   ssid,
   channel,
   radioband,
   min(first) as first,
   max(last) as last
from
```

radioband, detectionmethod, itime, onwire, apstatus order by itime desc

###(select ip, lower(mac) as lmac, sn, ssid, channel, radioband, min(dtime) as first, max
(dtime) as last from \$log-event where \$filter and ip is not null and mac is not null and sn
is not null and ssid is not null group by ip, lmac, sn, ssid, channel, radioband order by
ip)### t group by ip, lmac, sn, ssid, channel, radioband; select user_src, ip, lmac, sn,
ssid, channel, radioband, from_dtime(first) as first_seen, from_dtime(last) as last_seen,
cast(volume as decimal(18,2)) as bandwidth from (select * from rpt_tmptbl_1 inner join
(select user_src, srcip, sum(volume) as volume from ###(select coalesce(nullifna(`user`),
nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, srcip, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as volume from \$log-traffic where \$filter-time and (logflag&1>0)

and srcip is not null group by user_src, srcip having sum(coalesce(sentbyte, 0)+coalesce (rcvdbyte, 0))>0 order by volume desc)### t group by user_src, srcip order by user_src, srcip) t on rpt_tmptbl_1.ip = t.srcip) t order by volume desc

Dataset Name	Description	Log Category
event-Wireless-Accepted-Offwire	Event wireless accepted off-wire	event

```
select
  'accepted' as ap_full_status,
  devid,
  vd,
  ssid,
  bssid,
  manuf,
  channel,
  radioband,
  from_dtime(
    max(last_seen)
  ) as last_seen,
  detectionmethod,
  snclosest,
  'no' as on_wire
from
```

###(select devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod, snclosest,
onwire, logid, apstatus, max(dtime) as last_seen from \$log where \$filter and bssid is not
null and logid_to_int(logid) in (43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570,
43571) group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,
snclosest, onwire, logid, apstatus order by last_seen desc)### t where apstatus=2 and
onwire='no' group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,
snclosest order by last seen desc

Dataset Name	Description	Log Category
event-Wireless-Accepted-Onwire	Event wireless accepted on-wire	event

```
select
'accepted' as ap_full_status,
devid,
vd,
ssid,
bssid,
manuf,
channel,
radioband,
from_dtime(
max(last_seen)
) as last_seen,
detectionmethod,
snclosest,
'yes' as on_wire
```

###(select devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod, snclosest,
onwire, apstatus, signal, max(dtime) as last_seen from \$log where \$filter and bssid is not
null and logid_to_int(logid) in (43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570,
43571) group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,

snclosest, onwire, apstatus, signal order by last_seen desc)### t where apstatus=2 and
onwire='yes' group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,
snclosest order by last_seen desc

Dataset Name	Description	Log Category
event-Wireless-Rogue-Offwire	Event wireless rogue off-wire	event

```
relect
'rogue' as ap_full_status,
devid,
vd,
ssid,
bssid,
manuf,
channel,
radioband,
from_dtime(
   max(last_seen)
) as last_seen,
detectionmethod,
snclosest,
'no' as on_wire
```

###(select devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod, snclosest,
onwire, logid, apstatus, max(dtime) as last_seen from \$log where \$filter and bssid is not
null and logid_to_int(logid) in (43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570,
43571) group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,
snclosest, onwire, logid, apstatus order by last_seen desc)### t where apstatus=1 and
onwire='no' group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,
snclosest order by last seen desc

Dataset Name	Description	Log Category
event-Wireless-Rogue-Onwire	Event wireless rogue on-wire	event

```
rogue' as ap_full_status,
devid,
vd,
ssid,
bssid,
manuf,
channel,
radioband,
from_dtime(
max(last_seen)
) as last_seen,
detectionmethod,
snclosest,
'yes' as on_wire
```

###(select devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod, snclosest,
onwire, apstatus, signal, max(dtime) as last_seen from \$log where \$filter and bssid is not
null and logid_to_int(logid) in (43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570,
43571) group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,

snclosest, onwire, apstatus, signal order by last_seen desc)### t where apstatus=1 and onwire='yes' group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod, snclosest order by last_seen desc

Dataset Name	Description	Log Category
event-Wireless-Suppressed-Offwire	Event wireless suppressed off-wire	event

```
select
 'suppressed' as ap_full_status,
 devid,
 vd,
 ssid,
 bssid,
 manuf,
 channel,
 radioband,
 from dtime(
  max(last_seen)
 ) as last_seen,
 detectionmethod,
 snclosest,
  'no' as on wire
```

###(select devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod, snclosest, onwire, logid, apstatus, max(dtime) as last seen from \$log where \$filter and bssid is not null and logid to int(logid) in (43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570, 43571) group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod, snclosest, onwire, logid, apstatus order by last seen desc) ### t where apstatus=3 and onwire='no' group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod, snclosest order by last seen desc

Dataset Name	Description	Log Category
event-Wireless-Suppressed-Onwire	Event wireless suppressed on-wire	event

```
'suppressed' as ap_full_status,
devid,
vd,
ssid,
bssid,
manuf,
channel,
radioband,
from dtime(
 max(last seen)
) as last seen,
detectionmethod,
snclosest,
'yes' as on_wire
```

###(select devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod, snclosest, onwire, apstatus, signal, max(dtime) as last seen from \$log where \$filter and bssid is not null and logid_to_int(logid) in (43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570, 43571) group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,

snclosest, onwire, apstatus, signal order by last_seen desc)### t where apstatus=3 and
onwire='yes' group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,
snclosest order by last_seen desc

Dataset Name	Description	Log Category
event-Wireless-Unclassified-Offwire	Event wireless unclassified off-wire	event

```
select
  'unclassified' as ap_full_status,
  devid,
  vd,
  ssid,
  bssid,
  manuf,
  channel,
  radioband,
  from_dtime(
    max(last_seen)
  ) as last_seen,
  detectionmethod,
  snclosest,
  'no' as on_wire
  from
```

###(select devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod, snclosest,
onwire, logid, apstatus, max(dtime) as last_seen from \$log where \$filter and bssid is not
null and logid_to_int(logid) in (43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570,
43571) group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,
snclosest, onwire, logid, apstatus order by last_seen desc)### t where apstatus=0 and
onwire='no' group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,
snclosest order by last seen desc

Dataset Name	Description	Log Category
event-Wireless-Unclassified-Onwire	Event wireless unclassified on-wire	event

```
'unclassified' as ap_full_status,
devid,
vd,
ssid,
bssid,
manuf,
channel,
radioband,
from_dtime(
   max(last_seen)
) as last_seen,
detectionmethod,
snclosest,
'yes' as on_wire
from
```

###(select devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod, snclosest,
onwire, apstatus, signal, max(dtime) as last_seen from \$log where \$filter and bssid is not
null and logid_to_int(logid) in (43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570,
43571) group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,

snclosest, onwire, apstatus, signal order by last_seen desc)### t where apstatus=0 and
onwire='yes' group by devid, vd, ssid, bssid, manuf, channel, radioband, detectionmethod,
snclosest order by last seen desc

```
Dataset NameDescriptionLog Categorydefault-Top-IPSEC-Vpn-Dial-Up-User-<br/>By-BandwidthDefault top IPsec VPN dial up user by bandwidth usageevent
```

```
select
 coalesce(
   xauthuser_agg,
   user_agg,
   ipstr(`remip`)
  ) as user src,
  from dtime(
   min(s time)
  ) as start time,
  sum (bandwidth) as bandwidth,
  sum(traffic in) as traffic in,
  sum(traffic out) as traffic out
from
    select
      devid,
      string agg(distinct xauthuser agg, ' ') as xauthuser agg,
      string_agg(distinct user_agg, ' ') as user_agg,
      tunnelid,
      min(s time) as s time,
      max(e_time) as e_time,
        case when min(s time) = max(e time) then max(max traffic in) + max(max traffic out)
else max(max_traffic_in) - min(min_traffic_in) + max(max_traffic_out) - min(min_traffic_out)
end
      ) as bandwidth,
       case when min(s time) = max(e time) then max(max traffic in) else max(max traffic
in) - min(min traffic in) end
      ) as traffic in,
        case when min(s time) = max(e time) then max(max traffic out) else max(max traffic
out) - min(min traffic out) end
      ) as traffic out
      ###(select devid, vd, remip, nullifna(`xauthuser`) as xauthuser agg, nullifna(`user`)
as user_agg, tunnelid, min(coalesce(dtime, 0)) as s_time, max(coalesce(dtime, 0)) as e_time,
max(coalesce(duration,0)) as max duration, min(coalesce(duration,0)) as min duration, min
(coalesce(sentbyte, 0)) as min traffic out, min(coalesce(rcvdbyte, 0)) as min traffic in,
max(coalesce(sentbyte, 0)) as max_traffic_out, max(coalesce(rcvdbyte, 0)) as max_traffic_in,
max(coalesce(rcvdbyte, 0)+coalesce(sentbyte, 0)) as max traffic from $log where $filter and
subtype='vpn' and tunneltype like 'ipsec%' and not (tunnelip is null or tunnelip='0.0.0.0')
and action in ('tunnel-stats', 'tunnel-down', 'tunnel-up') and tunnelid is not null and
tunnelid!=0 group by devid, vd, remip, xauthuser_agg, user_agg, tunnelid order by max_
```

traffic desc) ### t group by devid, vd, remip, tunnelid) tt group by user_src having sum (bandwidth)>0 order by bandwidth desc

Dataset Name	Description	Log Category
default-Top-Sources-Of-SSL-VPN- Tunnels-By-Bandwidth	Default top sources of SSL VPN tunnels by bandwidth usage	event

```
select
 remip as remote ip,
 sum (bandwidth) as bandwidth
    select
      devid,
      vd,
      remip,
      tunnelid,
       case when min(s time) = max(e time) then max(max traffic in) else max(max traffic
in) - min(min traffic in) end
      ) as traffic in,
       case when min(s time) = max(e time) then max(max traffic out) else max(max traffic
out) - min(min traffic out) end
      ) as traffic out,
        case when min(s_time) = max(e_time) then max(max_traffic_in) + max(max_traffic_out)
else max(max traffic in) - min(min traffic in) + max(max traffic out) - min(min traffic out)
      ) as bandwidth
    from
      ###(select $flex timestamp as timestamp, devid, vd, remip, tunnelid, (case when
tunneltype like 'ipsec%' then 'ipsec' else tunneltype end) as t type, (case when
action='tunnel-up' then 1 else 0 end) as tunnelup, max(coalesce(sentbyte, 0)) as max
traffic_out, max(coalesce(rcvdbyte, 0)) as max_traffic_in, min(coalesce(sentbyte, 0)) as
min traffic out, min(coalesce(rcvdbyte, 0)) as min traffic in, min(coalesce(dtime, 0)) as s
time, max(coalesce(dtime, 0)) as e time from $log where $filter and subtype='vpn' and
(tunneltype like 'ipsec%' or tunneltype like 'ssl%') and action in ('tunnel-up', 'tunnel-
stats', 'tunnel-down') and tunnelid is not null and tunnelid!=0 group by timestamp, devid,
vd, remip, t type, tunnelid, action /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t
where t type like 'ssl%' group by devid, vd, remip, tunnelid) tt group by remote ip having
sum(traffic in+traffic out)>0 order by bandwidth desc
```

Dataset Name	Description	Log Category
webfilter-Web-Activity-Summary-By- Requests	Webfilter web activity summary by requests	webfilter

```
select
   $flex_timescale(timestamp) as hodex,
   sum(allowed_request) as allowed_request,
   sum(blocked_request) as blocked_request
from
   ###(select $flex_timestamp as timestamp, sum(case when action!='blocked' then 1 else 0
end) as allowed request, sum(case when action='blocked' then 1 else 0 end) as blocked
```

request from \$log where \$filter and (eventtype is null or logver>=502000000) group by timestamp /*SkipSTART*/order by timestamp desc/*SkipEND*/) ### t group by hodex order by hodex

Dataset Name	Description	Log Category
traffic-Browsing-Time-Summary	Traffic browsing time summary	traffic

```
select
  $flex_timescale(timestamp) as hodex,
  cast(
    ebtr_value(
        ebtr_agg_flat(browsetime),
        null,
        $timespan
    )/ 60.0 as decimal(18, 2)
  ) as browsetime
from
```

###(select \$flex_timestamp as timestamp, ebtr_agg_flat(\$browse_time) as browsetime from \$log where \$filter and (logflag&1>0) and \$browse_time is not null group by timestamp /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t group by hodex order by hodex

Dataset Name	Description	Log Category
webfilter-Top-Web-Users-By-Blocked- Requests	Webfilter top web users by blocked requests	webfilter

```
select
  coalesce(
    f_user,
    euname,
    ipstr(`srcip`)
) as user_src,
  coalesce(
    epname,
    ipstr(`srcip`)
) as ep_src,
  sum(requests) as requests
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user, srcip, (case when
epid<1024 then null else epid end) as ep_id, (case when euid<1024 then null else euid end)
as eu_id, action, count(*) as requests from \$log where \$filter and coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) is not null group by f_user, srcip, ep_id,
eu_id, action /*SkipSTART*/order by requests desc/*SkipEND*/)### t1 left join \$ADOM_ENDPOINT
t2 on t1.ep_id=t2.epid left join \$ADOM_ENDUSER t3 on t1.eu_id=t3.euid where action='blocked'
group by user_src, ep_src order by requests desc</pre>

Dataset Name	Description	Log Category
webfilter-Top-Web-Users-By-Allowed- Requests	Webfilter top web users by allowed requests	webfilter

```
select
  coalesce(
  f_user,
  euname,
```

```
ipstr(`srcip`)
) as user_src,
coalesce(
  epname,
  ipstr(`srcip`)
) as ep src,
sum (requests) as requests
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f user, srcip, (case when epid<1024 then null else epid end) as ep id, (case when euid<1024 then null else euid end) as eu id, action, count(*) as requests from \$log where \$filter and coalesce(nullifna (`user`), nullifna(`unauthuser`), ipstr(`srcip`)) is not null group by f user, srcip, ep id, eu id, action /*SkipSTART*/order by requests desc/*SkipEND*/)### t1 left join \$ADOM ENDPOINT t2 on t1.ep id=t2.epid left join \$ADOM ENDUSER t3 on t1.eu id=t3.euid where action!='blocked' group by user src, ep src order by requests desc

Dataset Name	Description	Log Category
traffic-Top-Web-Users-By-Browsing- Time	Traffic top web users by browsing time	traffic

```
select
 user src,
 ebtr value(
   ebtr agg flat (browsetime),
   null,
   $timespan
  ) as browsetime,
 sum (bandwidth) as bandwidth,
  sum(traffic in) as traffic in,
  sum(traffic_out) as traffic_out
from
```

###(select user src, ebtr agg flat(browsetime) as browsetime, sum(bandwidth) as bandwidth, sum(traffic in) as traffic in, sum(traffic out) as traffic out from (select coalesce (nullifna(`user`), ipstr(`srcip`)) as user_src, ebtr_agg_flat(\$browse_time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic in, sum(coalesce(sentbyte, 0)) as traffic out from \$log where \$filter and \$browse time is not null group by user src) t group by user src /*SkipSTART*/order by ebtr value (ebtr agg flat(browsetime), null, null) desc/*SkipEND*/)### t group by user src order by browsetime desc

Dataset Name	Description	Log Category
webfilter-Top-Blocked-Web-Sites-By-Requests	Webfilter top blocked web sites by requests	webfilter

```
select
 domain,
 catdesc,
 sum(requests) as requests
```

###(select hostname as domain, catdesc, action, count(*) as requests from \$log where \$filter and (eventtype is null or logver>=502000000) and hostname is not null and catdesc is not null group by domain, catdesc, action /*SkipSTART*/order by requests desc/*SkipEND*/)### t where action='blocked' group by domain, catdesc order by requests desc

Dataset Name	Description	Log Category
webfilter-Top-Allowed-Web-Sites-By-Requests	Webfilter top allowed web sites by requests	webfilter

```
select
 string_agg(distinct catdesc, ', ') as agg_catdesc,
 sum(requests) as requests
```

###(select hostname as domain, catdesc, action, count(*) as requests from \$log where \$filter and (eventtype is null or logver>=502000000) and hostname is not null and catdesc is not null group by domain, catdesc, action /*SkipSTART*/order by requests desc/*SkipEND*/)### t where action!='blocked' group by domain order by requests desc

Dataset Name	Description	Log Category
webfilter-Top-Video-Streaming- Websites-By-Bandwidth	Webfilter top video streaming websites by bandwidth usage	webfilter

```
select
 domain,
 sum (bandwidth) as bandwidth,
 sum(traffic in) as traffic in,
 sum(traffic out) as traffic out
```

###(select coalesce(nullifna(root_domain(hostname)), 'other') as domain, sum(coalesce (sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic in, sum(coalesce(sentbyte, 0)) as traffic out from \$log-traffic where \$filter and (logflag&1>0) and (countweb>0 or ((logver is null or logver<502000000) and (hostname is not null or utmevent in ('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) and catdesc in ('Streaming Media and Download') group by domain having sum(coalesce (sentbyte, 0)+coalesce(rcvdbyte, 0))>0 /*SkipSTART*/order by bandwidth desc/*SkipEND*/)### t group by domain order by bandwidth desc

Dataset Name	Description	Log Category
webfilter-Top-Blocked-Web-Categories	Webfilter top blocked web categories	webfilter

```
select
 catdesc.
 sum(requests) as requests
```

###(select catdesc, action, count(*) as requests from \$log-webfilter where \$filter and (eventtype is null or logver>=502000000) and catdesc is not null group by catdesc, action /*SkipSTART*/order by requests desc/*SkipEND*/)### t where action='blocked' group by catdesc order by requests desc

Dataset Name	Description	Log Category
webfilter-Top-Allowed-Web-Categories	Webfilter top allowed web categories	webfilter

```
select
 catdesc.
  sum (requests) as requests
```

from

###(select catdesc, action, count(*) as requests from \$log-webfilter where \$filter and
(eventtype is null or logver>=502000000) and catdesc is not null group by catdesc, action
/*SkipSTART*/order by requests desc/*SkipEND*/)### t where action!='blocked' group by
catdesc order by requests desc

Dataset Name	Description	Log Category
traffic-Top-50-Sites-By-Browsing-Time	Traffic top sites by browsing time	traffic

```
select
hostname,
string_agg(distinct catdesc, ', ') as agg_catdesc,
ebtr_value(
   ebtr_agg_flat(browsetime),
   null,
   $timespan
) as browsetime,
sum(bandwidth) as bandwidth,
sum(traffic_in) as traffic_in,
sum(traffic_out) as traffic_out
```

###(select hostname, catdesc, ebtr_agg_flat(browsetime) as browsetime, sum(bandwidth) as
bandwidth, sum(traffic_in) as traffic_in, sum(traffic_out) as traffic_out from (select
hostname, catdesc, ebtr_agg_flat(\$browse_time) as browsetime, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum
(coalesce(sentbyte, 0)) as traffic_out from \$log where \$filter and (logflag&1>0) and
hostname is not null and \$browse_time is not null group by hostname, catdesc) t group by
hostname, catdesc /*SkipSTART*/order by ebtr_value(ebtr_agg_flat(browsetime), null, null)
desc/*SkipEND*/)### t group by hostname order by browsetime desc

Dataset Name	Description	Log Category
traffic-Top-10-Categories-By- Browsing-Time	Traffic top category by browsing time	traffic

```
select
  catdesc,
  ebtr_value(
    ebtr_agg_flat(browsetime),
    null,
    $timespan
  ) as browsetime,
  sum(bandwidth) as bandwidth
from
```

###(select catdesc, ebtr_agg_flat(browsetime) as browsetime, sum(bandwidth) as bandwidth
from (select catdesc, ebtr_agg_flat(\$browse_time) as browsetime, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter and (logflag&1>0) and catdesc
is not null and \$browse_time is not null group by catdesc) t group by catdesc
/*SkipSTART*/order by ebtr_value(ebtr_agg_flat(browsetime), null, null) desc/*SkipEND*/)###
t group by catdesc order by browsetime desc

Dataset Name	Description	Log Category
traffic-Top-Destination-Countries-By- Browsing-Time	Traffic top destination countries by browsing time	traffic

```
select
 dstcountry,
 ebtr_value(
   ebtr agg flat (browsetime),
   null,
   $timespan
 ) as browsetime,
  sum (bandwidth) as bandwidth,
 sum(traffic in) as traffic in,
 sum(traffic out) as traffic out
  ###(select dstcountry, ebtr agg flat(browsetime) as browsetime, sum(bandwidth) as
bandwidth, sum(traffic_in) as traffic_in, sum(traffic_out) as traffic_out from (select
dstcountry, ebtr_agg_flat($browse_time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic in, sum(coalesce
(sentbyte, 0)) as traffic out from $log where $filter and (logflag&1>0) and $browse time is
not null group by dstcountry) t group by dstcountry /*SkipSTART*/order by ebtr_value(ebtr_
agg flat(browsetime), null, null) desc/*SkipEND*/)### t group by dstcountry order by
browsetime desc
```

Dataset Name	Description	Log Category
webfilter-Top-Search-Phrases	Webfilter top search phrases	webfilter

```
select
 keyword,
 count(*) as requests
  $log
where
 $filter
  and keyword is not null
group by
 keyword
order by
  requests desc
```

Dataset Name	Description	Log Category
Top-10-Users-Browsing-Time	Estimated browsing time	traffic

```
select
 coalesce(
    f user,
    euname,
    ipstr(`srcip`)
  ) as user src,
  coalesce(
    epname,
    ipstr(`srcip`)
 ) as ep_src,
  ebtr value(
    ebtr agg flat (browsetime),
    null,
    $timespan
  ) as browsetime
```

from

###(select f_user, srcip, ep_id, eu_id, ebtr_agg_flat(browsetime) as browsetime from (select coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f user, srcip, (case when epid<1024 then null else epid end) as ep_id, (case when euid<1024 then null else euid end) as eu id, ebtr agg flat(\$browse time) as browsetime from \$log where \$filter and (logflag&1>0) and \$browse time is not null group by f user, srcip, ep id, eu id) t group by f user, srcip, ep id, eu id order by ebtr value(ebtr agg flat(browsetime), null, null) desc) ### t1 left join \$ADOM ENDPOINT t2 on t1.ep id=t2.epid left join \$ADOM ENDUSER t3 on t1.eu id=t3.euid group by user src, ep src order by browsetime desc

Dataset Name	Description	Log Category
Estimated-Browsing-Time	Estimated browsing time	traffic

```
select
 coalesce(
    f user,
    euname,
    ipstr(`srcip`)
  ) as user src,
  coalesce(
    epname,
    ipstr(`srcip`)
  ) as ep src,
  ebtr value(
    ebtr agg flat (browsetime),
    null,
    $timespan
 ) as browsetime
```

###(select f user, srcip, ep id, eu id, ebtr agg flat(browsetime) as browsetime from (select coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f user, srcip, (case when epid<1024 then null else epid end) as ep_id, (case when euid<1024 then null else euid end) as eu_id, ebtr_agg_flat(\$browse_time) as browsetime from \$log where \$filter and (logflag&1>0) and \$browse time is not null group by f user, srcip, ep id, eu id) t group by f user, srcip, ep id, eu id order by ebtr value(ebtr agg flat(browsetime), null, null) desc) ### t1 left join \$ADOM ENDPOINT t2 on t1.ep id=t2.epid left join \$ADOM ENDUSER t3 on t1.eu_id=t3.euid group by user_src, ep_src order by browsetime desc

Dataset Name	Description	Log Category
wifi-Top-AP-By-Bandwidth	Top access point by bandwidth usage	traffic

```
select
  ap srcintf,
  sum (bandwidth) as bandwidth
from
   select
     coalesce(ap, srcintf) as ap srcintf,
     sum(bandwidth) as bandwidth
    from
      ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user
src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce(nullifna
(`srcname`), `srcmac`) as hostname_mac, max(srcswversion) as srcswversion, max(osname) as
osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte,
```

0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from \$log-traffic where \$filter and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user_src, ap, srcintf, srcssid, srcmac, hostname_mac /*SkipSTART*/order by bandwidth desc, subtotal desc/*SkipEND*/)### t group by ap_srcintf having sum(bandwidth)>0 union all select ap as ap_srcintf, sum(bandwidth) as bandwidth from ###(select \$flex_timestamp as timestamp, stamac, stamac as srcmac, ap, ssid, ssid as srcssid, user_src, sum(coalesce(sentdelta, 0)) as sentdelta, sum(coalesce(rcvddelta, 0)) as rcvddelta, sum(coalesce(sentdelta, 0)+coalesce (rcvddelta, 0)) as bandwidth from (select itime, stamac, ap, ssid, coalesce(`user`, ipstr (`srcip`)) as user_src, sentbyte-lag(coalesce(sentbyte, 0)) over (partition by stamac order by itime) as sentdelta, rcvdbyte-lag(coalesce(rcvdbyte, 0)) over (partition by stamac order by itime) as rcvddelta from \$log-event where \$filter and subtype='wireless' and stamac is not null and ssid is not null and action in ('sta-wl-bridge-traffic-stats', 'reassoc-req', 'assoc-req')) as t group by timestamp, stamac, ap, ssid, user_src /*SkipSTART*/order by bandwidth desc/*SkipEND*/)### t group by ap having sum(bandwidth)>0) t group by ap_srcintf order by bandwidth desc

Dataset Name	Description	Log Category
wifi-Top-AP-By-Client	Top access point by client	traffic

```
select
  ap_srcintf as srcintf,
  count(distinct srcmac) as totalnum
from
  (
   select
    coalesce(ap, srcintf) as ap_srcintf,
    srcmac
  from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce (nullifna (`srcname`), `srcmac`) as hostname mac, max(srcswversion) as srcswversion, max(osname) as osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from \$log-traffic where \$filter and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user src, ap, srcintf, srcssid, srcmac, hostname mac /*SkipSTART*/order by bandwidth desc, subtotal desc/*SkipEND*/)### t where srcmac is not null group by ap srcintf, srcmac union all (select ap as ap_srcintf, stamac as srcmac from ###(select \$flex_timestamp as timestamp, stamac, stamac as srcmac, ap, ssid, ssid as srcssid, user src, sum(coalesce(sentdelta, 0)) as sentdelta, sum(coalesce(rcvddelta, 0)) as rcvddelta, sum(coalesce(sentdelta, 0)+coalesce (rcvddelta, 0)) as bandwidth from (select itime, stamac, ap, ssid, coalesce(`user`, ipstr (`srcip`)) as user_src, sentbyte-lag(coalesce(sentbyte, 0)) over (partition by stamac order by itime) as sentdelta, rcvdbyte-lag(coalesce(rcvdbyte, 0)) over (partition by stamac order by itime) as rcvddelta from \$log-event where \$filter and subtype='wireless' and stamac is not null and ssid is not null and action in ('sta-wl-bridge-traffic-stats', 'reassoc-req', 'assoc-req')) as t group by timestamp, stamac, ap, ssid, user src /*SkipSTART*/order by bandwidth desc/*SkipEND*/)### t where stamac is not null group by ap, stamac)) t group by srcintf order by totalnum desc

Dataset Name	Description	Log Category
wifi-Top-SSID-By-Bandwidth	Top SSIDs by bandwidth usage	traffic

```
select
  srcssid,
  sum(bandwidth) as bandwidth
```

```
from
  (
   select
      srcssid,
      sum(bandwidth) as bandwidth
    from
      ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user
src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce (nullifna
(`srcname`), `srcmac`) as hostname mac, max(srcswversion) as srcswversion, max(osname) as
osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte,
0) + coalesce (rcvdbyte, 0)) as bandwidth, count(*) as subtotal from $log-traffic where $filter
and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user src, ap,
srcintf, srcssid, srcmac, hostname mac /*SkipSTART*/order by bandwidth desc, subtotal
desc/*SkipEND*/)### t where srcssid is not null group by srcssid having sum(bandwidth)>0
union all select ssid as srcssid, sum(bandwidth) as bandwidth from ###(select $flex
timestamp as timestamp, stamac, stamac as srcmac, ap, ssid, ssid as srcssid, user src, sum
(coalesce(sentdelta, 0)) as sentdelta, sum(coalesce(rcvddelta, 0)) as rcvddelta, sum
(coalesce(sentdelta, 0)+coalesce(rcvddelta, 0)) as bandwidth from (select itime, stamac, ap,
ssid, coalesce(`user`, ipstr(`srcip`)) as user src, sentbyte-lag(coalesce(sentbyte, 0)) over
(partition by stamac order by itime) as sentdelta, rcvdbyte-lag(coalesce(rcvdbyte, 0)) over
(partition by stamac order by itime) as rcvddelta from $log-event where $filter and
subtype='wireless' and stamac is not null and ssid is not null and action in ('sta-wl-
bridge-traffic-stats', 'reassoc-req', 'assoc-req')) as t group by timestamp, stamac, ap,
ssid, user src /*SkipSTART*/order by bandwidth desc/*SkipEND*/)### t group by ssid having
sum(bandwidth)>0) t group by srcssid order by bandwidth desc
```

Dataset Name	Description	Log Category
wifi-Top-SSID-By-Client	Top SSIDs by client	traffic

```
select
 srcssid,
  count(distinct srcmac) as totalnum
from
    select
      srcssid,
      srcmac
    from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce(nullifna (`srcname`), `srcmac`) as hostname_mac, max(srcswversion) as srcswversion, max(osname) as osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from \$log-traffic where \$filter and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user src, ap, srcintf, srcssid, srcmac, hostname mac /*SkipSTART*/order by bandwidth desc, subtotal desc/*SkipEND*/)### t where srcmac is not null group by srcssid, srcmac union all select ssid as srcssid, stamac as srcmac from ###(select \$flex timestamp as timestamp, stamac, stamac as srcmac, ap, ssid, ssid as srcssid, user src, sum(coalesce(sentdelta, 0)) as sentdelta, sum(coalesce(rcvddelta, 0)) as rcvddelta, sum(coalesce(sentdelta, 0)+coalesce (rcvddelta, 0)) as bandwidth from (select itime, stamac, ap, ssid, coalesce(`user`, ipstr (`srcip`)) as user src, sentbyte-lag(coalesce(sentbyte, 0)) over (partition by stamac order by itime) as sentdelta, rcvdbyte-lag(coalesce(rcvdbyte, 0)) over (partition by stamac order by itime) as rcvddelta from \$log-event where \$filter and subtype='wireless' and stamac is not null and ssid is not null and action in ('sta-wl-bridge-traffic-stats', 'reassoc-req', 'assoc-req')) as t group by timestamp, stamac, ap, ssid, user src /*SkipSTART*/order by

bandwidth desc/*SkipEND*/)### t where stamac is not null group by ssid, stamac) t where srcssid is not null group by srcssid order by totalnum desc

Dataset Name	Description	Log Category
wifi-Top-App-By-Bandwidth	Top WiFi applications by bandwidth usage	traffic

```
select
 appid,
  app,
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) as bandwidth
  $log
where
 $filter
  and (
   logflag&1>0
  and (
   srcssid is not null
   or dstssid is not null
  and nullifna(app) is not null
group by
 appid,
  app
having
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) > 0
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
wifi-Top-Client-By-Bandwidth	Top WiFi client by bandwidth usage	traffic

```
select
 client,
 sum (bandwidth) as bandwidth
from
   select
      (
       coalesce(hostname_mac, 'unknown') || ' (' || get_devtype(srcswversion, osname,
devtype) || ', ' || coalesce(osname, '') || (
         case when srcswversion is null then '' else ' ' || srcswversion end
        ) || ')'
      ) as client,
      sum(bandwidth) as bandwidth
   from
      ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_
src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce(nullifna
(`srcname`), `srcmac`) as hostname_mac, max(srcswversion) as srcswversion, max(osname) as
```

osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from \$log-traffic where \$filter and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user src, ap, srcintf, srcssid, srcmac, hostname mac /*SkipSTART*/order by bandwidth desc, subtotal desc/*SkipEND*/)### t group by client having sum(bandwidth)>0 union all select (coalesce (stamac, 'unknown')) as client, sum(bandwidth) as bandwidth from ###(select \$flex timestamp as timestamp, stamac, stamac as srcmac, ap, ssid, ssid as srcssid, user src, sum(coalesce (sentdelta, 0)) as sentdelta, sum(coalesce(rcvddelta, 0)) as rcvddelta, sum(coalesce (sentdelta, 0)+coalesce(rcvddelta, 0)) as bandwidth from (select itime, stamac, ap, ssid, coalesce(`user`, ipstr(`srcip`)) as user src, sentbyte-lag(coalesce(sentbyte, 0)) over (partition by stamac order by itime) as sentdelta, rcvdbyte-lag(coalesce(rcvdbyte, 0)) over (partition by stamac order by itime) as rcvddelta from \$log-event where \$filter and subtype='wireless' and stamac is not null and ssid is not null and action in ('sta-wlbridge-traffic-stats', 'reassoc-req', 'assoc-req')) as t group by timestamp, stamac, ap, ssid, user src /*SkipSTART*/order by bandwidth desc/*SkipEND*/)### t group by client having sum(bandwidth) > 0) t where client is not null group by client order by bandwidth desc

Dataset Name	Description	Log Category
wifi-Top-OS-By-Bandwidth	Top WiFi os by bandwidth usage	traffic

```
select
  (
    coalesce(osname, 'unknown') || ' ' || coalesce(srcswversion, '')
  ) as os,
  sum(bandwidth) as bandwidth
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce(nullifna
(`srcname`), `srcmac`) as hostname_mac, max(srcswversion) as srcswversion, max(osname) as
osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from \$log-traffic where \$filter
and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user_src, ap,
srcintf, srcssid, srcmac, hostname_mac /*SkipSTART*/order by bandwidth desc, subtotal
desc/*SkipEND*/)### t group by os having sum(bandwidth)>0 order by bandwidth desc

Dataset Name	Description	Log Category
wifi-Top-OS-By-WiFi-Client	Top WiFi os by WiFi client	traffic

```
select
  (
    coalesce(osname, 'unknown') || ' ' || coalesce(osversion, '')
  ) as os,
  count(distinct srcmac) as totalnum
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce(nullifna
(`srcname`), `srcmac`) as hostname_mac, max(srcswversion) as srcswversion, max(osname) as
osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from \$log-traffic where \$filter
and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user_src, ap,
srcintf, srcssid, srcmac, hostname_mac /*SkipSTART*/order by bandwidth desc, subtotal
desc/*SkipEND*/)### t where srcmac is not null group by os order by totalnum desc

Dataset Name	Description	Log Category
wifi-Top-Device-By-Bandwidth	Top WiFi device by bandwidth usage	traffic

```
select
  get_devtype(srcswversion, osname, devtype) as devtype_new,
  sum(bandwidth) as bandwidth
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce(nullifna
(`srcname`), `srcmac`) as hostname_mac, max(srcswversion) as srcswversion, max(osname) as
osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from \$log-traffic where \$filter
and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user_src, ap,
srcintf, srcssid, srcmac, hostname_mac /*SkipSTART*/order by bandwidth desc, subtotal
desc/*SkipEND*/)### t where devtype is not null group by devtype_new having sum(bandwidth)>0
order by bandwidth desc

Dataset Name	Description	Log Category
wifi-Top-Device-By-Client	Top WiFi device by client	traffic

```
select
  devtype_new,
  count(distinct srcmac) as totalnum
from
  (
   select
     get_devtype(srcswversion, osname, devtype) as devtype_new,
     srcmac
  from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_
src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce(nullifna
(`srcname`), `srcmac`) as hostname_mac, max(srcswversion) as srcswversion, max(osname) as
osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from \$log-traffic where \$filter
and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user_src, ap,
srcintf, srcssid, srcmac, hostname_mac /*SkipSTART*/order by bandwidth desc, subtotal
desc/*SkipEND*/)### t where srcmac is not null) t where devtype_new is not null group by
devtype_new order by totalnum desc

Dataset Name	Description	Log Category
wifi-Overall-Traffic	WiFi overall traffic	traffic

```
select
  sum(bandwidth) as bandwidth
from
  (
   select
    sum(bandwidth) as bandwidth
  from
   ###(select coalesce(nullifna(`user
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_
src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce(nullifna
(`srcname`), `srcmac`) as hostname_mac, max(srcswversion) as srcswversion, max(osname) as
osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte,

0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from \$log-traffic where \$filter and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user_src, ap, srcintf, srcssid, srcmac, hostname_mac /*SkipSTART*/order by bandwidth desc, subtotal desc/*SkipEND*/)### t group by srcssid union all select sum(bandwidth) as bandwidth from ### (select \$flex_timestamp as timestamp, stamac, stamac as srcmac, ap, ssid, ssid as srcssid, user_src, sum(coalesce(sentdelta, 0)) as sentdelta, sum(coalesce(rcvddelta, 0)) as rcvddelta, sum(coalesce(sentdelta, 0)+coalesce(rcvddelta, 0)) as bandwidth from (select itime, stamac, ap, ssid, coalesce(`user`, ipstr(`srcip`)) as user_src, sentbyte-lag(coalesce (sentbyte, 0)) over (partition by stamac order by itime) as sentdelta, rcvdbyte-lag(coalesce (rcvdbyte, 0)) over (partition by stamac order by itime) as rcvddelta from \$log-event where \$filter and subtype='wireless' and stamac is not null and ssid is not null and action in ('sta-wl-bridge-traffic-stats', 'reassoc-req', 'assoc-req')) as t group by timestamp, stamac, ap, ssid, user src /*SkipSTART*/order by bandwidth desc/*SkipEND*/)### t) t

Dataset Name	Description	Log Category
wifi-Num-Distinct-Client	WiFi num distinct client	traffic

```
select
 count(distinct srcmac) as totalnum
   select
     srcmac
      ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user
src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce (nullifna
(`srcname`), `srcmac`) as hostname mac, max(srcswversion) as srcswversion, max(osname) as
osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte,
0) + coalesce (rcvdbyte, 0)) as bandwidth, count(*) as subtotal from $log-traffic where $filter
and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user src, ap,
srcintf, srcssid, srcmac, hostname mac /*SkipSTART*/order by bandwidth desc, subtotal
desc/*SkipEND*/) ### t where srcmac is not null group by srcmac union all select stamac as
srcmac from ###(select $flex_timestamp as timestamp, stamac, stamac as srcmac, ap, ssid,
ssid as srcssid, user src, sum(coalesce(sentdelta, 0)) as sentdelta, sum(coalesce(rcvddelta,
0)) as rcvddelta, sum(coalesce(sentdelta, 0)+coalesce(rcvddelta, 0)) as bandwidth from
(select itime, stamac, ap, ssid, coalesce(`user`, ipstr(`srcip`)) as user src, sentbyte-lag
(coalesce(sentbyte, 0)) over (partition by stamac order by itime) as sentdelta, rcvdbyte-lag
(coalesce(rcvdbyte, 0)) over (partition by stamac order by itime) as rcvddelta from $log-
event where $filter and subtype='wireless' and stamac is not null and ssid is not null and
action in ('sta-wl-bridge-traffic-stats', 'reassoc-req', 'assoc-req')) as t group by
timestamp, stamac, ap, ssid, user_src /*SkipSTART*/order by bandwidth desc/*SkipEND*/)### t
where stamac is not null group by stamac) t
```

Dataset Name	Description	Log Category
Top30-Subnets-by-Bandwidth-and- Sessions	Top subnets by application bandwidth	traffic

```
select
  ip_subnet(`srcip`) as subnet,
  sum(
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
) as bandwidth,
  sum(
    coalesce(rcvdbyte, 0)
```

```
) as traffic_in,
  sum(
   coalesce(sentbyte, 0)
  ) as traffic out,
  count(*) as sessions
from
  $log
where
 $filter
 and (
   logflag&1>0
group by
  subnet
having
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) > 0
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
Top30-Subnets-by-Application- Bandwidth	Top applications by bandwidth	traffic

```
select
  ip_subnet(`srcip`) as subnet,
  app_group_name(app) as app_group,
  sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and (
   logflag&1>0
  and nullifna(app) is not null
group by
 subnet,
  app_group
having
  sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) > 0
order by
 bandwidth desc
```

Dataset Name	Description	Log Category
Top30-Subnets-by-Application- Sessions	Top applications by sessions	traffic

```
select
  ip_subnet(`srcip`) as subnet,
  app_group_name(app) as app_group,
  count(*) as sessions
from
  $log
where
  $filter
  and (
    logflag&1>0
)
  and nullifna(app) is not null
group by
  subnet,
  app_group
order by
  sessions desc
```

Dataset Name	Description	Log Category
Top30-Subnets-by-Website-Bandwidth	Top websites and web category by bandwidth	traffic

```
select
  subnet,
  website,
  sum(bandwidth) as bandwidth
from
```

###(select ip_subnet(`srcip`) as subnet, hostname as website, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log-traffic where \$filter and hostname is not
null and (logflag&1>0) and (countweb>0 or ((logver is null or logver<502000000) and
(hostname is not null or utmevent in ('webfilter', 'banned-word', 'web-content', 'commandblock', 'script-filter')))) group by subnet, website order by bandwidth desc)### t group by
subnet, website order by bandwidth desc</pre>

Dataset Name	Description	Log Category
Top30-Subnets-by-Website-Hits	Top websites and web category by sessions	webfilter

```
select
  subnet,
  website,
  sum(hits) as hits
from
```

###(select ip_subnet(`srcip`) as subnet, hostname as website, count(*) as hits from \$log
where \$filter and hostname is not null and (eventtype is null or logver>=502000000) group by
subnet, website order by hits desc)### t group by subnet, website order by hits desc

Dataset Name	Description	Log Category
Top30-Subnets-with-Top10-User-by- Bandwidth	Top users by bandwidth	traffic

```
select
  ip_subnet(`srcip`) as subnet,
  coalesce(
    nullifna(`user`),
```

```
nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
 and (
   logflag&1>0
  and srcip is not null
group by
 subnet,
 user_src
having
  sum(
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) > 0
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
Top30-Subnets-with-Top10-User-by- Sessions	Top users by sessions	traffic

```
select
 ip_subnet(`srcip`) as subnet,
 coalesce(
  nullifna(`user`),
  nullifna(`unauthuser`),
   ipstr(`srcip`)
 ) as user_src,
 count(*) as sessions
from
  $log
where
 $filter
 and (
    logflag&1>0
group by
 subnet,
 user_src
order by
 sessions desc
```

Dataset Name	Description	Log Category
app-Top-20-Category-and- Applications-by-Bandwidth	Top category and applications by bandwidth usage	traffic

```
select
  appcat,
  app,
  sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and (
   logflag&1>0
group by
  appcat,
  app
having
  sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) > 0
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
app-Top-20-Category-and- Applications-by-Session	Top category and applications by session	traffic

```
select
  appcat,
  app,
  count(*) as sessions
from
  $log
where
  $filter
  and (
    logflag&1>0
 )
group by
  appcat,
  app
order by
  sessions desc
```

Dataset Name	Description	Log Category
app-Top-500-Allowed-Applications-by-Bandwidth	Top allowed applications by bandwidth usage	traffic

```
select
  from_itime(itime) as timestamp,
  coalesce(
    nullifna(`user`),
  nullifna(`unauthuser`),
  ipstr(`srcip`)
```

```
) as user_src,
  appcat,
  app,
  coalesce(
  root domain(hostname),
   ipstr(dstip)
 ) as destination,
   coalesce(`sentbyte`, 0) + coalesce(`rcvdbyte`, 0)
 ) as bandwidth
from
  $log
where
 $filter
 and (
   logflag&1>0
 and action in ('accept', 'close', 'timeout')
group by
 timestamp,
 user_src,
 appcat,
 app,
 destination
order by
 bandwidth desc
```

Dataset NameDescriptionLog Categoryapp-Top-500-Blocked-Applications-by-SessionTop blocked applications by sessiontraffic

```
select
 coalesce(
  nullifna(`user`),
   nullifna(`unauthuser`),
   ipstr(`srcip`)
  ) as user src,
  appcat,
  app,
 count(*) as sessions
  $log
where
 $filter
  and (
   logflag&1>0
  and action in (
    'deny', 'blocked', 'reset', 'dropped'
group by
 user src,
  appcat,
  app
```

order by sessions desc

Dataset Name	Description	Log Category
web-Detailed-Website-Browsing-Log	Web detailed website browsing log	traffic

```
select
  from_dtime(dtime) as timestamp,
  catdesc,
  hostname as website,
  status,
  sum(bandwidth) as bandwidth
from
```

###(select dtime, catdesc, hostname, cast(utmaction as text) as status, sum(coalesce
(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log-traffic where \$filter and
hostname is not null and (logflag&1>0) and (countweb>0 or ((logver is null or
logver<502000000) and (hostname is not null or utmevent in ('webfilter', 'banned-word',
'web-content', 'command-block', 'script-filter')))) group by dtime, catdesc, hostname,
utmaction order by dtime desc)### t group by dtime, catdesc, website, status order by dtime
desc</pre>

Dataset Name	Description	Log Category
web-Hourly-Category-and-Website- Hits-Action	Web hourly category and website hits action	webfilter

```
select
hod,
website,
sum(hits) as hits
from
    ###(select $hour_of_day as hod, (hostname || ' (' || coalesce(`catdesc`, 'Unknown') ||
')') as website , count(*) as hits from $log where $filter and hostname is not null and
(eventtype is null or logver>=502000000) group by hod, website order by hod, hits desc)### t
group by hod, website order by hod, hits desc
```

Dataset Name	Description	Log Category
web-Top-20-Category-and-Websites- by-Bandwidth	Web top category and websites by bandwidth usage	traffic

```
select
  website,
  catdesc,
  sum(bandwidth) as bandwidth
from
```

###(select hostname as website, catdesc, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0))
as bandwidth from \$log-traffic where \$filter and hostname is not null and (logflag&1>0) and
(countweb>0 or ((logver is null or logver<50200000) and (hostname is not null or utmevent
in ('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by
website, catdesc order by bandwidth desc)### t group by website, catdesc order by bandwidth
desc</pre>

Dataset Name	Description	Log Category
web-Top-20-Category-and-Websites- by-Session	Web top category and websites by session	webfilter

```
select
 website,
 catdesc.
 sum(sessions) as hits
```

###(select hostname as website, catdesc, count(*) as sessions from \$log where \$filter and hostname is not null and (eventtype is null or logver>=502000000) group by hostname, catdesc order by sessions desc) ### t group by website, catdesc order by hits desc

Dataset Name	Description	Log Category
web-Top-500-Website-Sessions-by- Bandwidth	Web top website sessions by bandwidth usage	traffic

```
select
 from dtime(dtime) as timestamp,
 user src,
 website,
 catdesc,
 cast(
   sum(dura) / 60 as decimal(18, 2)
 ) as dura.
 sum(bandwidth) as bandwidth
```

###(select dtime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, hostname as website, catdesc, sum(coalesce(duration, 0)) as dura, sum(coalesce (sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter and hostname is not null and (logflag&1>0) and action in ('accept','close','timeout') group by dtime, user_ src, website, catdesc having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0))>0 order by bandwidth desc) ### t group by dtime, user src, website, catdesc order by bandwidth desc

Dataset Name	Description	Log Category
web-Top-500-User-Visted-Websites- by-Bandwidth	Web top user visted websites by bandwidth usage	traffic

```
select
 website,
 catdesc.
 sum (bandwidth) as bandwidth
from
```

###(select hostname as website, catdesc, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log-traffic where \$filter and hostname is not null and (logflag&1>0) and (countweb>0 or ((logver is null or logver<502000000) and (hostname is not null or utmevent in ('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by hostname, catdesc having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0))>0 order by bandwidth desc) ### t group by website, catdesc order by bandwidth desc

Dataset Name	Description	Log Category
web-Top-500-User-Visted-Websites- by-Session	Web top user visted websites by session	webfilter

```
select
  website,
  catdesc,
  sum(sessions) as sessions
from
```

###(select hostname as website, catdesc, count(*) as sessions from \$log where \$filter and
hostname is not null and (eventtype is null or logver>=502000000) group by hostname, catdesc
order by sessions desc)### t where catdesc is not null group by website, catdesc order by
sessions desc

Dataset Name	Description	Log Category
fct-Installed-Feature-Summary	Installed Feature Summary	fct-event

```
select
  subtype,
  count(distinct fctuid) as totalnum
from
```

###(select uid as fctuid, regexp_replace(os, '\\((build.*', '')\) as os_short, fctver,
subtype, fgtserial, max(case when msg like 'Compliance rules%applied' then 1 else 0 end) as
compliance_flag from \$log where \$filter and subtype != 'admin' group by uid, os_short,
fctver, subtype, fgtserial order by compliance_flag desc)### t where subtype is not null
group by subtype order by totalnum desc

Dataset Name	Description	Log Category
fct-Device-by-Operating-System	Device by OS	fct-event

```
select
  os_short as os,
  count(distinct fctuid) as totalnum
from
```

###(select uid as fctuid, regexp_replace(os, '\\((build.*', '')\) as os_short, fctver,
subtype, fgtserial, max(case when msg like 'Compliance rules%applied' then 1 else 0 end) as
compliance_flag from \$log where \$filter and subtype != 'admin' group by uid, os_short,
fctver, subtype, fgtserial order by compliance_flag desc)### t where os_short is not null
group by os order by totalnum desc

Dataset Name	Description	Log Category
fct-Installed-FortiClient-Version	FortiClient Version	fct-event

```
select
  fctver as fctver_short,
  count(distinct fctuid) as totalnum
from
```

###(select uid as fctuid, regexp_replace(os, '\\((build.*', '')\) as os_short, fctver,
subtype, fgtserial, max(case when msg like 'Compliance rules%applied' then 1 else 0 end) as
compliance_flag from \$log where \$filter and subtype != 'admin' group by uid, os_short,
fctver, subtype, fgtserial order by compliance_flag desc)### t where fctver is not null
group by fctver order by totalnum desc

Dataset Name	Description	Log Category
fct-Endpoint-Profile-Deployment	Endpoint Profile Deployment	fct-event

```
select
  profile,
  count(distinct fctuid) as totalnum
from
```

###(select uid as fctuid, coalesce(nullifna(usingpolicy), 'No Profile') as profile from
\$log where \$filter group by uid, profile)### t group by profile order by totalnum desc

Dataset Name	Description	Log Category
fct-Client-Summary	Client Summary	fct-event

```
select
  hostname,
  deviceip,
  os_short as os,
  profile,
  fctver,
  from_itime(
    max(itime)
  ) as last_seen
from
```

###(select hostname, deviceip, regexp_replace(os, '\\(build.*', '') as os_short, nullifna
(usingpolicy) as profile, fctver, max(itime) as itime from \$log where \$filter and os is not
null group by hostname, deviceip, os_short, profile, fctver order by itime desc)### t group
by hostname, deviceip, os, profile, fctver order by last seen desc

Dataset Name	Description	Log Category
fct-Total-Threats-Found	Total Threats Found	fct-traffic

```
select
  utmevent_s as utmevent,
  count(distinct threat) as totalnum
from
```

###(select coalesce(nullifna(lower(utmevent)), 'unknown') as utmevent_s, threat from \$log
where \$filter and threat is not null and utmaction='blocked' group by utmevent_s, threat)###
t group by utmevent order by totalnum desc

Dataset Name	Description	Log Category
fct-Top10-AV-Threats-Detected	Top AV Threats Detected	fct-traffic

```
select
  threat,
  sum(totalnum) as totalnum
from
  (
     (
        select
        threat,
        sum(totalnum) as totalnum
  from
```

###(select threat, count(*) as totalnum from \$log-fct-traffic where \$filter and
threat is not null and lower(utmevent)='antivirus' group by threat order by totalnum
desc)### t group by threat) union all (select threat, sum(totalnum) as totalnum from ###
(select virus as threat, count(*) as totalnum from \$log-fct-event where \$filter and virus is
not null group by threat order by totalnum desc)### t group by threat)) t group by threat
order by totalnum desc

Dataset Name	Description	Log Category
fct-Top10-Infected-Devices-with- Botnet	Top Infected Devices with Botnet	fct-traffic

```
select
  hostname,
  count(*) as totalnum
from
  $log
where
  $filter
  and hostname is not null
  and lower(utmevent) in ('webfilter', 'appfirewall')
  and lower(threat) like '%botnet%'
group by
  hostname
order by
  totalnum desc
```

Dataset Name	Description	Log Category
fct-Top10-Infected-Devices-with-Virus- Malware	Top Infected Devices with Virus Malware	fct-traffic

```
select
  hostname,
  sum(totalnum) as totalnum
from
  (
    (
        select
        hostname,
        sum(totalnum) as totalnum
```

###(select hostname, count(*) as totalnum from \$log-fct-traffic where \$filter and
hostname is not null and lower(utmevent) in ('antivirus', 'antimalware') group by hostname
order by totalnum desc)### t group by hostname) union all (select hostname, sum(totalnum) as
totalnum from ###(select hostname, count(*) as totalnum from \$log-fct-event where \$filter
and hostname is not null and virus is not null group by hostname order by totalnum desc)###
t group by hostname)) t group by hostname order by totalnum desc

Dataset Name	Description	Log Category
fct-All-Antivirus-Antimalware- Detections	All Antivirus and Antimalware Detections	fct-traffic

```
select
threat,
```

```
hostname,
 hostuser,
 utmaction,
 from dtime(
   max(dtime)
 ) as last seen
from
  (
      select
        threat,
       hostname,
       hostuser,
       utmaction,
       max(dtime) as dtime
        ###(select threat, hostname, coalesce(nullifna(`user`), 'Unknown') as hostuser,
utmaction, max(dtime) as dtime from $log-fct-traffic where $filter and lower(utmevent) in
('antivirus', 'antimalware') group by threat, hostname, hostuser, utmaction order by
threat) ### t group by threat, hostname, hostuser, utmaction) union all (select threat,
hostname, hostuser, utmaction, max(dtime) as dtime from ###(select virus as threat,
hostname, coalesce(nullifna(`user`), 'Unknown') as hostuser, action as utmaction, max(dtime)
as dtime from $log-fct-event where $filter and (logflag is null or logflag&8=0) and virus is
not null group by threat, hostname, hostuser, utmaction order by threat) ### t group by
threat, hostname, hostuser, utmaction)) t group by threat, hostname, hostuser, utmaction
order by threat
```

Dataset Name	Description	Log Category
fct-Web-Filter-Violations	Web Filter Violations	fct-traffic

```
select
  hostuser,
  hostname,
  string agg(distinct remotename, ',') as remotename,
  utmaction,
  sum(total) as totalnum,
  from dtime(
   max(dtime)
  ) as last seen
  ###(select remotename, hostname, coalesce(nullifna(`user`), 'Unknown') as hostuser,
utmaction, count(*) as total, max(dtime) as dtime from $log where $filter and lower
(utmevent) = 'webfilter' and utmaction = 'blocked' group by remotename, hostname, hostuser,
utmaction order by total desc) ### t group by hostuser, hostname, utmaction order by totalnum
desc
```

Dataset Name	Description	Log Category
fct-Application-Firewall	Application Firewall	fct-traffic

```
select
 threat,
 hostname,
 hostuser,
 utmaction,
```

```
from_dtime(
    max(dtime)
) as last_seen
from
    ###(select threat, hostname, coalesce(nullifna(`user`), 'Unknown') as hostuser, utmaction,
max(dtime) as dtime from $log where $filter and lower(utmevent)='appfirewall' and
utmaction='blocked' group by threat, hostname, hostuser, utmaction order by dtime desc)###
t1 left join app_mdata t2 on t1.threat=t2.name group by threat, risk, hostname, hostuser,
utmaction order by risk desc
```

Dataset Name	Description	Log Category
fct-Errors-and-Alerts	Errors and Alerts	fct-event

```
select
  msg,
  hostname,
  hostuser,
  from_dtime(
    max(dtime)
  ) as last_seen
from
```

###(select msg, hostname, coalesce(nullifna(`user`), 'Unknown') as hostuser, max(dtime) as
dtime from \$log where \$filter and level in ('error', 'alert') group by msg, hostname,
hostuser order by dtime desc)### t group by msg, hostname, hostuser order by last seen desc

Dataset Name	Description	Log Category
fct-Threats-by-Top-Devices	Threats by Top Devices	fct-traffic

```
select
  hostname,
  count(*) as totalnum
from
  $log
where
  $filter
  and hostname is not null
  and utmevent is not null
  and utmaction = 'blocked'
group by
  hostname
order by
  totalnum desc
```

Dataset Name	Description	Log Category
fct-vuln-Device-Vulnerabilities	Vulnerabilities Detected by User/Device	fct-netscan

```
select
  vulnseverity,
  (
    CASE vulnseverity WHEN 'Critical' THEN 5 WHEN 'High' THEN 4 WHEN 'Medium' THEN 3 WHEN
'Info' THEN 2 WHEN 'Low' THEN 1 ELSE 0 END
  ) as severity_number,
  count(distinct vulnname) as vuln num
```

from

###(select vulnseverity, devid, vulnname from \$log where \$filter and nullifna
(vulnseverity) is not null and nullifna(vulnname) is not null group by vulnseverity,
vulnname, devid)### t group by vulnseverity order by severity number desc

Dataset Name	Description	Log Category
fct-vuln-Category-Type-Vulnerabilities	Vulnerabilities Detected by Category Type	fct-netscan

```
select
  vulncat,
  count(distinct vulnname) as totalnum
from
```

###(select vulncat, vulnname from \$log where \$filter and nullifna(vulncat) is not null and
nullifna(vulnname) is not null group by vulncat, vulnname)### t group by vulncat order by
totalnum desc

Dataset Name	Description	Log Category
fct-vuln-Vulnerabilities-by-OS	Forticlient Vulnerabilities by OS	fct-netscan

```
select
  os,
  count(distinct vulnname) as totalnum
from
```

###(select os, vulnname from \$log where \$filter and nullifna(os) is not null and nullifna
(vulnname) is not null group by os, vulnname)### t group by os order by totalnum desc

Dataset Name	Description	Log Category
fct-vuln-Vulnerabilities-by-Risk-Level	Number Vulnerability by Device and Risk Level	fct-netscan

```
select
  vulnseverity,
  (
    case when vulnseverity = 'Critical' then 5 when vulnseverity = 'High' then 4 when
vulnseverity = 'Medium' then 3 when vulnseverity = 'Low' then 2 when vulnseverity = 'Info'
then 1 else 0 end
  ) as severity_number,
  count(distinct vulnname) as vuln_num,
  count(distinct devid) as dev_num
from
```

###(select vulnseverity, devid, vulnname from \$log where \$filter and nullifna
(vulnseverity) is not null and nullifna(vulnname) is not null group by vulnseverity,
vulnname, devid)### t where nullifna(devid) is not null group by vulnseverity order by dev_
num desc, severity_number desc

Dataset Name	Description	Log Category
fct-vuln-Device-by-Risk-Level	Number Vulnerability by Device and Risk Level	fct-netscan

```
select
  vulnseverity,
  (
    case when vulnseverity = 'Critical' then 5 when vulnseverity = 'High' then 4 when
vulnseverity = 'Medium' then 3 when vulnseverity = 'Low' then 2 when vulnseverity = 'Info'
```

```
then 1 else 0 end
  ) as severity_number,
  count(distinct vulnname) as vuln_num,
  count(distinct devid) as dev_num
from
  ###(select vulnseverity, devid, vulnname from $log where $filter and nullifna
(vulnseverity) is not null and nullifna(vulnname) is not null group by vulnseverity,
vulnname, devid)### t where nullifna(devid) is not null group by vulnseverity order by dev_
num desc, severity number desc
```

Dataset Name	Description	Log Category
fct-vuln-Vulnerability-Trend	Vulnerability Trend	fct-netscan

```
select
  $flex_timescale(timestamp) as hodex,
  count(distinct vulnname) as total_num
from
```

###(select \$flex_timestamp as timestamp, vulnname from \$log where \$filter and nullifna
(vulnname) is not null group by timestamp, vulnname order by timestamp desc)### t group by
hodex order by hodex

Dataset Name	Description	Log Category
fct-vuln-Details-by-Risk-Level-Device	Vulnerability Details for Each Risk Level by Device	fct-netscan

```
select
hostname,
os,
vulnseverity,
count(distinct vulnname) as vuln_num,
count(distinct products) as products,
count(distinct cve_id) as cve_count
from
```

###(select hostname, os, vulnname, vulnseverity, vulnid from \$log where \$filter and
vulnname is not null and vulnseverity is not null and hostname is not null group by
hostname, os, vulnname, vulnseverity, vulnid)### t1 left join fct_mdata t2 on
t1.vulnid=t2.vid::int group by hostname, os, vulnseverity order by vuln_num desc, hostname

Dataset Name	Description	Log Category
fct-vuln-Details-by-Device-User	Vulnerability Details by Device User	fct-netscan

```
select
hostname,
(
    '<div>' || vulnname || '</div>'
) as vulnname,
vulnseverity,
vulncat,
string_agg(distinct products, ',') as products,
string_agg(distinct cve_id, ',') as cve_list,
(
    '<a href=' || String_agg(DISTINCT vendor_link, ',') || '>Remediation Info</a>'
) as vendor_link
from
```

###(select hostname, vulnname, vulnseverity, vulncat, vulnid from \$log where \$filter and
vulnname is not null and hostname is not null group by hostname, vulnname, vulnseverity,
vulncat, vulnid)### t1 inner join fct_mdata t2 on t1.vulnid=t2.vid::int group by hostname,
vulnname, vulnseverity, vulncat order by hostname

Dataset Name	Description	Log Category
fct-vuln-Remediation-by-Device	Remediate The Vulnerability Found on Device	fct-netscan

```
select
hostname,
(
    '<div>' || vulnname || '</div>'
) as vulnname,
vulnseverity,
string_agg(distinct vendor_link, ',') as vendor_link
from
```

###(select hostname, vulnname, vulnseverity, vulnid from \$log where \$filter and vulnname
is not null and hostname is not null group by hostname, vulnname, vulnseverity, vulnid)###
t1 inner join fct_mdata t2 on t1.vulnid=t2.vid::int group by hostname, vulnname,
vulnseverity order by vulnseverity, hostname

Dataset Name	Description	Log Category
fct-vuln-Remediation-by-Vulnerability	Remediation by Vulnerability	fct-netscan

```
select
  (
    '<b>' || vulnname || '</b><br/>' || 'Description<br/>'<div style=word-break:normal>'
|| description || '</div><br/>' || 'Affected Products<br/>' || products || '<br/>'
|| 'Impact<br/>' || impact || '<br/>' || 'Recommended Actions<br/>' || vendor_link || '<br/>'<br/>' ) as remediation
from
```

###(select devid, vulnname, vulnseverity, (case vulnseverity when 'low' then 1 when 'info'
then 2 when 'medium' then 3 when 'high' then 4 when 'critical' then 5 else 0 end) as
severity_level, vulnid from \$log where \$filter and vulnname is not null group by devid,
vulnname, vulnseverity, severity_level, vulnid order by severity_level)### t1 inner join
fct_mdata t2 on t1.vulnid=t2.vid::int group by remediation order by remediation

Dataset Name	Description	Log Category
fct-vuln-Top-30-Targeted-High-Risk- Vulnerabilities	Top 30 Targeted High Risk Vulnerabilities	fct-netscan

```
select
  t3.cve_id,
  score,
  string_agg(distinct products, ',') as products,
  (
    '<a href=' || String_agg(vendor_link, ',') || '>Mitigation Infomation</a>'
  ) as vendor_link
from
  ###(select vulnid from $log where $filter group by vulnid)### t1 inner join fct_mdata t2
on t2.vid=t1.vulnid::text inner join fct_cve_score t3 on strpos(t2.cve_id, t3.cve_id) > 0
group by t3.cve id, score order by score desc, t3.cve id
```

Dataset Name	Description	Log Category
fct-Endpoints-by-FortiGate	Endpoints by FortiGate	fct-event

```
select
  fgtserial,
  count(distinct fctuid) as totalnum
from
```

###(select uid as fctuid, regexp_replace(os, '\\((build.*', '')\) as os_short, fctver,
subtype, fgtserial, max(case when msg like 'Compliance rules%applied' then 1 else 0 end) as
compliance_flag from \$log where \$filter and subtype != 'admin' group by uid, os_short,
fctver, subtype, fgtserial order by compliance_flag desc)### t where fgtserial is not null
group by fgtserial order by totalnum desc

Dataset Name	Description	Log Category
fct-Top-Malware-Detections	Top Infected Devices with Malware	fct-traffic

```
select
  hostname,
  fctuid,
  sum(totalnum) as totalnum

from
  (
        (
        select
        hostname,
        fctuid,
        sum(totalnum) as totalnum
        from
```

###(select threat, hostname, coalesce(nullifna(`user`), 'Unknown') as hostuser,
utmaction, max(dtime) as dtime, uid as fctuid, count(*) as totalnum from \$log-fct-traffic
where \$filter and lower(utmevent) in ('antivirus', 'antimalware') group by threat, hostname,
hostuser, utmaction, uid order by threat)### t group by hostname, fctuid) union all (select
hostname, fctuid, sum(totalnum) as totalnum from ###(select virus as threat, hostname,
coalesce(nullifna(`user`), 'Unknown') as hostuser, action as utmaction, max(dtime) as dtime,
uid as fctuid, count(*) as totalnum from \$log-fct-event where \$filter and (logflag is null
or logflag&8=0) and virus is not null group by threat, hostname, hostuser, utmaction, uid
order by threat)### t group by hostname, fctuid)) t group by hostname, fctuid order by
totalnum desc

Dataset Name	Description	Log Category
fct-Top10-Malware-Detections	Top 10 Infected Devices with Malware	fct-traffic

```
select
  threat,
  hostname,
  hostuser,
  utmaction,
  fctuid,
  sum(totalnum) as totalnum
from
  (
     (
        select
```

```
threat,
hostname,
hostuser,
utmaction,
fctuid,
sum(totalnum) as totalnum
com
```

###(select threat, hostname, coalesce(nullifna(`user`), 'Unknown') as hostuser,
utmaction, max(dtime) as dtime, uid as fctuid, count(*) as totalnum from \$log-fct-traffic
where \$filter and lower(utmevent) in ('antivirus', 'antimalware') group by threat, hostname,
hostuser, utmaction, uid order by threat)### t group by threat, hostname, hostuser,
utmaction, fctuid) union all (select threat, hostname, hostuser, utmaction, fctuid, sum
(totalnum) as totalnum from ###(select virus as threat, hostname, coalesce(nullifna(`user`),
'Unknown') as hostuser, action as utmaction, max(dtime) as dtime, uid as fctuid, count(*) as
totalnum from \$log-fct-event where \$filter and (logflag is null or logflag&8=0) and virus is
not null group by threat, hostname, hostuser, utmaction, uid order by threat)### t group by
threat, hostname, hostuser, utmaction, fctuid)) t where utmaction != 'pass' group by threat,
hostname, hostuser, utmaction, fctuid order by totalnum desc

Dataset Name	Description	Log Category
fct-Devices-with-Botnet	Infected Devices with Botnet	fct-traffic

```
select
 threat,
 hostname,
 coalesce(
   nullifna(`user`),
   'Unknown'
  ) as hostuser,
 utmaction,
 uid as fctuid,
  count(*) as totalnum
from
  $log
where
  and hostname is not null
  and lower(utmevent) in ('webfilter', 'appfirewall')
  and lower(threat) like '%botnet%'
group by
 threat,
 hostname,
 hostuser,
 utmaction,
 fctuid
order by
  totalnum desc
```

Dataset Name	Description	Log Category
fct-vuln-Vulnerability-by-Hostname	Vulnerability Details for Each Risk Level by Device	fct-netscan

```
select
  hostname,
  os,
```

```
vulnseverity,
count(distinct vulnname) as vuln_num,
count(distinct products) as products,
count(distinct cve_id) as cve_count
from
```

###(select hostname, os, vulnname, vulnseverity, vulnid from \$log where \$filter and
vulnname is not null and vulnseverity is not null and hostname is not null group by
hostname, os, vulnname, vulnseverity, vulnid)### t1 left join fct_mdata t2 on
t1.vulnid=t2.vid::int group by hostname, os, vulnseverity order by vuln num desc, hostname

Dataset Name	Description	Log Category
fct-Users-With-Web-Violations	Web Filter Violations	fct-traffic

```
select
  hostuser,
hostname,
string_agg(distinct remotename, ',') as remotename,
utmaction,
sum(total) as totalnum,
from_dtime(
  max(dtime)
) as last_seen
from
```

###(select remotename, hostname, coalesce(nullifna(`user`), 'Unknown') as hostuser,
utmaction, count(*) as total, max(dtime) as dtime from \$log where \$filter and lower
(utmevent)='webfilter' and utmaction='blocked' group by remotename, hostname, hostuser,
utmaction order by total desc)### t group by hostuser, hostname, utmaction order by totalnum
desc

Dataset Name	Description	Log Category
fct-Compliance-by-FortiGate	FortiClinet Compliance by FortiGate Enforcing	fct-event

```
select
  fgtserial,
  count(distinct fctuid) as totalnum
from
  (
    select
     fgtserial,
     fctuid,
     max(compliance_flag) as compliance_flag
  from
```

###(select uid as fctuid, regexp_replace(os, '\\((build.*', '')\) as os_short, fctver,
subtype, fgtserial, max(case when msg like 'Compliance rules%applied' then 1 else 0 end) as
compliance_flag from \$log where \$filter and subtype != 'admin' group by uid, os_short,
fctver, subtype, fgtserial order by compliance_flag desc)### tt group by fgtserial, fctuid)
t where compliance flag = 1 group by fgtserial order by totalnum desc

Dataset Name	Description	Log Category
fct-Compliance-Status	Number of FortiClinets by Compliance Status	fct-event

```
select
```

```
case compliance flag when 1 then 'Compliant' else 'Non-Compliant' end
 ) as compliance,
 count(distinct fctuid) as totalnum
from
   select
     fctuid,
     max(compliance flag) as compliance flag
      ###(select uid as fctuid, regexp replace(os, '\\(build.*', '') as os short, fctver,
```

subtype, fgtserial, max(case when msg like 'Compliance rules%applied' then 1 else 0 end) as compliance flag from \$log where \$filter and subtype != 'admin' group by uid, os short, fctver, subtype, fgtserial order by compliance flag desc) ### tt group by fctuid) t group by compliance order by totalnum desc

Dataset Name	Description	Log Category
fct-Non-Compliant-Endpoints	Non-compliant Endpoints	fct-event

```
select
 t1.fgtserial,
 t3.srcintf,
 t2.epname as hostname,
  t2.mac,
  'Non-Compliant' as status
from
   select
     fgtserial,
     fctuid,
     max(compliance flag) as compliance flag
    from
```

###(select uid as fctuid, regexp replace(os, '\\(build.*', '') as os short, fctver, subtype, fgtserial, max(case when msg like 'Compliance rules%applied' then 1 else 0 end) as compliance flag from \$log where \$filter and subtype != 'admin' group by uid, os short, fctver, subtype, fgtserial order by compliance flag desc) ### tt group by fgtserial, fctuid) t1 left join \$ADOM ENDPOINT t2 on t1.fctuid = t2.fctuid left join \$ADOM EPEU DEVMAP t3 on t2.epid = t3.epid where compliance_flag = 0 group by t1.fctuid, t1.fgtserial, t3.srcintf, t2.epname, t2.mac

fct-Traffic-Web-Hits Web Traffic Tren	d fct-traffic

```
select
 $flex timescale(timestamp) as hodex,
 sum(requests) as requests
```

###(select \$flex timestamp as timestamp, count(*) as requests from \$log where \$filter and lower(utmevent) = 'webfilter' group by timestamp order by timestamp desc) ### t group by hodex order by hodex

Dataset Name	Description	Log Category
fct-Traffic-Top-Allowed-Web-Cat	Top Visited Web Categories	fct-traffic

```
select
  category,
  sum(requests) as requests
from
  ###(select fct_webcat(threat) as category, remotename as website, direction, utmaction,
  count(*) as requests from $log where $filter and threat is not null and lower
  (utmevent)='webfilter' group by category, website, direction, utmaction order by requests
  desc)### t where direction='outbound' and utmaction='passthrough' group by category order by
  requests desc
```

Dataset Name	Description	Log Category
fct-Traffic-Top-Allowed-Website	Top Visited Websites	fct-traffic

```
select
  website,
  string_agg(distinct category, ', ') as agg_category,
  sum(requests) as requests
from
  ###(select fct_webcat(threat) as category, remotename as website, direction, utmaction,
count(*) as requests from $log where $filter and threat is not null and lower
(utmevent)='webfilter' group by category, website, direction, utmaction order by requests
desc)### t where direction='outbound' and utmaction='passthrough' and website is not null
group by website order by requests desc
```

Dataset Name	Description	Log Category
fct-Traffic-Top-Category-By-Website- Session	Top Web Categories by Website Session	fct-traffic

```
select
  category,
  website,
  sum(requests) as requests
from
  ###(select fct_webcat(threat) as category, remotename as website, direction, utmaction,
count(*) as requests from $log where $filter and threat is not null and lower
(utmevent)='webfilter' group by category, website, direction, utmaction order by requests
```

Dataset NameDescriptionLog Categoryfct-Traffic-Top-Web-Users-By-WebsiteTop Web Users by Websitefct-traffic

desc) ### t where nullifna(category) is not null group by category, website order by requests

```
select
  coalesce(
    nullifna(`user`),
    ipstr(`srcip`)
) as user_src,
  remotename as website,
  count(*) as requests
from
  $log
where
  $filter
```

desc

```
and direction = 'outbound'
  and remotename is not null
 and utmaction = 'passthrough'
  and lower(utmevent) = 'webfilter'
group by
 user_src,
 website
order by
 requests desc
```

Dataset Name	Description	Log Category
os-Detect-OS-Count	Detected operation system count	traffic

```
select
   coalesce(osname, 'Unknown')
  ) as os,
 count(*) as totalnum
from
  $log
where
 $filter
 and (
   logflag&1>0
group by
 os
order by
  totalnum desc
```

Dataset Name	Description	Log Category
drilldown-Top-App-By-Sessions-Table	Drilldown top applications by session count	traffic

```
select
 appid,
 app,
 sum(sessions) as sessions
 ###(select appid, app, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`))
as user src, dstip, srcintf, dstintf, policyid, count(*) as sessions, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth from $log where $filter-exclude-var and (logflag&1>0)
group by appid, app, user_src, dstip, srcintf, dstintf, policyid order by sessions desc)###
t where $filter-drilldown and nullifna(app) is not null group by appid, app order by
sessions desc
```

Dataset Name	Description	Log Category
drilldown-Top-App-By-Sessions-Bar	Drilldown top applications by session count	traffic

```
select
 appid,
 sum(sessions) as sessions
from
```

###(select appid, app, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`))
as user_src, dstip, srcintf, dstintf, policyid, count(*) as sessions, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter-exclude-var and (logflag&1>0)
group by appid, app, user_src, dstip, srcintf, dstintf, policyid order by sessions desc)###
t where \$filter-drilldown and nullifna(app) is not null group by appid, app order by
sessions desc

Dataset Name	Description	Log Category
drilldown-Top-App-By-Bandwidth- Table	Drilldown top applications by bandwidth usage	traffic

```
select
  appid,
  app,
  sum(bandwidth) as bandwidth
from
```

###(select appid, app, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`))
as user_src, dstip, srcintf, dstintf, policyid, count(*) as sessions, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter-exclude-var and (logflag&1>0)
group by appid, app, user_src, dstip, srcintf, dstintf, policyid order by sessions desc)###
t where \$filter-drilldown and nullifna(app) is not null group by appid, app having sum
(bandwidth)>0 order by bandwidth desc

Dataset Name	Description	Log Category
drilldown-Top-App-By-Bandwidth-Bar	Drilldown top applications by bandwidth usage	traffic

```
select
  appid,
  app,
  sum(bandwidth) as bandwidth
from
```

###(select appid, app, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`))
as user_src, dstip, srcintf, dstintf, policyid, count(*) as sessions, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter-exclude-var and (logflag&1>0)
group by appid, app, user_src, dstip, srcintf, dstintf, policyid order by sessions desc)###
t where \$filter-drilldown and nullifna(app) is not null group by appid, app having sum
(bandwidth)>0 order by bandwidth desc

Dataset Name	Description	Log Category
drilldown-Top-Destination-By- Sessions-Table	Drilldown top destination by session count	traffic

```
select
  dstip,
  sum(sessions) as sessions
from
```

###(select appid, app, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`))
as user_src, dstip, srcintf, dstintf, policyid, count(*) as sessions, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter-exclude-var and (logflag&1>0)
group by appid, app, user_src, dstip, srcintf, dstintf, policyid order by sessions desc)###
t where \$filter-drilldown and dstip is not null group by dstip order by sessions desc

Dataset Name	Description	Log Category
drilldown-Top-Destination-By- Bandwidth-Table	Drilldown top destination by bandwidth usage	traffic

```
select
  dstip,
  sum(bandwidth) as bandwidth
from
```

###(select appid, app, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`))
as user_src, dstip, srcintf, dstintf, policyid, count(*) as sessions, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter-exclude-var and (logflag&1>0)
group by appid, app, user_src, dstip, srcintf, dstintf, policyid order by sessions desc)###
t where \$filter-drilldown and dstip is not null group by dstip having sum(bandwidth)>0 order
by bandwidth desc

Dataset Name	Description	Log Category
drilldown-Top-User-By-Sessions-Table	Drilldown top user by session count	traffic

```
select
  user_src,
  sum(sessions) as sessions
from
```

###(select appid, app, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`))
as user_src, dstip, srcintf, dstintf, policyid, count(*) as sessions, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter-exclude-var and (logflag&1>0)
group by appid, app, user_src, dstip, srcintf, dstintf, policyid order by sessions desc)###
t where \$filter-drilldown and user src is not null group by user src order by sessions desc

Dataset Name	Description	Log Category
drilldown-Top-User-By-Sessions-Bar	Drilldown top user by session count	traffic

```
select
  user_src,
  sum(sessions) as sessions
from
```

###(select appid, app, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`))
as user_src, dstip, srcintf, dstintf, policyid, count(*) as sessions, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter-exclude-var and (logflag&1>0)
group by appid, app, user_src, dstip, srcintf, dstintf, policyid order by sessions desc)###
t where \$filter-drilldown and user src is not null group by user src order by sessions desc

Dataset Name	Description	Log Category
drilldown-Top-User-By-Bandwidth- Table	Drilldown top user by bandwidth usage	traffic

```
select
  user_src,
  sum(bandwidth) as bandwidth
from
  ###(select appid, app, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`))
as user src, dstip, srcintf, dstintf, policyid, count(*) as sessions, sum(coalesce(sentbyte,
```

0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter-exclude-var and (logflag&1>0) group by appid, app, user_src, dstip, srcintf, dstintf, policyid order by sessions desc)### t where \$filter-drilldown and user_src is not null group by user_src having sum(bandwidth)>0 order by bandwidth desc

Dataset Name	Description	Log Category
drilldown-Top-User-By-Bandwidth-Bar	Drilldown top user by bandwidth usage	traffic

```
select
  user_src,
  sum(bandwidth) as bandwidth
from
```

###(select appid, app, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`))
as user_src, dstip, srcintf, dstintf, policyid, count(*) as sessions, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter-exclude-var and (logflag&1>0)
group by appid, app, user_src, dstip, srcintf, dstintf, policyid order by sessions desc)###
t where \$filter-drilldown and user_src is not null group by user_src having sum(bandwidth)>0
order by bandwidth desc

Dataset Name	Description	Log Category
drilldown-Top-Web-User-By-Visit- Table	Drilldown top web user by visit	traffic

```
select
  user_src,
  sum(requests) as visits
from
  (
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_
src, hostname, count(*) as requests from \$log-traffic where \$filter-exclude-var and
(logflag&1>0) and utmevent in ('webfilter', 'banned-word', 'web-content', 'command-block',
'script-filter') and hostname is not null group by user_src, hostname order by requests
desc)### union all ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src,
hostname, count(*) as requests from \$log-webfilter where \$filter-exclude-var and (eventtype
is null or logver>=502000000) and hostname is not null group by user_src, hostname order by
requests desc)###) t where \$filter-drilldown and user_src is not null group by user_src
order by visits desc

Dataset Name	Description	Log Category
drilldown-Top-Web-User-By-Visit-Bar	Drilldown top web user by visit	traffic

```
select
  user_src,
  sum(requests) as visits
from
  (
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_
src, hostname, count(*) as requests from \$log-traffic where \$filter-exclude-var and
(logflag&1>0) and utmevent in ('webfilter', 'banned-word', 'web-content', 'command-block',
'script-filter') and hostname is not null group by user_src, hostname order by requests
desc)### union all ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src,
hostname, count(*) as requests from \$log-webfilter where \$filter-exclude-var and (eventtype
is null or logver>=502000000) and hostname is not null group by user_src, hostname order by

requests desc) ###) t where $filter-drilldown and user_src is not null group by user_src order by visits <math>desc$

Dataset Name	Description	Log Category
drilldown-Top-Website-By-Request- Table	Drilldown top website by request	traffic

```
select
  hostname,
  sum(requests) as visits
from
  (
    ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_
src, hostname, count(*) as requests from $log-traffic where $filter-exclude-var and
(logflag&1>0) and utmevent in ('webfilter', 'banned-word', 'web-content', 'command-block',
'script-filter') and hostname is not null group by user_src, hostname order by requests
desc)### union all ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src,
hostname, count(*) as requests from $log-webfilter where $filter-exclude-var and (eventtype
is null or logver>=502000000) and hostname is not null group by user_src, hostname order by
requests desc)###) t where $filter-drilldown and hostname is not null group by hostname
order by visits desc
```

Dataset Name	Description	Log Category
drilldown-Top-Website-By-Request- Bar	Drilldown top website by request	traffic

```
select
  hostname,
  sum(requests) as visits
from
  (
    ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_
src, hostname, count(*) as requests from $log-traffic where $filter-exclude-var and
  (logflag&1>0) and utmevent in ('webfilter', 'banned-word', 'web-content', 'command-block',
  'script-filter') and hostname is not null group by user_src, hostname order by requests
  desc)### union all ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src,
  hostname, count(*) as requests from $log-webfilter where $filter-exclude-var and (eventtype
  is null or logver>=502000000) and hostname is not null group by user_src, hostname order by
  requests desc)###) t where $filter-drilldown and hostname is not null group by hostname
  order by visits desc
```

Dataset Name	Description	Log Category
drilldown-Top-Email-Sender-By- Volume	Drilldown top email sender by volume	traffic

```
select
  sender,
  sum(bandwidth) as volume
from
  (
    ###(select sender, recipient, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth from $log-traffic where $filter-exclude-var and (logflag&1>0)
and service in ('smtp', 'SMTP', '25/tcp', '587/tcp', 'smtps', 'SMTPS', '465/tcp') and
```

utmevent in ('general-email-log', 'spamfilter') group by sender, recipient order by requests desc)### union all ###(select `from` as sender, `to` as recipient, count(*) as requests, sum (coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log-emailfilter where \$filter-exclude-var and service in ('smtp', 'SMTP', '25/tcp', '587/tcp', 'smtps', 'SMTPS', '465/tcp') and eventtype is null group by `from`, `to` order by requests desc)###) t where \$filter-drilldown and sender is not null group by sender having sum(bandwidth)>0 order by volume desc

Dataset Name	Description	Log Category
drilldown-Top-Email-Send-Recipient- By-Volume	Drilldown top email send recipient by volume	traffic

```
select
 recipient,
  sum (bandwidth) as volume
from
```

###(select sender, recipient, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce (rcvdbyte, 0)) as bandwidth from \$log-traffic where \$filter-exclude-var and (logflag&1>0) and service in ('smtp', 'SMTP', '25/tcp', '587/tcp', 'smtps', 'SMTPS', '465/tcp') and utmevent in ('general-email-log', 'spamfilter') group by sender, recipient order by requests desc)### union all ###(select `from` as sender, `to` as recipient, count(*) as requests, sum (coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log-emailfilter where \$filter-exclude-var and service in ('smtp', 'SMTP', '25/tcp', '587/tcp', 'smtps', 'SMTPS', '465/tcp') and eventtype is null group by `from`, `to` order by requests desc)###) t where \$filter-drilldown and recipient is not null group by recipient having sum(bandwidth)>0 order by volume desc

Dataset Name	Description	Log Category
drilldown-Top-Email-Sender-By-Count	Drilldown top email sender by count	traffic

```
select
 sender,
 sum(requests) as requests
from
```

###(select sender, recipient, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce (rcvdbyte, 0)) as bandwidth from \$log-traffic where \$filter-exclude-var and (logflag&1>0) and service in ('smtp', 'SMTP', '25/tcp', '587/tcp', 'smtps', 'SMTPS', '465/tcp') and utmevent in ('general-email-log', 'spamfilter') group by sender, recipient order by requests desc)### union all ###(select `from` as sender, `to` as recipient, count(*) as requests, sum (coalesce (sentbyte, 0)+coalesce (rcvdbyte, 0)) as bandwidth from \$log-emailfilter where \$filter-exclude-var and service in ('smtp', 'SMTP', '25/tcp', '587/tcp', 'smtps', 'SMTPS', '465/tcp') and eventtype is null group by `from`, `to` order by requests desc)###) t where \$filter-drilldown and sender is not null group by sender order by requests desc

Dataset Name	Description	Log Category
drilldown-Top-Email-Send-Recipient- By-Count	Drilldown top email send recipient by count	traffic

```
select
  recipient,
  sum(requests) as requests
```

```
from

(
    ###(select sender, recipient, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth from $log-traffic where $filter-exclude-var and (logflag&1>0)
and service in ('smtp', 'SMTP', '25/tcp', '587/tcp', 'smtps', 'SMTPS', '465/tcp') and
utmevent in ('general-email-log', 'spamfilter') group by sender, recipient order by requests
desc)### union all ###(select `from` as sender, `to` as recipient, count(*) as requests, sum
(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from $log-emailfilter where
$filter-exclude-var and service in ('smtp', 'SMTP', '25/tcp', '587/tcp', 'smtps', 'SMTPS',
'465/tcp') and eventtype is null group by `from`, `to` order by requests desc)###) t where
$filter-drilldown and recipient is not null group by recipient order by requests desc
```

Dataset Name	Description	Log Category
drilldown-Top-Email-Recipient-By- Volume	Drilldown top email receiver by volume	traffic

```
select
  recipient,
  sum(bandwidth) as volume
from
  (
    ###(select recipient, sender, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth from $log where $filter-exclude-var and (logflag&1>0) and
service in ('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps', 'IMAPS',
'993/tcp', 'pop3s', 'POP3S', '995/tcp') and utmevent in ('general-email-log', 'spamfilter')
group by recipient, sender order by requests desc)### union all ###(select `to` as
recipient, `from` as sender, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth from $log-emailfilter where $filter-exclude-var and service in
('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps', 'IMAPS', '993/tcp', 'pop3s',
'POP3S', '995/tcp') and eventtype is null group by `to`, `from` order by requests desc)###)
t where $filter-drilldown and recipient is not null group by recipient having sum
(bandwidth)>0 order by volume desc
```

Dataset Name	Description	Log Category
drilldown-Top-Email-Receive-Sender- By-Volume	Drilldown top email receive sender by volume	traffic

```
select
    sender,
    sum(bandwidth) as volume
from
    (
        ###(select recipient, sender, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth from $log where $filter-exclude-var and (logflag&1>0) and
service in ('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps', 'IMAPS',
'993/tcp', 'pop3s', 'POP3S', '995/tcp') and utmevent in ('general-email-log', 'spamfilter')
group by recipient, sender order by requests desc)### union all ###(select `to` as
recipient, `from` as sender, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth from $log-emailfilter where $filter-exclude-var and service in
('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps', 'IMAPS', '993/tcp', 'pop3s',
'POP3S', '995/tcp') and eventtype is null group by `to`, `from` order by requests desc)###)
t where $filter-drilldown and sender is not null group by sender having sum(bandwidth)>0
order by volume desc
```

Dataset Name	Description	Log Category
drilldown-Top-Email-Recipient-By- Count	Drilldown top email receiver by count	traffic

```
select
 recipient,
 sum (requests) as requests
from
    ###(select recipient, sender, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth from $log where $filter-exclude-var and (logflag&1>0) and
service in ('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps', 'IMAPS',
'993/tcp', 'pop3s', 'POP3S', '995/tcp') and utmevent in ('general-email-log', 'spamfilter')
group by recipient, sender order by requests desc) ### union all ###(select `to` as
recipient, `from` as sender, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth from $log-emailfilter where $filter-exclude-var and service in
('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps', 'IMAPS', '993/tcp', 'pop3s',
'POP3S', '995/tcp') and eventtype is null group by `to`, `from` order by requests desc)###)
t where $filter-drilldown and recipient is not null group by recipient order by requests
desc
```

Dataset Name	Description	Log Category
drilldown-Top-Email-Receive-Sender- By-Count	Drilldown top email receive sender by count	traffic

```
select
 sum(requests) as requests
from
   ###(select recipient, sender, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth from $log where $filter-exclude-var and (logflag&1>0) and
service in ('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps', 'IMAPS',
'993/tcp', 'pop3s', 'POP3S', '995/tcp') and utmevent in ('general-email-log', 'spamfilter')
group by recipient, sender order by requests desc) ### union all ###(select `to` as
recipient, `from` as sender, count(*) as requests, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth from $log-emailfilter where $filter-exclude-var and service in
('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps', 'IMAPS', '993/tcp', 'pop3s',
'POP3S', '995/tcp') and eventtype is null group by `to`, `from` order by requests desc)###)
t where $filter-drilldown and sender is not null group by sender order by requests desc
```

Dataset Name	Description	Log Category
drilldown-Top-Attack-Destination	Drilldown top attack dest	attack

```
select
 victim,
  sum(totalnum) as totalnum
```

###(select (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source, (CASE WHEN direction='incoming' THEN srcip ELSE dstip END) as victim, count(*) as totalnum from \$log where \$filter-exclude-var group by source, victim order by totalnum desc) ### t where \$filter-drilldown and victim is not null group by victim order by totalnum desc

Dataset Name	Description	Log Category
drilldown-Top-Attack-Source	Drilldown top attack source	attack

```
select
  source,
  sum(totalnum) as totalnum
from
```

###(select (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source, (CASE
WHEN direction='incoming' THEN srcip ELSE dstip END) as victim, count(*) as totalnum from
\$log where \$filter-exclude-var group by source, victim order by totalnum desc)### t where
\$filter-drilldown and source is not null group by source order by totalnum desc

Dataset Name	Description	Log Category
drilldown-Top-Attack-List	Drilldown top attack list	attack

```
select
  from_itime(itime) as timestamp,
  attack,
  source,
  victim
from
```

###(select itime, attack, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as
source, (CASE WHEN direction='incoming' THEN srcip ELSE dstip END) as victim from \$log where
\$filter-exclude-var order by itime desc)### t where \$filter-drilldown order by timestamp
desc

Dataset Name	Description	Log Category
drilldown-Top-Virus	UTM top virus	virus

```
select
  virus,
  max(virusid_s) as virusid,
  (
    case when virus like 'Riskware%' then 'Spyware' when virus like 'Adware%' then 'Adware'
else 'Virus' end
  ) as malware_type,
  sum(totalnum) as totalnum
from
```

###(select virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*) as totalnum
from \$log where \$filter and (eventtype is null or logver>=502000000) and nullifna(virus) is
not null group by virus, virusid_s /*SkipSTART*/order by totalnum desc/*SkipEND*/)### t
group by virus, malware_type order by totalnum desc

Dataset Name	Description	Log Category
drilldown-Virus-Detail	Drilldown virus detail	virus

```
select
  from_itime(itime) as timestamp,
  virus,
  user_src,
  victim,
  hostname,
```

recipient

from

###(select itime, virus, coalesce(nullifna(`user`), ipstr((CASE WHEN direction='incoming'
THEN dstip ELSE srcip END))) as user_src, (CASE WHEN direction='incoming' THEN srcip ELSE
dstip END) as victim, cast(' ' as char) as hostname, cast(' ' as char) as recipient from
\$log where \$filter and (eventtype is null or logver>=502000000) and nullifna(virus) is not
null order by itime desc)### t where \$filter-drilldown order by timestamp desc

Dataset Name	Description	Log Category
user-drilldown-Top-Blocked-Web- Sites-By-Requests	User drilldown top blocked web sites by requests	webfilter

select

hostname,

sum(requests) as requests

from

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as usersrc, euid, hostname, catdesc,
action, count(*) as requests from \$log where \$filter group by usersrc, euid, hostname,
catdesc, action order by requests desc)### t where \$filter-drilldown and action='blocked'
and hostname is not null group by hostname order by requests desc

Dataset Name	Description	Log Category
user-drilldown-Top-Allowed-Web- Sites-By-Requests	User drilldown top allowed web sites by requests	webfilter

select

hostname,

 $\operatorname{sum}\left(\operatorname{requests}\right)$ as $\operatorname{requests}$

from

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as usersrc, euid, hostname, catdesc,
action, count(*) as requests from \$log where \$filter group by usersrc, euid, hostname,
catdesc, action order by requests desc)### t where \$filter-drilldown and action!='blocked'
and hostname is not null group by hostname order by requests desc

Dataset Name	Description	Log Category
user-drilldown-Top-Blocked-Web- Categories	User drilldown top blocked web categories	webfilter

select

catdesc,

sum(requests) as requests

from

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, catdesc, action, count
(*) as requests from \$log where \$filter and catdesc is not null group by user_src, catdesc,
action order by requests desc)### t where \$filter-drilldown and action='blocked' group by
catdesc order by requests desc

Dataset Name	Description	Log Category
user-drilldown-Top-Allowed-Web- Categories	User drilldown top allowed web categories	webfilter

```
select
  catdesc,
  sum(requests) as requests
from
  ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, catdesc, action, count
(*) as requests from $log where $filter and catdesc is not null group by user_src, catdesc,
action order by requests desc)### t where $filter-drilldown and action!='blocked' group by
catdesc order by requests desc
```

Dataset Name	Description	Log Category
user-drilldown-Top-Attacks	User drilldown top attacks by name	attack

```
select
  attack,
  sum(attack_count) as attack_count
from
```

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, attack, (case when
severity in ('critical', 'high') then 1 else 0 end) as high_severity, count(*) as attack_
count from \$log where \$filter and nullifna(attack) is not null group by user_src, attack,
high_severity order by attack_count desc)### t where \$filter-drilldown group by attack order
by attack_count desc

Dataset Name	Description	Log Category
user-drilldown-Top-Attacks-High- Severity	User drilldown top attacks high severity	attack

```
select
  attack,
  sum(attack_count) as attack_count
from
```

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, attack, (case when
severity in ('critical', 'high') then 1 else 0 end) as high_severity, count(*) as attack_
count from \$log where \$filter and nullifna(attack) is not null group by user_src, attack,
high_severity order by attack_count desc)### t where \$filter-drilldown and high_severity=1
group by attack order by attack count desc

Dataset Name	Description	Log Category
user-drilldown-Top-Virus-By-Name	User drilldown top virus	virus

```
select
  virus,
  max(virusid_s) as virusid,
  sum(totalnum) as totalnum
from
```

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, virus, virusid_to_str
(virusid, eventtype) as virusid_s, count(*) as totalnum from \$log where \$filter and nullifna
(virus) is not null group by user_src, virus, virusid_s order by totalnum desc)### t where
\$filter-drilldown group by virus order by totalnum desc

Dataset Name	Description	Log Category
user-drilldown-Top-Virus-Receivers- Over-Email	User drilldown top virus receivers over email	virus

```
select
  receiver,
  sum(totalnum) as totalnum
from
from
###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, `to` as receiver, count
(*) as totalnum from $log where $filter and subtype='infected' and (service in ('smtp',
'SMTP', '25/tcp', '587/tcp', 'smtps', 'SMTPS', '465/tcp') or service in ('pop3', 'POP3',
'110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps', 'IMAPS', '993/tcp', 'pop3s', 'POP3S',
'995/tcp')) and nullifna(virus) is not null group by user_src, receiver order by totalnum
desc)### t where $filter-drilldown group by receiver order by totalnum desc
```

Dataset Name	Description	Log Category
user-drilldown-Count-Spam-Activity- by-Hour-of-Day	User drilldown count spam activity by hour of day	emailfilter

```
select
  $hour_of_day(timestamp) as hourstamp,
  sum(totalnum) as totalnum
from
```

###(select \$flex_timestamp as timestamp, coalesce(nullifna(`user`), ipstr(`srcip`)) as
user_src, `from` as mf_sender, `to` as mf_receiver, action, eventtype, count(*) as totalnum
from \$log where \$filter group by timestamp, user_src, mf_sender, mf_receiver, action,
eventtype /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and
mf_receiver is not null and action in ('detected', 'blocked') group by hourstamp order by
hourstamp

Dataset Name	Description	Log Category
user-drilldown-Top-Spam-Sources	User drilldown top spam sources	emailfilter

```
select
  mf_sender,
  sum(totalnum) as totalnum
from
```

###(select \$flex_timestamp as timestamp, coalesce(nullifna(`user`), ipstr(`srcip`)) as
user_src, `from` as mf_sender, `to` as mf_receiver, action, eventtype, count(*) as totalnum
from \$log where \$filter group by timestamp, user_src, mf_sender, mf_receiver, action,
eventtype /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and
mf_sender is not null and action in ('detected', 'blocked') group by mf_sender order by
totalnum desc

Dataset Name	Description	Log Category
event-Usage-CPU	Event usage CPU	event

```
select
   $hour_of_day(timestamp) as hourstamp,
   cast(
     sum(total_cpu) / sum(count) as decimal(6, 2)
   ) as cpu_avg_usage
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem peak, sum(coalesce(disk, 0)) as total disk, max(coalesce(disk, 0))

as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max (coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce (totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast (coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split_part(bandwidth, '/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak, count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group by timestamp, devid, slot order by total_mem desc)### t group by hourstamp order by hourstamp

Dataset Name	Description	Log Category
event-Usage-Memory	Event usage memory	event

```
select
   $hour_of_day(timestamp) as hourstamp,
   cast(
     sum(total_mem) / sum(count) as decimal(6, 2)
   ) as mem_avg_usage
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by hourstamp order by
hourstamp

Dataset Name	Description	Log Category
event-Usage-Sessions	Event usage sessions	event

```
select
   $hour_of_day(timestamp) as hourstamp,
   cast(
      sum(totalsession) / sum(count) as decimal(10, 2)
   ) as sess_avg_usage
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth,
'/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as

transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by hourstamp order by
hourstamp

Dataset Name	Description	Log Category
event-Usage-CPU-Sessions	Event usage CPU sessions	event

```
select
    $hour_of_day(timestamp) as hourstamp,
    cast(
        sum(totalsession) / sum(count) as decimal(10, 2)
    ) as sess_avg_usage,
    cast(
        sum(total_cpu) / sum(count) as decimal(6, 2)
    ) as cpu_avg_usage
from
    ###(select $flex_timestamp as timestamp, devid, slutrate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(erate, 0))
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth,
''/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by hourstamp order by
hourstamp

Dataset Name	Description	Log Category
App-Risk-Top-Users-By-Bandwidth	Top users by bandwidth usage	traffic

```
select
 coalesce(
   nullifna(`user`),
   nullifna(`unauthuser`),
   ipstr(`srcip`)
 ) as user src,
 srcip,
 sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) as bandwidth,
   coalesce(rcvdbyte, 0)
 ) as traffic in,
 sum (
   coalesce(sentbyte, 0)
 ) as traffic out
from
  $log
where
```

```
$filter
and (
    logflag&1>0
)
and srcip is not null
group by
user_src,
srcip
having
sum(
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
)> 0
order by
bandwidth desc
```

Dataset Name	Description	Log Category
App-Risk-Top-User-Source-By- Sessions	Application risk top user source by session count	traffic

```
select
 srcip,
 coalesce(
   nullifna(`user`),
   nullifna(`unauthuser`),
   ipstr(`srcip`)
 ) as user src,
 count(*) as sessions
from
  $log
where
 $filter
 and (
  logflag&1>0
 and srcip is not null
group by
 srcip,
 user src
order by
 sessions desc
```

Dataset Name	Description	Log Category
App-Risk-Top-Users-By-Reputation- Scores-Bar	Application risk reputation top users by scores	traffic

```
select
  coalesce(
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  sum(crscore % 65536) as scores
from
  $log
```

```
where
   $filter
   and (
     logflag&1>0
)
   and crscore is not null
group by
   user_src
having
   sum(crscore % 65536)> 0
order by
   scores desc
```

Dataset Name	Description	Log Category
App-Risk-Top-Devices-By-Reputation-Scores	Application risk reputation top devices by scores	traffic

```
select
  max(
    get devtype (srcswversion, osname, devtype)
  ) as devtype new,
  coalesce(
   nullifna(`srcname`),
   nullifna(`srcmac`),
   ipstr(`srcip`)
  ) as dev src,
  sum(crscore % 65536) as scores
from
  $log
where
  $filter
  and (
   logflag&1>0
 and crscore is not null
group by
  dev src
having
 sum(crscore % 65536) > 0
order by
 scores desc
```

Dataset Name	Description	Log Category
App-Risk-Application-Usage-By-Category-With-Pie	Application risk application usage by category	traffic

```
select
  appcat,
  sum(bandwidth) as bandwidth
from
  ###(select appid, app, appcat, apprisk, sum(bandwidth) as bandwidth, sum(sessions) as
sessions from ###base(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip, epid, euid,
coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app,
appcat, apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as
```

bandwidth, count(*) as sessions from \$log-traffic where \$filter and (logflag&(1|32)>0) and nullifna(app) is not null group by dvid, srcip, dstip, epid, euid, user_src, appid, app, appcat, apprisk order by sessions desc)base### t group by appid, app, appcat, apprisk /*SkipSTART*/order by sessions desc, bandwidth desc/*SkipEND*/)### t where \$filter-drilldown and nullifna(appcat) is not null group by appcat order by bandwidth desc

Dataset Name	Description	Log Category
App-Risk-App-Usage-by-Category	Application risk application usage by category	traffic

```
select
  appcat,
  sum(bandwidth) as bandwidth
from
```

###(select appid, app, appcat, apprisk, sum(bandwidth) as bandwidth, sum(sessions) as
sessions from ###base(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip, epid, euid,
coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app,
appcat, apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as
bandwidth, count(*) as sessions from \$log-traffic where \$filter and (logflag&(1|32)>0) and
nullifna(app) is not null group by dvid, srcip, dstip, epid, euid, user_src, appid, app,
appcat, apprisk order by sessions desc)base### t group by appid, app, appcat, apprisk
/*SkipSTART*/order by sessions desc, bandwidth desc/*SkipEND*/)### t where \$filter-drilldown
and nullifna(appcat) is not null group by appcat order by bandwidth desc

Dataset Name	Description	Log Category
Top-20-Categories-By-Bandwidth	Webfilter categories by bandwidth usage	webfilter

```
select
  catdesc,
  sum(bandwidth) as bandwidth
from
```

###(select catdesc, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from
\$log-traffic where \$filter and (logflag&1>0) and (countweb>0 or ((logver is null or
logver<502000000) and (hostname is not null or utmevent in ('webfilter', 'banned-word',
'web-content', 'command-block', 'script-filter')))) and catdesc is not null group by catdesc
/*SkipSTART*/order by bandwidth desc/*SkipEND*/)### t group by catdesc order by bandwidth
desc</pre>

Dataset Name	Description	Log Category
App-Risk-Key-Applications-Crossing- The-Network	Application risk application activity	traffic

```
select
  app_group,
  appcat,
  sum(bandwidth) as bandwidth,
  sum(sessions) as num_session
from
```

###(select app_group_name(app) as app_group, appcat, service, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log where \$filter and (logflag&(1|32)>0) and nullifna(app) is not null
group by app_group, appcat, service order by bandwidth desc)### t group by app_group, appcat
order by bandwidth desc

Dataset Name	Description	Log Category
App-Risk-Applications-Running-Over-HTTP	Application risk applications running over HTTP	traffic

```
select
  app_group,
  service,
  sum(sessions) as sessions,
  sum(bandwidth) as bandwidth
from
```

###(select app_group_name(app) as app_group, appcat, service, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log where \$filter and (logflag&(1|32)>0) and nullifna(app) is not null
group by app_group, appcat, service order by bandwidth desc)### t where service in
('80/tcp', '443/tcp', 'HTTP', 'HTTPS', 'http', 'https') group by app_group, service having
sum(bandwidth)>0 order by bandwidth desc

Dataset Name	Description	Log Category
App-Risk-Top-Web-Sites-Visited-By-Network-Users-Pie-Cha	Application risk web browsing summary category	traffic

```
select
  catdesc,
  sum(num_sess) as num_sess,
  sum(bandwidth) as bandwidth
from
```

###(select catdesc, count(*) as num_sess, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0))
as bandwidth from \$log-traffic where \$filter and (logflag&1>0) and (countweb>0 or ((logver
is null or logver<502000000) and (hostname is not null or utmevent in ('webfilter', 'bannedword', 'web-content', 'command-block', 'script-filter')))) and catdesc is not null group by
catdesc order by num sess desc)### t group by catdesc order by num sess desc</pre>

Dataset Name	Description	Log Category
App-Risk-Top-Web-Sites-Visited-By- Network-Users	Application risk web browsing summary category	traffic

```
select
  catdesc,
  sum(num_sess) as num_sess,
  sum(bandwidth) as bandwidth
from
```

###(select catdesc, count(*) as num_sess, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0))
as bandwidth from \$log-traffic where \$filter and (logflag&1>0) and (countweb>0 or ((logver
is null or logver<502000000) and (hostname is not null or utmevent in ('webfilter', 'bannedword', 'web-content', 'command-block', 'script-filter')))) and catdesc is not null group by
catdesc order by num_sess desc)### t group by catdesc order by num_sess desc</pre>

Dataset Name	Description	Log Category
App-Risk-Web-Browsing-Hostname- Category	Application risk web browsing activity hostname category	webfilter

```
select
  domain,
  catdesc,
  sum(visits) as visits
from
  ###(select coalesce(nullifna(hostname), ipstr(`dstip`)) as domain, catdesc, count(*) as
visits from $log where $filter and (eventtype is null or logver>=502000000) and catdesc is
not null group by domain, catdesc order by visits desc)### t group by domain, catdesc order
by visits desc
```

Dataset Name	Description	Log Category
Top-Destination-Countries-By-Browsing-Time	Traffic top destination countries by browsing time	traffic

```
select
  dstcountry,
  ebtr_value(
    ebtr_agg_flat(browsetime),
    null,
    $timespan
  ) as browsetime,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out
from
```

###(select dstcountry, ebtr_agg_flat(browsetime) as browsetime, sum(bandwidth) as
bandwidth, sum(traffic_in) as traffic_in, sum(traffic_out) as traffic_out from (select
dstcountry, ebtr_agg_flat(\$browse_time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce
(sentbyte, 0)) as traffic_out from \$log where \$filter and (logflag&l>0) and \$browse_time is
not null group by dstcountry) t group by dstcountry /*SkipSTART*/order by ebtr_value(ebtr_
agg_flat(browsetime), null, null) desc/*SkipEND*/)### t group by dstcountry order by
browsetime desc

Dataset Name	Description	Log Category
App-Risk-Traffic-Top-Hostnames-By-Browsing-Time	Traffic top domains by browsing time	traffic

```
select
hostname,
ebtr_value(
   ebtr_agg_flat(browsetime),
   null,
   $timespan
) as browsetime,
sum(bandwidth) as bandwidth,
sum(traffic_in) as traffic_in,
sum(traffic_out) as traffic_out
from
```

###(select hostname, ebtr_agg_flat(browsetime) as browsetime, sum(bandwidth) as bandwidth,
sum(traffic_in) as traffic_in, sum(traffic_out) as traffic_out from (select hostname, ebtr_
agg_flat(\$browse_time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out from \$log where \$filter and (logflag&1>0) and hostname is not null and \$browse_time is

not null group by hostname) t group by hostname /*SkipSTART*/order by ebtr_value(ebtr_agg_
flat(browsetime), null, null) desc/*SkipEND*/)### t group by hostname order by browsetime
desc

Dataset Name	Description	Log Category
App-Risk-Top-Threat-Vectors- Crossing-The-Network	Application risk top threat vectors	attack

```
select
  severity,
  sum(totalnum) as totalnum
from
```

###(select attack, severity, ref, count(*) as totalnum from \$log where \$filter and
nullifna(attack) is not null group by attack, severity, ref order by totalnum desc)### t
group by severity order by totalnum desc

Dataset Name	Description	Log Category
App-Risk-Top-Critical-Threat-Vectors-Crossing-The-Network	Application risk top critical threat vectors	attack

```
select
  attack,
  severity,
  ref,
  sum(totalnum) as totalnum
from
```

###(select attack, severity, ref, count(*) as totalnum from \$log where \$filter and
nullifna(attack) is not null group by attack, severity, ref order by totalnum desc)### t
where severity='critical' group by attack, severity, ref order by totalnum desc

Dataset Name	Description	Log Category
App-Risk-Top-High-Threat-Vectors- Crossing-The-Network	Application risk top high threat vectors	attack

```
select
  attack,
  severity,
  ref,
  sum(totalnum) as totalnum
from
```

###(select attack, severity, ref, count(*) as totalnum from \$log where \$filter and
nullifna(attack) is not null group by attack, severity, ref order by totalnum desc)### t
where severity='high' group by attack, severity, ref order by totalnum desc

Dataset Name	Description	Log Category
App-Risk-Top-Medium-Threat- Vectors-Crossing-The-Network	Application risk top medium threat vectors	attack

```
select
attack,
severity,
```

```
ref,
   sum(totalnum) as totalnum
from
   ###(select attack, severity, ref, count(*) as totalnum from $log where $filter and
nullifna(attack) is not null group by attack, severity, ref order by totalnum desc)### t
where severity='medium' group by attack, severity, ref order by totalnum desc
```

Dataset Name	Description	Log Category
App-Risk-Top-Low-Threat-Vectors- Crossing-The-Network	Application risk top low threat vectors	attack

```
select
  attack,
  severity,
  ref,
  sum(totalnum) as totalnum
from
```

###(select attack, severity, ref, count(*) as totalnum from \$log where \$filter and
nullifna(attack) is not null group by attack, severity, ref order by totalnum desc)### t
where severity='low' group by attack, severity, ref order by totalnum desc

Dataset Name	Description	Log Category
App-Risk-Top-Info-Threat-Vectors- Crossing-The-Network	Application risk top info threat vectors	attack

```
select
  attack,
  severity,
  ref,
  sum(totalnum) as totalnum
from
```

###(select attack, severity, ref, count(*) as totalnum from \$log where \$filter and
nullifna(attack) is not null group by attack, severity, ref order by totalnum desc)### t
where severity='info' group by attack, severity, ref order by totalnum desc

Dataset Name	Description	Log Category
App-Risk-Top-Virus-By-Name	UTM top virus	virus

```
select
  virus,
  max(virusid_s) as virusid,
  (
    case when virus like 'Riskware%' then 'Spyware' when virus like 'Adware%' then 'Adware'
else 'Virus' end
  ) as malware_type,
  sum(totalnum) as totalnum
from
```

###(select virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*) as totalnum
from \$log where \$filter and (eventtype is null or logver>=502000000) and nullifna(virus) is
not null group by virus, virusid_s /*SkipSTART*/order by totalnum desc/*SkipEND*/)### t
group by virus, malware_type order by totalnum desc

Dataset Name	Description	Log Category
App-Risk-Top-Virus-Victim	UTM top virus user	virus

```
select
  user_src,
  sum(totalnum) as totalnum
from
```

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, eventtype, logver,
virus, count(*) as totalnum from \$log where \$filter group by user_src, eventtype, logver,
virus /*SkipSTART*/order by totalnum desc/*SkipEND*/)### t where (eventtype is null or
logver>=502000000) and nullifna(virus) is not null group by user src order by totalnum desc

Dataset Name	Description	Log Category
App-Risk-Data-Loss-Prevention-Type- Events	Application risk DLP UTM event	dlp

```
select
  subtype : :text as utmsubtype,
  count(*) as number
from
```

###(select itime, hostname, from as sender, to as receiver, profile, action, service,
subtype, srcip, dstip, severity, filename, direction, filesize, (case when
severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna
('user'), ipstr('srcip')) is not null then 'User Associated Data Loss' else NULL end) end)
as data_loss from \$log where \$filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where
\$filter-drilldown and subtype is not null group by subtype order by number desc

Dataset Name	Description	Log Category
App-Risk-Vulnerability-Discovered	Application risk vulnerability discovered	netscan

```
select
 vuln,
 vulnref as ref,
 vulncat,
 severity,
 count(*) as totalnum
from
  $10a
where
 $filter
 and vuln is not null
group by
 vuln,
 vulnref,
 vulncat,
  severity
order by
  totalnum desc
```

Dataset Name	Description	Log Category
App-Risk-Malware-Discovered	Application risk virus discovered	virus

```
select
  dom,
  sum(totalnum) as totalnum
from
  ###(select $DAY_OF_MONTH as dom, count(*) as totalnum from $log where $filter and nullifna
(virus) is not null and (eventtype is null or logver>=502000000) group by dom order by
totalnum desc)### t group by dom order by totalnum desc
```

Dataset Name	Description	Log Category
App-Risk-Breakdown-Of-Risk- Applications	Application risk breakdown of risk applications	traffic

```
select
 unnest(
  string_to_array(behavior, ',')
 ) as d behavior,
 count(*) as number
from
 $log t1
 inner join app_mdata t2 on t1.appid = t2.id
where
 $filter
 and (
  logflag&1>0
group by
 d behavior
order by
 number desc
```

Dataset Name	Description	Log Category
App-Risk-Number-Of-Applications-By-Risk-Behavior	Application risk number of applications by risk behavior	traffic

```
select
 risk as d_risk,
 unnest(
  string_to_array(behavior, ',')
 ) as f behavior,
 count(*) as number
from
 $log t1
 inner join app_mdata t2 on t1.appid = t2.id
where
 $filter
 and (
   logflag&1>0
group by
 risk,
 f behavior
order by
 risk desc,
 number desc
```

Dataset Name	Description	Log Category
App-Risk-High-Risk-Application	Application risk high risk application	traffic

```
select
 risk as d risk,
 behavior as d_behavior,
  t2.id,
  t2.name,
  t2.app cat,
  t2.technology,
  sum(
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) as bandwidth,
  count(*) as sessions
from
  $log t1
 inner join app_mdata t2 on t1.appid = t2.id
  $filter
  and (
   logflag&1>0
  and behavior is not null
group by
  t2.id
order by
 risk desc,
  sessions desc
```

Dataset Name	Description	Log Category
Apprisk-Ctrl-Severe-High-Risk- Application	Severe and high risk applications	traffic

```
select
  appcat,
  count(distinct app) as total_num
from
```

###(select appid, app, appcat, apprisk, sum(bandwidth) as bandwidth, sum(sessions) as
sessions from ###base(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip, epid, euid,
coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app,
appcat, apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as
bandwidth, count(*) as sessions from \$log-traffic where \$filter and (logflag&(1|32)>0) and
nullifna(app) is not null group by dvid, srcip, dstip, epid, euid, user_src, appid, app,
appcat, apprisk order by sessions desc)base### t group by appid, app, appcat, apprisk
/*SkipSTART*/order by sessions desc, bandwidth desc/*SkipEND*/)### t where \$filter-drilldown
and nullifna(appcat) is not null and apprisk in ('critical', 'high') group by appcat order
by total num desc

Dataset Name	Description	Log Category
Apprisk-Ctrl-Threats-Prevention	Threat Prevention	app-ctrl

```
select threat name,
```

```
count(distinct threats) as total_num
from
   (
    ###(select cast('Malware & Botnet C&C' as char(32)) as threat_name, app as threats,
count(*) as total_num from $log-app-ctrl where $filter and lower(appcat)='botnet' group by
app order by total_num desc)### union all ###(select cast('Malware & Botnet C&C' as char
   (32)) as threat_name, virus as threats, count(*) as total_num from $log-virus where $filter
and nullifna(virus) is not null group by virus order by total_num desc)### union all ###
   (select cast('Malicious & Phishing Sites' as char(32)) as threat_name, hostname as threats,
   count(*) as total_num from $log-webfilter where $filter and cat in (26, 61) group by
   hostname order by total_num desc)### union all ###(select cast('Critical & High Intrusion
   Attacks' as char(32)) as threat_name, attack as threats, count(*) as total_num from $log-
   attack where $filter and severity in ('critical', 'high') group by attack order by total_num
   desc)###) t group by threat_name order by total_num desc
```

Dataset Name	Description	Log Category
Apprisk-Ctrl-Application-Vulnerability	Application vulnerabilities discovered	attack

```
select
  attack,
  attackid,
  vuln_type,
  cve,
  severity_number,
  count(
     distinct (
        CASE WHEN direction = 'incoming' THEN srcip ELSE dstip END
    )
  ) as victims,
  count(
     distinct (
        CASE WHEN direction = 'incoming' THEN dstip ELSE srcip END
  )
  ) as sources,
  sum(totalnum) as totalnum
from
```

###(select attack, attackid, (case when severity='critical' then 5 when severity='high'
then 4 when severity='medium' then 3 when severity='low' then 2 when severity='info' then 1
else 0 end) as severity_number, direction, dstip, srcip, count(*) as totalnum from \$log
where \$filter and nullifna(attack) is not null and severity is not null group by attack,
attackid, severity, direction, dstip, srcip order by totalnum desc)### t1 left join (select
name, cve, vuln_type from ips_mdata) t2 on t1.attack=t2.name group by attack, attackid,
vuln_type, severity_number, cve order by severity_number desc, totalnum desc

Dataset Name	Description	Log Category
Apprisk-Ctrl-Breakdown-Of-High-Risk-Application	Severe and high risk applications	traffic

```
select
  appcat,
  count(distinct app) as total_num
from
  ###(select appid, app, appcat, apprisk, sum(bandwidth) as bandwidth, sum(sessions) as
sessions from ###base(/*tag:rpt base t top app*/select dvid, srcip, dstip, epid, euid,
```

coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app, appcat, apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, count(*) as sessions from \$log-traffic where \$filter and (logflag&(1|32)>0) and nullifna(app) is not null group by dvid, srcip, dstip, epid, euid, user_src, appid, app, appcat, apprisk order by sessions desc)base### t group by appid, app, appcat, apprisk /*SkipSTART*/order by sessions desc, bandwidth desc/*SkipEND*/)### t where \$filter-drilldown and nullifna(appcat) is not null and apprisk in ('critical', 'high') group by appcat order by total_num desc

Dataset Name	Description	Log Category
Apprisk-Ctrl-Top-20-High-Risk- Application	Application risk high risk application	traffic

```
select
  risk as d_risk,
  count(distinct user_src) as users,
  id,
  name,
  app_cat,
  technology,
  sum(bandwidth) as bandwidth,
  sum(sessions) as sessions
from
```

###(select lower(app) as lowapp, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user_src, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count
(*) as sessions from \$log where \$filter and (logflag&1>0) group by lowapp, user_src order by
bandwidth desc)### t1 inner join app_mdata t2 on t1.lowapp=lower(t2.name) where risk>='4'
group by id, name, app_cat, technology, risk order by d_risk desc, sessions desc

Dataset Name	Description	Log Category
Apprisk-Ctrl-High-Risk-Application- Behavioral	Application Behavioral Characteristics	traffic

```
select
 behavior,
    sum(total_num)* 100 / sum(
     sum(total num)
    ) over (),
  ) as percentage
from
    ###(select (case when lower(appcat)='botnet' then 'malicious' when lower
(appcat) = 'remote.access' then 'tunneling' when lower(appcat) in ('storage.backup',
'video/audio') then 'bandwidth-consuming' when lower(appcat)='p2p' then 'peer-to-peer' when
lower(appcat)='proxy' then 'proxy' end) as behavior, sum(sessions) as total num from ###base
(/*tag:rpt base t top app*/select dvid, srcip, dstip, epid, euid, coalesce(nullifna(`user`),
nullifna(`unauthuser`), ipstr(`srcip`)) as user src, appid, app, appcat, apprisk, sum
(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, count(*)
as sessions from $log-traffic where $filter and (logflag&(1|32)>0) and nullifna(app) is not
null group by dvid, srcip, dstip, epid, euid, user src, appid, app, appcat, apprisk order by
sessions desc)base### t where lower(appcat) in ('botnet', 'remote.access', 'storage.backup',
'video/audio', 'p2p', 'proxy') and apprisk in ('critical', 'high') group by appcat order by
```

total_num desc)### union all ###(select 'malicious' as behavior, count(*) as total_num from $\log - \alpha$ where filter and (logflag&16>0) and severity in ('critical', 'high') group by behavior order by total_num desc)###) t where filter-drilldown group by behavior order by percentage desc

Dataset Name	Description	Log Category
Apprisk-Ctrl-Key-Application-Crossing- The-Network	Key Application Crossing The Network	traffic

```
select
  risk as d_risk,
  count(distinct user_src) as users,
  id,
  name,
  app_cat,
  technology,
  sum(bandwidth) as bandwidth,
  sum(sessions) as sessions
from
```

###(select app, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as
user_src, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as
sessions from \$log where \$filter and (logflag&1>0) group by app, user_src order by bandwidth
desc)### t1 inner join app_mdata t2 on t1.app=t2.name group by id, app, app_cat, technology,
risk order by bandwidth desc

Dataset Name	Description	Log Category
Apprisk-Ctrl-Risk-Application-Usage- By-Category-With-Pie	Application risk application usage by category	traffic

```
select
  appcat,
  sum(bandwidth) as bandwidth
```

###(select appid, app, appcat, apprisk, sum(bandwidth) as bandwidth, sum(sessions) as
sessions from ###base(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip, epid, euid,
coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app,
appcat, apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as
bandwidth, count(*) as sessions from \$log-traffic where \$filter and (logflag&(1|32)>0) and
nullifna(app) is not null group by dvid, srcip, dstip, epid, euid, user_src, appid, app,
appcat, apprisk order by sessions desc)base### t group by appid, app, appcat, apprisk
/*SkipSTART*/order by sessions desc, bandwidth desc/*SkipEND*/)### t where \$filter-drilldown
and nullifna(appcat) is not null group by appcat order by bandwidth desc

Dataset Name	Description	Log Category
Apprisk-Ctrl-Category-Breakdown-By-Bandwidth	Category breakdown of all applications, sorted by bandwidth	traffic

```
select
  appcat,
  count(distinct app) as app_num,
  count(distinct user_src) as user_num,
  sum(bandwidth) as bandwidth,
  sum(sessions) as num session
```

from

###(select app, appcat, user_src, sum(bandwidth) as bandwidth, sum(sessions) as sessions
from ###base(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip, epid, euid, coalesce
(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app, appcat,
apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as
bandwidth, count(*) as sessions from \$log-traffic where \$filter and (logflag&(1|32)>0) and
nullifna(app) is not null group by dvid, srcip, dstip, epid, euid, user_src, appid, app,
appcat, apprisk order by sessions desc)base### t where nullifna(appcat) is not null and
appcat not in ('Not.Scanned', 'unscanned', 'unknown') group by app, appcat, user_src order
by bandwidth desc)### t where \$filter-drilldown group by appcat order by bandwidth desc

Dataset Name	Description	Log Category
Apprisk-Ctrl-Top-Web-Applications-by-Bandwidth	Top 25 Web Categories by Bandwidtih	traffic

```
select
  risk as d_risk,
  id,
  name,
  technology,
  count(distinct f_user) as user_num,
  sum(bandwidth) as bandwidth,
  sum(num_session) as num_session
from
```

###(select appid, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as f_
user, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as num_session
from \$log where \$filter and (logflag&1>0) and nullifna(app) is not null and service in
('80/tcp', '443/tcp', 'HTTP', 'HTTPS', 'http', 'https') group by appid, f_user order by
bandwidth desc)### t1 inner join app_mdata t2 on t1.appid=t2.id group by d_risk, id, name,
technology order by bandwidth desc

Dataset Name	Description	Log Category
Apprisk-Ctrl-Top-Web-Categories-Visited	Top 25 Web Categories Visited	traffic

```
select
  catdesc,
  count(distinct f_user) as user_num,
  sum(sessions) as sessions,
  sum(bandwidth) as bandwidth
from
```

###(select catdesc, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as
f_user, count(*) as sessions, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth
from \$log-traffic where \$filter and catdesc is not null and (logflag&1>0) and (countweb>0 or
((logver is null or logver<502000000) and (hostname is not null or utmevent in ('webfilter',
'banned-word', 'web-content', 'command-block', 'script-filter')))) group by f_user, catdesc
order by sessions desc)### t group by catdesc order by sessions desc</pre>

Dataset Name	Description	Log Category
Apprisk-Ctrl-Common-Virus-Botnet- Spyware	Common virus disvocered, the botnet communictions and the spyware/adware	traffic

```
select
 virus_s as virus,
   case when lower(appcat) = 'botnet' then 'Botnet C&C' else (
     case when virus s like 'Riskware%' then 'Spyware' when virus_s like 'Adware%' then
'Adware' else 'Virus' end
   ) end
  ) as malware type,
 appid,
 app,
 count (distinct dstip) as victims,
 count (distinct srcip) as source,
 sum(total num) as total num
from
    ###(select app as virus s, appcat, appid, app, dstip, srcip, count(*) as total num from
$log-traffic where $filter and (logflag&1>0) and lower(appcat)='botnet' group by virus s,
appcat, appid, dstip, srcip, app order by total num desc) ### union all ###(select unnest
(string to array(virus, ',')) as virus s, appcat, appid, app, dstip, srcip, count(*) as
total num from $log-traffic where $filter and (logflag&1>0) and virus is not null group by
virus_s, appcat, appid, dstip, srcip, app order by total_num desc)### union all ###(select
attack as virus s, 'botnet' as appcat, 0 as appid, attack as app, dstip, srcip, count(*) as
total num from $log-attack where $filter and (logflag&16>0) group by virus s, appcat, appid,
dstip, srcip, app order by total num desc) ###) t group by virus, appid, app, malware type
order by total num desc
```

Dataset Name	Description	Log Category
Apprisk-Ctrl-Zero-Day-Detected-On- Network	Zero-day malware detected on the network	traffic

```
select
  virus_s,
  appid,
  app,
  count(distinct dstip) as victims,
  count(distinct srcip) as source,
  sum(total_num) as total_num
from
  ###(select unnest(string_to_array(virus, ',')) as virus_s, appid, app, dstip, srcip, count
(*) as total_num from $log where $filter and (logflag&l>0) and virus like
'%PossibleThreat.SB%' group by virus_s, dstip, srcip, appid, app order by total_num desc)###
t where virus_s like '%PossibleThreat.SB%' group by virus_s, appid, app order by total_num desc
```

Dataset Name	Description	Log Category
Apprisk-Ctrl-Files-Analyzed-By-FortiCloud-Sandbox	Files analyzed by FortiCloud Sandbox	virus

```
select
   $DAY_OF_MONTH as dom,
   count(*) as total_num
from
   $log
where
```

```
$filter
and nullifna(filename) is not null
and logid_to_int(logid) = 9233
group by
dom
order by
dom
```

Dataset Name	Description	Log Category
Apprisk-Ctrl-Malicious-Files-Detected- By-FortiCloud-Sandbox	Files detected by FortiCloud Sandbox	virus

```
select
  filename,
  analyticscksum,
  count(distinct victim) as victims,
  count(distinct source) as source
from
```

###(select filename, analyticscksum, (CASE WHEN direction='incoming' THEN dstip ELSE srcip
END) as source, (CASE WHEN direction='incoming' THEN srcip ELSE dstip END) as victim, count
(*) as totalnum from \$log where \$filter and filename is not null and logid_to_int
(logid)=9233 and analyticscksum is not null group by filename, analyticscksum, source,
victim order by totalnum desc)### t group by filename, analyticscksum order by victims desc,
source desc

Dataset Name	Description	Log Category
Apprisk-Ctrl-File-Transferred-By-Application	File transferred by applications on the network	app-ctrl

```
select
 appid,
  app,
  filename,
 cloudaction,
 max(filesize) as filesize
  $log
where
 $filter
  and filesize is not null
 and clouduser is not null
 and filename is not null
group by
 cloudaction,
 appid,
  app,
 filename
order by
  filesize desc
```

Dataset Name	Description	Log Category
appctrl-Top-Blocked-SCCP-Callers	Appctrl top blocked SCCP callers	app-ctrl

```
select
  caller,
  sum(totalnum) as totalnum
from
```

###(select srcname as caller, app, count(*) as totalnum from \$log where \$filter and
srcname is not null and lower(appcat)='voip' and action='block' group by caller, app order
by totalnum desc)### t where app='sccp' group by caller order by totalnum desc

Dataset Name	Description	Log Category
appctrl-Top-Blocked-SIP-Callers	Appctrl top blocked SIP callers	app-ctrl

```
select
  caller,
  sum(totalnum) as totalnum
from
```

###(select srcname as caller, app, count(*) as totalnum from \$log where \$filter and
srcname is not null and lower(appcat)='voip' and action='block' group by caller, app order
by totalnum desc)### t where app='sip' group by caller order by totalnum desc

Dataset Name	Description	Log Category
360-degree-security-Application- Visiblity-and-Control-Summary	Application Visibolity and Control Summary	app-ctrl

```
select
  appcat,
  count(distinct app) as total_num
from
```

###(select appcat, app from \$log where \$filter and app is not null and appcat is not null
group by appcat, app)### t group by appcat order by total_num desc

Dataset Name	Description	Log Category
360-degree-security-Threats- Detection-and-Prevention-Summary	Threat Prevention	app-ctrl

```
select
  threat_name,
  count(distinct threats) as total_num
from
  (
```

###(select cast('Malware & Botnet C&C' as char(32)) as threat_name, app as threats,
count(*) as total_num from \$log-app-ctrl where \$filter and lower(appcat)='botnet' group by
app order by total_num desc)### union all ###(select cast('Malware & Botnet C&C' as char
(32)) as threat_name, virus as threats, count(*) as total_num from \$log-virus where \$filter
and nullifna(virus) is not null group by virus order by total_num desc)### union all ###
(select cast('Malicious & Phishing Sites' as char(32)) as threat_name, hostname as threats,
count(*) as total_num from \$log-webfilter where \$filter and cat in (26, 61) group by
hostname order by total_num desc)### union all ###(select cast('Critical & High Intrusion
Attacks' as char(32)) as threat_name, attack as threats, count(*) as total_num from \$logattack where \$filter and severity in ('critical', 'high') group by attack order by total_num
desc)###) t group by threat_name order by total_num desc

Dataset Name	Description	Log Category
360-degree-security-Data-Exfiltration- Detection-and-Prevention-Summary	Data Exfiltration Summary	dlp

```
select
  data_loss,
  count(*) as total_num
from
  ###(select itime, hostname,`from` as sender, `to` as receiver, profile, action, service,
subtype, srcip, dstip, severity, filename, direction, filesize, (case when
severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna
(`user`), ipstr(`srcip`)) is not null then 'User Associated Data Loss' else NULL end) end)
as data_loss from $log where $filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where
$filter-drilldown and data_loss is not null group by data_loss order by total_num desc
```

Dataset Name	Description	Log Category
360-degree-security-Endpoint- Protection-Summary	Endpoint Protection	fct-traffic

```
select
 blocked event,
  count(*) as total num
from
    select
        case utmevent when 'antivirus' then 'Malware Deteced and Blocked' when 'appfirewall'
then 'Risk Application Blocked' when 'webfilter' then (
         case when coalesce(
           nullifna(`user`),
           ipstr(`srcip`)
          ) is not null then 'Web Sites Violation Blocked' else 'Non User Initiated Web
Visits' end
        ) else NULL end
      ) as blocked event
    from
      $log
    where
     $filter
     and utmaction in ('blocked', 'quarantined')
 ) t
where
 blocked event is not null
group by
 blocked event
order by
 total num desc
```

Dataset Name	Description	Log Category
security-Top20-High-Risk-Application-In-Use	High risk application in use	traffic

```
select
   d_risk,
   count(distinct f_user) as users,
   name,
   app_cat,
   technology,
   sum(bandwidth) as bandwidth,
   sum(sessions) as sessions
from
   ###(select risk as d_risk, coalesce(nullifna(t1.`user`), nullifna(t1.`unauthuser`), ipstr
(t1.`srcip`)) as f_user, t2.name, t2.app_cat, t2.technology, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as sessions from $log t1 inner join app_
mdata t2 on t1.appid=t2.id where $filter and risk>='4' and (logflag&1>0) group by f_user,
t2.name, t2.app_cat, t2.technology, risk)### t group by d_risk, name, app_cat, technology
order by d_risk desc, sessions desc
```

Dataset Name	Description	Log Category
security-High-Risk-Application-By- Category	High risk application by category	traffic

```
select
  app_cat,
  count(distinct app) as total_num
from
  ###(select app_cat, app from $log t1 inner join app_mdata t2 on t1.appid=t2.id where
$filter and risk>='4' and (logflag&1>0) group by app_cat, app)### t group by app_cat order
by total num desc
```

Dataset Name	Description	Log Category
security-Top10-Application- Categories-By-Bandwidth	Application risk application usage by category	traffic

```
select
  appcat,
  sum(bandwidth) as bandwidth
from
```

###(select appid, app, appcat, apprisk, sum(bandwidth) as bandwidth, sum(sessions) as
sessions from ###base(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip, epid, euid,
coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app,
appcat, apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as
bandwidth, count(*) as sessions from \$log-traffic where \$filter and (logflag&(1|32)>0) and
nullifna(app) is not null group by dvid, srcip, dstip, epid, euid, user_src, appid, app,
appcat, apprisk order by sessions desc)base### t group by appid, app, appcat, apprisk
/*SkipSTART*/order by sessions desc, bandwidth desc/*SkipEND*/)### t where \$filter-drilldown
and nullifna(appcat) is not null group by appcat order by bandwidth desc

Dataset Name	Description	Log Category
Security-Category-Breakdown-By- Bandwidth	Category breakdown of all applications, sorted by bandwidth	traffic

```
select
  appcat,
  count(distinct app) as app num,
```

```
count(distinct user_src) as user_num,
sum(bandwidth) as bandwidth,
sum(sessions) as num_session
```

###(select app, appcat, user_src, sum(bandwidth) as bandwidth, sum(sessions) as sessions
from ###base(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip, epid, euid, coalesce
(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app, appcat,
apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as
bandwidth, count(*) as sessions from \$log-traffic where \$filter and (logflag&(1|32)>0) and
nullifna(app) is not null group by dvid, srcip, dstip, epid, euid, user_src, appid, app,
appcat, apprisk order by sessions desc)base### t where nullifna(appcat) is not null and
appcat not in ('Not.Scanned', 'unscanned', 'unknown') group by app, appcat, user_src order
by bandwidth desc)### t where \$filter-drilldown group by appcat order by bandwidth desc

Dataset Name	Description	Log Category
security-Top25-Web-Applications-By-Bandwidth	Top Web Applications by Bandwidtih	traffic

```
select
  risk as d_risk,
  t2.name,
  t2.app_cat,
  t2.technology,
  count(distinct f_user) as users,
  sum(bandwidth) as bandwidth,
  sum(num_session) as sessions
from
```

###(select appid, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as f_
user, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as num_session
from \$log where \$filter and (logflag&1>0) and nullifna(app) is not null and service in
('80/tcp', '443/tcp', 'HTTP', 'HTTPS', 'http', 'https') group by appid, f_user order by
bandwidth desc)### t1 inner join app_mdata t2 on t1.appid=t2.id group by d_risk, t2.name,
t2.app_cat, t2.technology order by d_risk desc, bandwidth desc

Dataset Name	Description	Log Category
Security-Top25-Web-Categories- Visited	Top 25 Web Categories Visited	traffic

```
select
  catdesc,
  count(distinct f_user) as user_num,
  sum(sessions) as sessions,
  sum(bandwidth) as bandwidth
from
```

###(select catdesc, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as
f_user, count(*) as sessions, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth
from \$log-traffic where \$filter and catdesc is not null and (logflag&1>0) and (countweb>0 or
((logver is null or logver<502000000) and (hostname is not null or utmevent in ('webfilter',
'banned-word', 'web-content', 'command-block', 'script-filter')))) group by f_user, catdesc
order by sessions desc)### t group by catdesc order by sessions desc</pre>

Dataset Name	Description	Log Category
security-Top25-Malware-Virus-Botnet- Spyware	Malware: viruses, Bots, Spyware/Adware	traffic

```
select
 virus s as virus,
   case when lower(appcat) = 'botnet' then 'Botnet C&C' else (
     case when virus s like 'Riskware%' then 'Spyware' when virus s like 'Adware%' then
'Adware' else 'Virus' end
   ) end
 ) as malware type,
 count (distinct dstip) as victims,
 count (distinct srcip) as source,
 sum(total_num) as total_num
from
    ###(select app as virus_s, appcat, dstip, srcip, count(*) as total_num from $log-traffic
where $filter and (logflag&1>0) and lower(appcat)='botnet' group by virus_s, appcat, dstip,
srcip order by total num desc)### union all ###(select unnest(string to array(virus, ','))
as virus s, appcat, dstip, srcip, count(*) as total num from $log-traffic where $filter and
(logflag&1>0) and virus is not null group by virus_s, appeat, dstip, srcip order by total_
num desc)### union all ###(select attack as virus_s, 'null' as appcat, dstip, srcip, count
(*) as total num from $log-attack where $filter and (logflag&16>0) group by virus s, appcat,
```

Dataset Name	Description	Log Category
security-Top10-Malware-Virus- Spyware	Malware: viruses, Spyware/Adware	virus

dstip, srcip order by total num desc)###) t group by virus, malware type order by total num

```
virus,
  max(virusid_s) as virusid,
  malware_type,
  count(distinct victim) as victims,
  count(distinct source) as source,
  sum(total_num) as total_num

from
  ###(select virus, virusid_to_str(virusid, eventtype) as virusid_s, (CASE WHEN
direction='incoming' THEN dstip ELSE srcip END) as source, (CASE WHEN direction='incoming'
THEN srcip ELSE dstip END) as victim, (case when virus like 'Riskware%' then 'Spyware' when
  virus like 'Adware%' then 'Adware' else 'Virus' end) as malware_type, count(*) as total_num
  from $log where $filter and nullifna(virus) is not null group by virus, virusid s, source,
```

Dataset Name	Description	Log Category
security-Top10-Malware-Botnet	Malware: Botnet	appctrl

victim order by total num desc) ### t group by virus, malware type order by total num desc

```
select
app,
appid,
malware type,
```

desc

select

Dataset Name	Description	Log Category
security-Top10-Victims-of-Malware	Victims of Malware	virus

```
select
 coalesce(
   nullifna(`user`),
   nullifna(`unauthuser`),
   ipstr(`srcip`)
  ) as user src,
 virus as malware,
 count(*) as total num
  $10a
where
 $filter
  and virus is not null
group by
 user src,
 malware
order by
  total_num desc
```

Dataset Name	Description	Log Category
security-Top10-Victims-of-Phishing- Site	Victims of Phishing Site	webfilter

```
select
  coalesce(
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
) as user_src,
  url as phishing_site,
  count(*) as total_num
from
  $log
where
  $filter
```

```
and cat in (26, 61)
group by
 user_src,
 phishing site
order by
 total num desc
```

Dataset Name	Description	Log Category
security-Top25-Malicious-Phishing- Sites	Malicious Phishing Site	webfilter

```
select
 phishing_site,
  count (distinct dstip) as victims,
 count (distinct srcip) as source,
 sum(total) as total num
```

###(select url as phishing site, dstip, srcip, count(*) as total from \$log where \$filter and cat in (26, 61) group by phishing site, dstip, srcip order by total desc) ### t group by phishing site order by total num desc

Dataset Name	Description	Log Category
security-Application-Vulnerability	Application vulnerabilities discovered	attack

```
select
 attack,
 attackid,
 vuln type,
 cve,
 severity number,
 count (
   distinct (
     CASE WHEN direction = 'incoming' THEN srcip ELSE dstip END
  ) as victims,
 count (
     CASE WHEN direction = 'incoming' THEN dstip ELSE srcip END
 ) as sources,
 sum(totalnum) as totalnum
```

###(select attack, attackid, (case when severity='critical' then 5 when severity='high' then 4 when severity='medium' then 3 when severity='low' then 2 when severity='info' then 1 else 0 end) as severity number, direction, dstip, srcip, count(*) as totalnum from \$log where \$filter and nullifna(attack) is not null and severity is not null group by attack, attackid, severity, direction, dstip, srcip order by totalnum desc) ### t1 left join (select name, cve, vuln type from ips mdata) t2 on t1.attack=t2.name group by attack, attackid, vuln type, severity number, cve order by severity number desc, totalnum desc

Dataset Name	Description	Log Category
security-Files-Analyzed-By-FortiCloud-Sandbox	Files analyzed by FortiCloud Sandbox	virus

```
select
  $day_of_week as dow,
  count(*) as total_num
from
  $log
where
  $filter
  and nullifna(filename) is not null
  and logid_to_int(logid) = 9233
group by
  dow
order by
  dow
```

Dataset Name	Description	Log Category
Security-Zero-Day-Detected-On- Network	Zero-day malware detected on the network	traffic

```
select
  virus_s,
  app,
  count(distinct dstip) as victims,
  count(distinct srcip) as source,
  sum(total_num) as total_num
from
```

###(select unnest(string_to_array(virus, ',')) as virus_s, app, dstip, srcip, count(*) as
total_num from \$log where \$filter and (logflag&1>0) and virus like '%PossibleThreat.SB%'
group by virus_s, dstip, srcip, app)### t group by virus_s, app order by total_num desc

Dataset Name	Description	Log Category
security-Data-Loss-Incidents-By- Severity	Data loss incidents summary by severity	dlp

```
select
  initcap(severity : :text) as s_severity,
  count(*) as total_num
from
```

###(select itime, hostname, from as sender, to as receiver, profile, action, service,
subtype, srcip, dstip, severity, filename, direction, filesize, (case when
severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna
('user'), ipstr('srcip')) is not null then 'User Associated Data Loss' else NULL end) end)
as data_loss from \$log where \$filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where
\$filter-drilldown and severity is not null group by s_severity order by total_num desc

Dataset Name	Description	Log Category
security-Data-Loss-Files-By-Service	Data Lass Files By Service	dlp

```
select
  filename,
  (
    case direction when 'incoming' then 'Download' when 'outgoing' then 'Upload' end
) as action,
  max(filesize) as filesize,
```

```
from

###(select itime, hostname, from as sender, to as receiver, profile, action, service, subtype, srcip, dstip, severity, filename, direction, filesize, (case when severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna (`user`), ipstr(`srcip`)) is not null then 'User Associated Data Loss' else NULL end) end) as data_loss from $log where $filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where $filter-drilldown and filesize is not null group by filename, direction, service order by filesize desc
```

Dataset Name	Description	Log Category
security-Endpoint-Security-Events- Summary	Endpoint Security Events summary	fct-traffic

```
select
  (
    case utmevent when 'antivirus' then 'Malware incidents' when 'webfilter' then
'Malicious/phishing websites' when 'appfirewall' then 'Risk applications' when 'dlp' then
'Data loss incidents' when 'netscan' then 'Vulnerability detected' else 'Others' end
  ) as events,
    count(*) as total_num
from
    $log
where
    $filter
    and utmevent is not null
group by
    events
order by
    total num desc
```

Dataset Name	Description	Log Category
security-Top-Endpoing-Running-High-Risk-Application	Endpoints Running High Risk Application	fct-traffic

```
select
 coalesce(
   nullifna(`user`),
    ipstr(`srcip`),
    'Unknown'
  ) as f user,
  coalesce(
   nullifna(hostname),
   'Unknown'
  ) as host name,
  threat as app,
  t2.app cat as appcat,
  risk as d risk
from
  $log t1
  inner join app mdata t2 on t1.threat = t2.name
where
  $filter
  and utmevent = 'appfirewall'
```

```
and risk >= '4'
group by
f_user,
host_name,
t1.threat,
t2.app_cat,
t2.risk
order by
risk desc
```

Dataset Name	Description	Log Category
security-Top-Endpoints-Infected-With-Malware	Endpoints Infected With Malware	fct-event

```
select
 coalesce(
  nullifna(`user`),
   ipstr(`deviceip`),
   'Unknown'
 ) as f_user,
  coalesce(
   nullifna (hostname),
   'Unknown'
  ) as host_name,
  virus,
  file
from
  $log
where
 $filter
  and subtype = 'av'
 and virus is not null
group by
 f user,
 host_name,
 virus,
  file
```

Dataset Name	Description	Log Category
security-Top-Endpoints-With-Web- Violateions	Endpoints With Web Violations	fct-traffic

```
select
  f_user,
  host_name,
  remotename,
  sum(total_num) as total_num
from
  ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as f_user, coalesce(nullifna
(hostname), 'Unknown') as host_name, remotename, count(*) as total_num from $log where
$filter and utmevent='webfilter' and remotename is not null and utmaction='blocked' group by
f_user, host_name, remotename order by total_num desc)### t group by f_user, host_name,
remotename order by total_num desc
```

Dataset Name	Description	Log Category
security-Top-Endpoints-With-Data- Loss-Incidents	Endpoints With Data Loss Incidents	fct-event

```
select
  f_user,
  host_name,
  msg,
  sum(total_num) as total_num
from
```

###(select coalesce(nullifna(`user`), ipstr(`deviceip`), 'Unknown') as f_user, coalesce
(nullifna(hostname), 'Unknown') as host_name, msg, count(*) as total_num from \$log where
\$filter and subtype='dlp' group by f_user, host_name, msg order by total_num desc)### t
group by f user, host name, msg order by total num desc

Dataset Name	Description	Log Category
content-Count-Total-SCCP-Call- Registrations-by-Hour-of-Day	Content count total SCCP call registrations by hour of day	content

```
select
  hourstamp,
  count(totalnum) as totalnum
from
```

###(select \$hour_of_day as hourstamp, proto, kind, status, sum(duration) as sccp_usage,
count(*) as totalnum from \$log-content where \$filter group by hourstamp, proto, kind, status
order by totalnum desc)### t where proto='sccp' and kind='register' group by hourstamp order
by hourstamp

Dataset Name	Description	Log Category
content-Count-Total-SCCP-Calls- Duration-by-Hour-of-Day	Content count total SCCP calls duration by hour of day	content

```
select
  hourstamp,
  sum(sccp_usage) as sccp_usage
from
```

###(select \$hour_of_day as hourstamp, proto, kind, status, sum(duration) as sccp_usage,
count(*) as totalnum from \$log-content where \$filter group by hourstamp, proto, kind, status
order by totalnum desc)### t where proto='sccp' and kind='call-info' and status='end' group
by hourstamp order by hourstamp

Dataset Name	Description	Log Category
content-Count-Total-SCCP-Calls-per- Status	Content count total SCCP calls per status	content

```
select
  status,
  count(totalnum) as totalnum
from
```

###(select \$hour_of_day as hourstamp, proto, kind, status, sum(duration) as sccp_usage,
count(*) as totalnum from \$log-content where \$filter group by hourstamp, proto, kind, status

order by totalnum desc) ### t where proto='sccp' and kind='call-info' group by status order by totalnum desc

Dataset Name	Description	Log Category
content-Count-Total-SIP-Call- Registrations-by-Hour-of-Day	Content count total SIP call registrations by hour of day	content

```
select
  hourstamp,
  count(totalnum) as totalnum
from
```

###(select \$hour_of_day as hourstamp, proto, kind, status, sum(duration) as sccp_usage,
count(*) as totalnum from \$log-content where \$filter group by hourstamp, proto, kind, status
order by totalnum desc)### t where proto='sip' and kind='register' group by hourstamp order
by hourstamp

Dataset Name	Description	Log Category
content-Count-Total-SIP-Calls-per- Status	Content count total SIP calls per status	content

```
select
  status,
  count(totalnum) as totalnum
from
```

###(select \$hour_of_day as hourstamp, proto, kind, status, sum(duration) as sccp_usage,
count(*) as totalnum from \$log-content where \$filter group by hourstamp, proto, kind, status
order by totalnum desc)### t where proto='sip' and kind='call' group by status order by
totalnum desc

Dataset Name	Description	Log Category
content-Dist-Total-SIP-Calls-by- Duration	Content dist total SIP calls by duration	content

```
select
   case when duration<60 then 'LESS ONE MIN' when duration<600 then 'LESS TEN MIN' when
duration<3600 then 'LESS ONE HOUR' when duration >= 3600 then 'MORE ONE HOUR' else 'unknown'
 ) as f duration,
 count(*) as totalnum
from
 $log
where
 $filter
 and proto = 'sip'
 and kind = 'call'
 and status = 'end'
group by
 f duration
order by
 totalnum desc
```

Dataset Name	Description	Log Category
Botnet-Activity-By-Sources	Botnet activity by sources	traffic

###(select app, appcat, apprisk, srcip, dstip, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as user_src, count(*) as totalnum from \$log-traffic where
\$filter and (logflag&l>0) and appcat='Botnet' and nullifna(app) is not null group by app,
appcat, apprisk, srcip, dstip, user_src order by totalnum desc)### t group by app, user_src
order by events desc) union all (select attack, user_src, sum(totalnum) as events from ###
(select attack, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_
src, \$flex_timestamp as timestamp, hostname, severity, crlevel, eventtype, service, dstip,
srcip, count(*) as totalnum from \$log-attack where \$filter and (logflag&16>0) group by
attack, user_src, timestamp, hostname, severity, crlevel, eventtype, service, dstip, srcip
order by timestamp desc)### t group by attack, user_src order by events desc)) t group by
app, user_src order by events desc

Dataset Name	Description	Log Category
Botnet-Infected-Hosts	Botnet infected hosts	traffic

```
select
  user_src,
  devtype_new,
  host_mac,
  sum(events) as events
from
  (
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_
src, get_devtype(srcswversion, osname, devtype) as devtype_new, coalesce(srcname, srcmac) as
host_mac, count(*) as events from \$log-traffic where \$filter and (logflag&1>0) and
appcat='Botnet' group by user_src, devtype_new, host_mac order by events desc)### union all
###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
'Unknown' as devtype_new, hostname as host_mac, count(*) as events from \$log-attack where
\$filter and (logflag&16>0) group by user_src, devtype_new, host_mac order by events
desc)###) t group by user src, devtype new, host mac order by events desc

Dataset Name	Description	Log Category
Detected-Botnet	Detected botnet	traffic

```
select
  app,
  sum(events) as events
from
```

```
(
    select
    app,
    sum(totalnum) as events
    from
```

###(select app, appcat, apprisk, srcip, dstip, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as user_src, count(*) as totalnum from \$log-traffic where
\$filter and (logflag&1>0) and appcat='Botnet' and nullifna(app) is not null group by app,
appcat, apprisk, srcip, dstip, user_src order by totalnum desc)### t group by app order by
events desc) union all (select attack, sum(totalnum) as events from ###(select attack,
coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, \$flex_
timestamp as timestamp, hostname, severity, crlevel, eventtype, service, dstip, srcip, count
(*) as totalnum from \$log-attack where \$filter and (logflag&16>0) group by attack, user_src,
timestamp, hostname, severity, crlevel, eventtype, service, dstip, srcip order by timestamp
desc)### t group by attack order by events desc)) t group by app order by events desc

Dataset Name	Description	Log Category
Botnet-Sources	Botnet sources	traffic

```
select
  dstip,
  domain,
  sum(events) as events
from
  (
    (
      select
      dstip,
      domain,
      sum(events) as events
  from
```

###(select dstip, root_domain(hostname) as domain, count(*) as events from \$logtraffic where \$filter and (logflag&1>0) and appeat='Botnet' and dstip is not null group by
dstip, domain order by events desc)### t group by dstip, domain) union all (select dstip,
root_domain(hostname) as domain, sum(totalnum) as events from ###(select attack, coalesce
(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, \$flex_timestamp as
timestamp, hostname, severity, crlevel, eventtype, service, dstip, srcip, count(*) as
totalnum from \$log-attack where \$filter and (logflag&16>0) group by attack, user_src,
timestamp, hostname, severity, crlevel, eventtype, service, dstip, srcip order by timestamp
desc)### t group by dstip, domain)) t group by dstip, domain order by events desc

Dataset Name	Description	Log Category
Botnet-Victims	Botnet victims	traffic

```
select
  user_src,
  sum(events) as events
from
  (
        (
        select
        user_src,
        sum(totalnum) as events
```

from

###(select app, appcat, apprisk, srcip, dstip, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as user_src, count(*) as totalnum from \$log-traffic where
\$filter and (logflag&l>0) and appcat='Botnet' and nullifna(app) is not null group by app,
appcat, apprisk, srcip, dstip, user_src order by totalnum desc)### t group by user_src)
union all (select user_src, sum(totalnum) as events from ###(select attack, coalesce
(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, \$flex_timestamp as
timestamp, hostname, severity, crlevel, eventtype, service, dstip, srcip, count(*) as
totalnum from \$log-attack where \$filter and (logflag&16>0) group by attack, user_src,
timestamp, hostname, severity, crlevel, eventtype, service, dstip, srcip order by timestamp
desc)### t group by user src)) t group by user src order by events desc

Dataset Name	Description	Log Category
Botnet-Timeline	Botnet timeline	traffic

```
select
  $flex_datetime(timestamp) as hodex,
  sum(events) as events
from
```

###(select \$flex_timestamp as timestamp, count(*) as events from \$log-traffic where
\$filter and (logflag&1>0) and appcat='Botnet' group by timestamp order by timestamp desc)###
union all ###(select \$flex_timestamp as timestamp, count(*) as events from \$log-dns where
\$filter and (botnetdomain is not null or botnetip is not null) group by timestamp order by
timestamp)### union all ###(select \$flex_timestamp as timestamp, count(*) as events from
\$log-attack where \$filter and (logflag&16>0) group by timestamp order by timestamp)###) t
group by hodex order by hodex

Dataset Name	Description	Log Category
Application-Session-History	Application session history	traffic

```
select
  $flex_timescale(timestamp) as hodex,
  sum(counter) as counter
from
```

###(select \$flex_timestamp as timestamp, count(*) as counter from \$log where \$filter and
(logflag&1>0) group by timestamp order by timestamp desc)### t group by hodex order by hodex

Dataset Name	Description	Log Category
Application-Usage-List	Detailed application usage	traffic

```
select
appid,
app,
appcat,
(
   case when (
    utmaction in ('block', 'blocked')
   or action = 'deny'
   ) then 'Blocked' else 'Allowed' end
) as custaction,
sum(
   coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
```

```
) as bandwidth,
 count(*) as num_session
from
  $log
where
  $filter
  and (
   logflag&1>0
 and nullifna(app) is not null
 and policyid != 0
group by
 appid,
 app,
 appcat,
 custaction
order by
 bandwidth desc
```

Dataset Name	Description	Log Category
PCI-DSS-Compliance-Summary	PCI DSS Compliance Summary	event

```
select
 status,
 num reason as requirements,
 cast(
  num reason * 100.0 /(
     sum(num reason) over()
   ) as decimal(18, 2)
 ) as percent
from
   select
       case when fail count>0 then 'Non-Compliant' else 'Compliant' end
     ) as status,
     count(distinct reason) as num_reason
   from
        select
          ftnt_pci_id,
           sum(fail count) over (partition by ftnt pci id)
          ) as fail count,
          reason
        from
          ###(select ftnt pci id, (case when result='fail' then 1 else 0 end) as fail count,
reason from $log t1 inner join pci_dss_mdata t2 on t1.reason=t2.ftnt_id where $filter and
subtype='compliance-check' group by ftnt_pci_id, result, reason)### t) t group by status) t
order by status
```

Dataset Name	Description	Log Category
PCI-DSS-Non-Compliant- Requirements-By-Severity	PCI DSS Non-Compliant Requirements by Severity	event

```
with query as (
  select
  from
      select
        ftnt pci id,
        severity,
          sum(fail count) over (partition by ftnt pci id)
        ) as fail count,
        reason
```

###(select ftnt pci id, t2.severity, (case when result='fail' then 1 else 0 end) as fail count, reason from \$log t1 inner join pci dss mdata t2 on t1.reason=t2.ftnt id where \$filter and subtype='compliance-check' group by ftnt pci id, t2.severity, result, reason order by fail count desc) ### t) t where fail count>0) select t.severity, count(distinct t.reason) as requirements from (select distinct on (1) reason, severity from query order by reason, (case lower(severity) when 'high' then 4 when 'critical' then 3 when 'medium' then 2 when 'low' then 1 else 0 end) desc) t group by t.severity order by requirements desc

Dataset Name	Description	Log Category
PCI-DSS-Compliant-Requirements- By-Severity	PCI DSS Compliant Requirements by Severity	event

```
with query as (
  select
  from
      select
        ftnt_pci_id,
        severity,
          sum(fail_count) over (partition by ftnt_pci_id)
        ) as fail count,
        reason
```

###(select ftnt pci id, t2.severity, (case when result='fail' then 1 else 0 end) as fail count, reason from \$log t1 inner join pci dss mdata t2 on t1.reason=t2.ftnt_id where \$filter and subtype='compliance-check' group by ftnt pci id, t2.severity, result, reason order by fail count desc) ### t) t where fail count=0) select t.severity, count(distinct t.reason) as requirements from (select distinct on (1) reason, severity from query order by reason, (case lower(severity) when 'high' then 4 when 'critical' then 3 when 'medium' then 2 when 'low' then 1 else 0 end) desc) t group by t.severity order by requirements desc

Dataset Name	Description	Log Category
PCI-DSS-Fortinet-Security-Best- Practice-Summary	PCI DSS Fortinet Security Best Practice Summary	event

```
select
 status,
 num reason as practices,
 cast(
```

```
num_reason * 100.0 /(
    sum(num_reason) over()
) as decimal(18, 2)
) as percent
from
(
    select
        (
            case when result = 'fail' then 'Failed' else 'Passed' end
) as status,
        count(distinct reason) as num_reason
    from
        ###(select result, reason from $log where $filter and subtype='compliance-check' and
result in ('fail','pass') group by result, reason)### t group by status) t order by status
desc
```

Dataset Name	Description	Log Category
PCI-DSS-Failed-Fortinet-Security- Best-Practices-By-Severity	PCI DSS Failed Fortinet Security Best Practices by Severity	event

```
select
 status,
 num reason as practices,
 cast(
   num reason * 100.0 /(
     sum(num reason) over()
   ) as decimal(18, 2)
 ) as percent
from
 (
   select
     initcap(status) as status,
     count(distinct reason) as num reason
      ###(select status, reason, result from $log where $filter and subtype='compliance-
check' group by status, reason, result) ### t where result='fail' group by status) t order by
status
```

Dataset Name	Description	Log Category
PCI-DSS-Passed-Fortinet-Security- Best-Practices-By-Severity	PCI DSS Passed Fortinet Security Best Practices by Severity	event

```
select
  status,
  num_reason as practices,
  cast(
    num_reason * 100.0 /(
      sum(num_reason) over()
    ) as decimal(18, 2)
  ) as percent
from
  (
    select
    initcap(status) as status,
```

```
count(distinct reason) as num_reason
from
    ###(select status, reason, result from $log where $filter and subtype='compliance-
check' group by status, reason, result)### t where result='pass' group by status) t order by
status
```

Dataset Name	Description	Log Category
PCI-DSS-Requirements-Compliance- Details	PCI DSS Requirements Compliance Details	event

```
select
ftnt_pci_id,
left(
    string_agg(distinct ftnt_id, ','),
    120
) as practice,
(
    case when sum(fail_count) > 0 then 'Non-Compliant' else 'Compliant' end
) as compliance,
pci_requirement
from
    ###(select ftnt_pci_id, ftnt_id, (case when result='fail' then 1 else 0 end) as fail_
count, pci_requirement from $log t1 inner join pci_dss_mdata t2 on t1.reason=t2.ftnt_id
where $filter and subtype='compliance-check' group by ftnt_pci_id, ftnt_id, result, pci_
requirement)### t group by ftnt_pci_id, pci_requirement order by ftnt_pci_id
```

Dataset Name	Description	Log Category
PCI-DSS-Fortinet-Security-Best- Practice-Details	PCI DSS Fortinet Security Best Practice Details	event

```
select
 reason as ftnt id,
 initcap(status) as status,
 module
from
  $log
where
 $filter
 and subtype = 'compliance-check'
group by
 reason,
 status,
 module,
 msg
order by
  ftnt id
```

Dataset Name	Description	Log Category
DLP-Email-Activity-Details	Email DLP Violations Summary	dlp

```
select
  from_itime(itime) as timestamp,
```

```
sender,
receiver,
regexp_replace(filename, '.*/', '') as filename,
filesize,
profile,
action,
direction
from
```

###(select itime, hostname,`from` as sender, `to` as receiver, profile, action, service,
subtype, srcip, dstip, severity, filename, direction, filesize, (case when
severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna
(`user`), ipstr(`srcip`)) is not null then 'User Associated Data Loss' else NULL end) end)
as data_loss from \$log where \$filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where
\$filter-drilldown and (service in ('smtp', 'SMTP', '25/tcp', '587/tcp', 'smtps', '965/tcp') or service in ('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps',
'IMAPS', '993/tcp', 'pop3s', 'POP3S', '995/tcp')) order by timestamp desc

Dataset Name	Description	Log Category
Email-DLP-Chart	Email DLP Activity Summary	dlp

```
select
  profile,
  count(*) as total_num
from
```

###(select itime, hostname, from as sender, to as receiver, profile, action, service,
subtype, srcip, dstip, severity, filename, direction, filesize, (case when
severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna
('user'), ipstr('srcip')) is not null then 'User Associated Data Loss' else NULL end) end)
as data_loss from \$log where \$filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where
\$filter-drilldown and (service in ('smtp', 'SMTP', '25/tcp', '587/tcp', 'smtps', '965/tcp') or service in ('pop3', 'POP3', '110/tcp', 'imap', 'IMAP', '143/tcp', 'imaps',
'IMAPS', '993/tcp', 'pop3s', 'POP3S', '995/tcp')) group by profile order by total_num desc

Dataset Name	Description	Log Category
DLP-Web-Activity-Details	Web DLP Violations Summary	dlp

```
select
  from_itime(itime) as timestamp,
  srcip,
  dstip,
  hostname,
  profile,
  filename,
  filesize,
  action,
  direction
from
```

###(select itime, hostname,`from` as sender, `to` as receiver, profile, action, service,
subtype, srcip, dstip, severity, filename, direction, filesize, (case when
severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna
(`user`), ipstr(`srcip`)) is not null then 'User Associated Data Loss' else NULL end) end)
as data_loss from \$log where \$filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where
\$filter-drilldown and lower(service) in ('http', 'https') order by timestamp desc

Dataset Name	Description	Log Category
Web-DLP-Chart	Web DLP Activity Summary	dlp

```
select
  profile,
  count(*) as total_num
```

###(select itime, hostname, from as sender, to as receiver, profile, action, service,
subtype, srcip, dstip, severity, filename, direction, filesize, (case when
severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna
('user'), ipstr('srcip')) is not null then 'User Associated Data Loss' else NULL end) end)
as data_loss from \$log where \$filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where
\$filter-drilldown and lower(service) in ('http', 'https') group by profile order by total_
num desc

Dataset Name	Description	Log Category
DLP-FTP-Activity-Details	Web DLP Violations Summary	dlp

```
select
  from_itime(itime) as timestamp,
  srcip,
  dstip,
  filename,
  profile,
  filesize,
  action,
  direction
from
```

###(select itime, hostname, from as sender, to as receiver, profile, action, service,
subtype, srcip, dstip, severity, filename, direction, filesize, (case when
severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna
('user'), ipstr('srcip')) is not null then 'User Associated Data Loss' else NULL end) end)
as data_loss from \$log where \$filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where
\$filter-drilldown and lower(service) in ('ftp', 'ftps') order by timestamp desc

Dataset Name	Description	Log Category
FTP-DLP-Chart	FTP DLP Activity Summary	dlp

```
select
  profile,
  count(*) as total_num
from
```

###(select itime, hostname, from as sender, to as receiver, profile, action, service,
subtype, srcip, dstip, severity, filename, direction, filesize, (case when
severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna
('user'), ipstr('srcip')) is not null then 'User Associated Data Loss' else NULL end) end)
as data_loss from \$log where \$filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where
\$filter-drilldown and lower(service) in ('ftp', 'ftps') group by profile order by total_num
desc

Dataset Name	Description	Log Category
top-users-by-browsetime	Top Users by website browsetime	traffic

```
select
  user_src,
  domain,
  ebtr_value(
    ebtr_agg_flat(browsetime),
    null,
    $timespan
  ) as browsetime
from
```

###(select user_src, domain, ebtr_agg_flat(browsetime) as browsetime from (select coalesce
(nullifna(`user`), ipstr(`srcip`)) as user_src, coalesce(nullifna(hostname), ipstr(`dstip`))
as domain, ebtr_agg_flat(\$browse_time) as browsetime from \$log where \$filter and \$browse_
time is not null group by user_src, domain) t group by user_src, domain order by ebtr_value
(ebtr_agg_flat(browsetime), null, null) desc)### t group by user_src, domain order by
browsetime desc

Dataset Name	Description	Log Category
wifi-usage-by-hour-authenticated	Wifi Usage by Hour - Authenticated	event

```
select
  hod,
  count(distinct stamac) as totalnum
from
```

###(select \$HOUR_OF_DAY as hod, stamac from \$log where \$filter and subtype='wireless' and
action='client-authentication' group by hod, stamac)### t group by hod order by hod

Dataset Name	Description	Log Category
wifi-usage-authenticated-timeline	Wifi Usage Timeline - Authenticated	event

```
select
  $flex_timescale(timestamp) as hodex,
  count(distinct stamac) as totalnum
from
```

###(select \$flex_timestamp as timestamp, stamac from \$log where \$filter and
subtype='wireless' and action='client-authentication' group by timestamp, stamac order by
timestamp desc)### t group by hodex order by hodex

Dataset Name	Description	Log Category
app-top-user-by-bandwidth	Top 10 Applications Bandwidth by User Drilldown	traffic

```
select
app,
coalesce(
  nullifna(`user`),
  nullifna(`unauthuser`),
  ipstr(`srcip`)
) as user_src,
  sum(
   coalesce(`sentbyte`, 0) + coalesce(`rcvdbyte`, 0)
) as bandwidth
from
  $log
where
```

```
$filter
and (
    logflag&1>0
)
and nullifna(app) is not null
group by
app,
user_src
order by
bandwidth desc
```

Dataset Name	Description	Log Category
app-top-user-by-session	Top 10 Application Sessions by User Drilldown	traffic

```
select
  app,
 coalesce(
   nullifna(`user`),
   nullifna(`unauthuser`),
   ipstr(`srcip`)
 ) as user src,
 count(*) as sessions
from
  $log
where
 $filter
 and (
   logflag&1>0
 and nullifna(app) is not null
group by
 app,
 user_src
order by
  sessions desc
```

Dataset Name	Description	Log Category
traffic-Interface-Bandwidth-Usage	Interface Bandwidth Usage	traffic

```
with qry as (
    select
    dom as dom_s,
    devid as devid_s,
    vd as vd_s,
    srcintf,
    dstintf,
    total_sent,
    total_rcvd
    from
        ###(select $DAY_OF_MONTH as dom, devid, vd, srcintf, dstintf, sum(coalesce(sentbyte, 0))
as total_sent, sum(coalesce(rcvdbyte, 0)) as total_rcvd, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as total_sent, sum(coalesce(rcvdbyte, 0)) as total_sent, sum(coalesce(rcvdbyte, 0)) as total_rcvd, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) and nullifna(srcintf) is not null and nullifna(dstintf) is not null group by dom, devid, vd, srcintf, dstintf having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0))>0 order by total desc)### t) select dom,
```

unnest(array['download', 'upload']) as type, unnest(array[sum(download), sum(upload)]) as bandwidth from (select coalesce(t1.dom_s, t2.dom_s) as dom, coalesce(t1.devid_s, t2.devid_s) as devid, coalesce(t1.vd_s, t2.vd_s) as vd, coalesce(t1.srcintf, t2.dstintf) as intf, sum (coalesce(t1.total_sent, 0)+coalesce(t2.total_rcvd, 0)) as download, sum(coalesce(t2.total_sent, 0)+coalesce(t1.total_rcvd, 0)) as upload from qry t1 full join qry t2 on t1.dom_s=t2.dom_s and t1.srcintf=t2.dstintf group by dom, devid, vd, intf) t where \$filter-drilldown group by dom order by dom

```
Dataset NameDescriptionLog Categoryctap-SB-Files-Needing-Inspection-vs-OthersFiles Needing Inspection vs Othersvirus
```

```
select
  (
    case when suffix in (
        'bat', 'cmd', 'exe', 'jar', 'msi', 'vbs',
        '7z', 'zip', 'gzip', 'lzw', 'tar',
        'rar', 'cab', 'doc', 'docx', 'xls',
        'xlsx', 'ppt', 'pptx', 'pdf', 'swf',
        'lnk', 'js'
    ) then 'Higher Risk File Types' else 'Excluded Files' end
) as files,
    sum(total_num) as total_num
from
    ###(select file_name_ext(filename) as suffix, count(*) as total_num from $log where
$filter and dtype='fortisandbox' and nullifna(filename) is not null group by suffix order by
total num desc)### t group by files order by total num desc
```

Dataset Name	Description	Log Category
ctap-SB-Breakdown-of-File-Types	Breakdown of File Types	virus

```
select
   case when suffix in (
      'exe', 'msi', 'upx', 'vbs', 'bat', 'cmd',
     'dll', 'ps1', 'jar'
   ) then 'Executable Files' when suffix in ('pdf') then 'Adobe PDF' when suffix in ('swf')
then 'Adobe Flash' when suffix in (
      'doc', 'docx', 'rtf', 'dotx', 'docm',
      'dotm', 'dot'
    ) then 'Microsoft Word' when suffix in (
      'xls', 'xlsx', 'xltx', 'xlsm', 'xlsb',
      'xlam', 'xlt'
   ) then 'Microsoft Excel' when suffix in (
      'ppsx', 'ppt', 'pptx', 'potx', 'sldx',
      'pptm', 'ppsm', 'potm', 'ppam', 'sldm',
      'pps', 'pot'
   ) then 'Microsoft PowerPoint' when suffix in ('msg') then 'Microsoft Outlook' when
suffix in ('htm', 'js', 'url', 'lnk') then 'Web Files' when suffix in (
      'cab', 'tgz', 'z', '7z', 'tar', 'lzh',
      'kgb', 'rar', 'zip', 'gz', 'xz', 'bz2'
   ) then 'Archive Files' when suffix in ('apk') then 'Android Files' else 'Others' end
 ) as filetype,
 sum(total num) as total num
```

from
 ###(select file_name_ext(filename) as suffix, count(*) as total_num from \$log where
\$filter and dtype='fortisandbox' and nullifna(filename) is not null group by suffix order by
total num desc)### t group by filetype order by total num desc

```
Dataset Name Description Log Category
```

```
ctap-SB-Top-Sandbox-Malicious-Exes
```

virus

```
select
    case fsaverdict when 'malicious' then 5 when 'high risk' then 4 when 'medium risk' then
3 when 'low risk' then 2 else 1 end
 ) as risk,
 filename,
 service,
  count(*) as total num
  $log
where
 $filter
  and dtype = 'fortisandbox'
  and file name ext(filename) = 'exe'
 and fsaverdict not in ('clean', 'submission failed')
group by
 filename,
 risk,
 service
order by
 risk desc,
  total num desc,
  filename
```

Dataset Name	Description	Log Category
ctap-SB-Sources-of-Sandbox- Discovered-Malware	Sources of Sandbox Discovered Malware	virus

```
select
 source,
 sum(total_num) as total_num
from
   select
     (
       CASE WHEN direction = 'incoming' THEN dstip ELSE srcip END
     ) as source,
     count(*) as total num
   from
     $log
   where
     $filter
     and dtype = 'fortisandbox'
     and nullifna(filename) is not null
     and fsaverdict not in ('clean', 'submission failed')
   group by
```

```
source
) t
group by
source
order by
total num desc
```

Dataset Name	Description	Log Category
ctap-apprisk-ctrl-High-Risk-Application	Application risk high risk application	traffic

```
select
  risk as d_risk,
  count(distinct user_src) as users,
  id,
  name,
  app_cat,
  technology,
  sum(bandwidth) as bandwidth,
  sum(sessions) as sessions
from
   ###(select lower(app) as lowapp, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user_src, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count
(*) as sessions from $log where $filter and (logflag&1>0) group by lowapp, user_src order by
bandwidth desc)### t1 inner join app_mdata t2 on t1.lowapp=lower(t2.name) where risk>='4'
group by id, name, app_cat, technology, risk order by d_risk desc, sessions desc
```

Dataset Name	Description	Log Category
ctap-apprisk-ctrl-Application- Vulnerability	Application vulnerabilities discovered	attack

```
select
 attack,
 attackid,
 vuln type,
 cve,
 severity number,
 count (
     CASE WHEN direction = 'incoming' THEN srcip ELSE dstip END
  ) as victims,
  count (
   distinct (
     CASE WHEN direction = 'incoming' THEN dstip ELSE srcip END
 ) as sources,
 sum(totalnum) as totalnum
  ###(select attack, attackid, (case when severity='critical' then 5 when severity='high'
then 4 when severity='medium' then 3 when severity='low' then 2 when severity='info' then 1
else 0 end) as severity number, direction, dstip, srcip, count(*) as totalnum from $log
where $filter and nullifna(attack) is not null and severity is not null group by attack,
```

attackid, severity, direction, dstip, srcip order by totalnum desc) ### t1 left join (select

name, cve, vuln_type from ips_mdata) t2 on t1.attack=t2.name group by attack, attackid, vuln_type, severity_number, cve order by severity_number desc, totalnum desc

Dataset Name	Description	Log Category
ctap-apprisk-ctrl-Common-Virus- Botnet-Spyware	Common Virus Botnet Spyware	app-ctrl

```
select
  malware as virus,
  (
    case when lower(appcat) = 'botnet' then 'Botnet C&C' else (
       case when malware like 'Riskware%' then 'Spyware' when malware like 'Adware%' then
'Adware' else 'Virus' end
    ) end
    ) as malware_type,
    appid,
    app,
    count(distinct victim) as victims,
    count(distinct source) as source,
    sum(total_num) as total_num
from
```

###(select app as malware, appcat, appid, app, (CASE WHEN direction='incoming' THEN
dstip ELSE srcip END) as source, (CASE WHEN direction='incoming' THEN srcip ELSE dstip END)
as victim, count(*) as total_num from \$log-app-ctrl where \$filter and lower(appcat)='botnet'
group by malware, appcat, appid, app, victim, source, app order by total_num desc)### union
all ###(select virus as malware, 'null' as appcat, 0 as appid, service as app, (CASE WHEN
direction='incoming' THEN dstip ELSE srcip END) as source, (CASE WHEN direction='incoming'
THEN srcip ELSE dstip END) as victim, count(*) as total_num from \$log-virus where \$filter
and virus is not null group by malware, appcat, app, appid, victim, source order by total_
num desc)### union all ###(select attack as malware, 'null' as appcat, 0 as appid, service
as app, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source, (CASE WHEN
direction='incoming' THEN srcip ELSE dstip END) as victim, count(*) as total_num from \$logattack where \$filter and (logflag&16>0) group by malware, appcat, app, appid, victim, source
order by total_num desc)###) t group by malware, malware_type, app, appid order by total_num
desc

Dataset Name	Description	Log Category
ctap-App-Risk-Reputation-Top- Devices-By-Scores	Reputation Top Devices By-Scores	traffic

```
select
  coalesce(
    nullifna(`srcname`),
    ipstr(`srcip`),
    nullifna(`srcmac`)
) as dev_src,
  sum(crscore % 65536) as scores
from
  $log
where
  $filter
  and (
    logflag&1>0
```

```
) and crscore is not null group by dev_src having sum(crscore % 65536)> 0 order by scores desc
```

Dataset Name	Description	Log Category
ctap-HTTP-SSL-Traffic-Ratio	HTTP SSL Traffic Ratio	traffic

```
select
  case when service in ('80/tcp', 'HTTP', 'http') then 'HTTP' else 'HTTPS' end
 ) as service,
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) as bandwidth
from
 $log
where
 $filter
 and (
   logflag&1>0
 and nullifna(app) is not null
 and service in (
    '80/tcp', '443/tcp', 'HTTP', 'HTTPS',
   'http', 'https'
group by
 service
having
 sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) > 0
order by
 bandwidth desc
```

Dataset Name	Description	Log Category
ctap-Top-Source-Countries	Top Source Countries	traffic

```
select
   srccountry,
   sum(
     coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
   ) as bandwidth
from
   $log
where
   $filter
   and (
     logflag&1>0
```

```
and nullifna(srccountry) is not null
and srccountry <> 'Reserved'
group by
    srccountry
having
    sum(
        coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
    )> 0
order by
    bandwidth desc,
    srccountry
```

Dataset Name	Description	Log Category
ctap-SaaS-Apps	CTAP SaaS Apps	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth
from
```

###(select app_group_name(app) as app_group, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as
traffic_out, count(*) as sessions from \$log where \$filter and (logflag&1>0) and nullifna
(app) is not null group by app_group having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0))>0 order by bandwidth desc)### t1 inner join app_mdata t2 on lower(t1.app_group)=lower
(t2.name) where behavior like '%Cloud%' group by app group order by bandwidth desc

Dataset Name	Description	Log Category
ctap-laaS-Apps	CTAP laaS Apps	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth
from
```

###(select app_group_name(app) as app_group, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as
traffic_out, count(*) as sessions from \$log where \$filter and (logflag&1>0) and nullifna
(app) is not null group by app_group having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0))>0 order by bandwidth desc)### t1 inner join app_mdata t2 on lower(t1.app_group)=lower
(t2.name) where app_cat='Cloud.IT' group by app_group order by bandwidth desc

Dataset Name	Description	Log Category
ctap-RAS-Apps	CTAP RAS Apps	traffic

```
select
  name as app_group,
  sum(bandwidth) as bandwidth
from
```

###(select app_group_name(app) as app_group, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as
traffic_out, count(*) as sessions from \$log where \$filter and (logflag&1>0) and nullifna
(app) is not null group by app group having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,

0))>0 order by bandwidth desc)### t1 inner join app_mdata t2 on lower(t1.app_group)=lower (t2.name) where app cat='Remote.Access' group by name order by bandwidth desc

Dataset Name	Description	Log Category
ctap-Proxy-Apps	CTAP Proxy Apps	traffic

```
select
  name as app_group,
  sum(bandwidth) as bandwidth
from
```

###(select app_group_name(app) as app_group, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as
traffic_out, count(*) as sessions from \$log where \$filter and (logflag&1>0) and nullifna
(app) is not null group by app_group having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0))>0 order by bandwidth desc)### t1 inner join app_mdata t2 on lower(t1.app_group)=lower
(t2.name) where app cat='Proxy' group by name order by bandwidth desc

Dataset Name	Description	Log Category
ctap-Top-SocialMedia-App-By- Bandwidth	Top SocialMedia Applications by Bandwidth Usage	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
  sum(sessions) as sessions
from
```

###(select app_group_name(app) as app_group, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as
traffic_out, count(*) as sessions from \$log where \$filter and (logflag&1>0) and nullifna
(app) is not null group by app_group having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0))>0 order by bandwidth desc)### t1 inner join app_mdata t2 on lower(t1.app_group)=lower
(t2.name) where app cat='Social.Media' group by app group order by bandwidth desc

Dataset Name	Description	Log Category
ctap-Top-Streaming-App-By- Bandwidth	Top Streaming applications by bandwidth usage	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
  sum(sessions) as sessions
```

###(select app_group_name(app) as app_group, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as
traffic_out, count(*) as sessions from \$log where \$filter and (logflag&1>0) and nullifna
(app) is not null group by app_group having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0))>0 order by bandwidth desc)### t1 inner join app_mdata t2 on lower(t1.app_group)=lower
(t2.name) where app_cat='Video/Audio' group by app_group order by bandwidth desc

Dataset Name	Description	Log Category
ctap-Top-Game-App-By-Bandwidth	Top Game applications by bandwidth usage	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
  sum(sessions) as sessions
from
```

###(select app_group_name(app) as app_group, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as
traffic_out, count(*) as sessions from \$log where \$filter and (logflag&1>0) and nullifna
(app) is not null group by app_group having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0))>0 order by bandwidth desc)### t1 inner join app_mdata t2 on lower(t1.app_group)=lower
(t2.name) where app cat='Game' group by app group order by bandwidth desc

Dataset Name	Description	Log Category
ctap-Top-P2P-App-By-Bandwidth	Top P2P applications by bandwidth usage	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
  sum(sessions) as sessions
from
```

###(select app_group_name(app) as app_group, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as
traffic_out, count(*) as sessions from \$log where \$filter and (logflag&1>0) and nullifna
(app) is not null group by app_group having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte,
0))>0 order by bandwidth desc)### t1 inner join app_mdata t2 on lower(t1.app_group)=lower
(t2.name) where app cat='P2P' group by app group order by bandwidth desc

Dataset Name	Description	Log Category
ctap-apprisk-ctrl-Top-Web-Categories- Visited	Top 25 Web Categories Visited	traffic

```
select
  catdesc,
  count(distinct f_user) as user_num,
  sum(sessions) as sessions,
  sum(bandwidth) as bandwidth
from
```

###(select catdesc, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as
f_user, count(*) as sessions, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth
from \$log-traffic where \$filter and catdesc is not null and (logflag&1>0) and (countweb>0 or
((logver is null or logver<502000000) and (hostname is not null or utmevent in ('webfilter',
'banned-word', 'web-content', 'command-block', 'script-filter')))) group by f_user, catdesc
order by sessions desc)### t group by catdesc order by sessions desc</pre>

Dataset Name	Description	Log Category
ctap-App-Risk-Applications-Running- Over-HTTP	Application risk applications running over HTTP	traffic

```
select
 app group,
 service,
 sum(sessions) as sessions,
 sum (bandwidth) as bandwidth
```

###(select app_group_name(app) as app_group, appcat, service, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*) as sessions from \$log where \$filter and (logflag&(1|32)>0) and nullifna(app) is not null group by app group, appcat, service order by bandwidth desc) ### t where service in ('80/tcp', '443/tcp', 'HTTP', 'HTTPS', 'http', 'https') group by app_group, service having sum(bandwidth)>0 order by bandwidth desc

Dataset Name Description Log Category ctap-App-Risk-Web-Browsing-Activity-

Hostname-Category

Application risk web browsing activity hostname category

select domain, catdesc, sum(visits) as visits

###(select coalesce(nullifna(hostname), ipstr(`dstip`)) as domain, catdesc, count(*) as visits from \$log where \$filter and (eventtype is null or logver>=502000000) and catdesc is not null group by domain, catdesc order by visits desc) ### t group by domain, catdesc order by visits desc

Dataset Name	Description	Log Category
ctap-Top-Sites-By-Browsing-Time	Traffic top sites by browsing time	traffic

```
select
  string agg(distinct catdesc, ', ') as agg catdesc,
  ebtr value(
   ebtr agg flat (browsetime),
   null,
   $timespan
  ) as browsetime,
  sum (bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
 sum(traffic_out) as traffic_out
from
```

###(select hostname, catdesc, ebtr_agg_flat(browsetime) as browsetime, sum(bandwidth) as bandwidth, sum(traffic in) as traffic in, sum(traffic out) as traffic out from (select hostname, catdesc, ebtr agg flat(\$browse time) as browsetime, sum(coalesce(sentbyte, 0) + coalesce (rcvdbyte, 0)) as bandwidth, sum (coalesce (rcvdbyte, 0)) as traffic in, sum (coalesce(sentbyte, 0)) as traffic out from \$log where \$filter and (logflag&1>0) and hostname is not null and \$browse time is not null group by hostname, catdesc) t group by

hostname, catdesc /*SkipSTART*/order by ebtr_value(ebtr_agg_flat(browsetime), null, null) desc/*SkipEND*/)### t group by hostname order by browsetime desc

Dataset Name	Description	Log Category
ctap-Average-Bandwidth-Hour	Average Bandwidth Hour	traffic

```
select
hourstamp,
sum(bandwidth)/ count(distinct daystamp) as bandwidth
from
    ###(select to_char(from_dtime(dtime), 'HH24:00') as hourstamp, to_char(from_dtime(dtime),
'DD Mon') as daystamp, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from
$log where $filter and (logflag&1>0) group by hourstamp, daystamp having sum(coalesce
(sentbyte, 0)+coalesce(rcvdbyte, 0))>0 order by hourstamp)### t group by hourstamp order by
hourstamp
```

Dataset Name	Description	Log Category
ctap-Top-Bandwidth-Hosts	Top Bandwidth Hosts	traffic

```
select
 hostname,
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) as bandwidth
  $log - traffic
where
  $filter
  and hostname is not null
  and (
   logflag&1>0
group by
 hostname
having
 sum(
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) > 0
order by
 bandwidth desc
```

Dataset Name	Description	Log Category
saas-Application-Discovered	All Applications Discovered on the Network	traffic

```
select
  (
    case is_saas when 1 then 'SaaS Apps' else 'Other Apps' end
) as app_type,
  count(distinct app_s) as total_num
from
  ###(select app_s, (case when saas_s>=10 then 1 else 0 end) as is_saas from (select unnest (apps) as app_s, unnest(saasinfo) as saas_s from $log where $filter and apps is not null) t
group by app s, is saas order by is saas desc)### t group by is saas order by is saas
```

Dataset Name	Description	Log Category
saas-SaaS-Application-by-Category	Number of SaaS Applications by Category	traffic

```
select
  (
    case saas_cat when 0 then 'Sanctioned' else 'Unsanctioned' end
) as saas_cat_str,
  count(distinct app_s) as num_saas_app
from
```

###(select app_s, saas_s%10 as saas_cat, sum(sentbyte+rcvdbyte) as bandwidth, count(*) as
total_app from (select unnest(apps) as app_s, unnest(saasinfo) as saas_s, coalesce(sentbyte,
0) as sentbyte, coalesce(rcvdbyte, 0) as rcvdbyte from \$log where \$filter and apps is not
null) t where saas_s>=10 group by app_s, saas_cat order by bandwidth desc)### t where saas_
cat in (0, 1) group by saas cat order by saas cat

Dataset Name	Description	Log Category
saas-SaaS-Application-by-Bandwidth	Number of SaaS Applications by Bandwidth	traffic

```
select
  (
    case saas_cat when 0 then 'Sanctioned' else 'Tolerated' end
) as saas_cat_str,
  sum(bandwidth) as bandwidth
from
```

###(select app_s, saas_s%10 as saas_cat, sum(sentbyte+rcvdbyte) as bandwidth, count(*) as
total_app from (select unnest(apps) as app_s, unnest(saasinfo) as saas_s, coalesce(sentbyte,
0) as sentbyte, coalesce(rcvdbyte, 0) as rcvdbyte from \$log where \$filter and apps is not
null) t where saas_s>=10 group by app_s, saas_cat order by bandwidth desc)### t where saas_
cat in (0, 2) group by saas_cat order by saas_cat

Dataset Name	Description	Log Category
saas-SaaS-Application-by-Session	Number of SaaS Applications by Session	traffic

```
select
  (
    case saas_cat when 0 then 'Sanctioned' else 'Tolerated' end
) as saas_cat_str,
  sum(total_app) as total_app
from
```

###(select app_s, saas_s%10 as saas_cat, sum(sentbyte+rcvdbyte) as bandwidth, count(*) as
total_app from (select unnest(apps) as app_s, unnest(saasinfo) as saas_s, coalesce(sentbyte,
0) as sentbyte, coalesce(rcvdbyte, 0) as rcvdbyte from \$log where \$filter and apps is not
null) t where saas_s>=10 group by app_s, saas_cat order by bandwidth desc)### t where saas_
cat in (0, 2) group by saas cat order by saas cat

Dataset Name	Description	Log Category
saas-SaaS-App-Users-vs-Others	Number of Users of SaaS Apps vs Others	traffic

```
select
  (
    case is_saas when 0 then 'Other Apps' else 'SaaS Apps' end
) as app_type,
```

```
count(distinct saasuser) as total_user
from
   ###(select saasuser, saas_s/10 as is_saas from (select coalesce(nullifna(`user`), nullifna
(`clouduser`), nullifna(`unauthuser`), srcname, ipstr(`srcip`)) as saasuser, unnest
(saasinfo) as saas_s from $log where $filter and apps is not null) t group by saasuser, is_
saas)### t group by app_type
```

Dataset Name	Description	Log Category
saas-SaaS-App-Users	Number of Users of SaaS Apps	traffic

```
select
  (
    case saas_cat when 0 then 'Sanctioned' when 1 then 'Unsanctioned' else 'Others' end
) as app_type,
  count(distinct saasuser) as total_user
from
  ###(select saasuser, saas_s%10 as saas_cat from (select coalesce(nullifna(`user`),
nullifna(`clouduser`), nullifna(`unauthuser`), srcname, ipstr(`srcip`)) as saasuser, unnest
(saasinfo) as saas_s from $log where $filter and apps is not null) t where saas_s>=10 group
by saasuser, saas_cat)### t group by saas_cat order by saas_cat
```

Dataset Name	Description	Log Category
saas-Top-SaaS-User-by-Bandwidth- Session	Top SaaS Users by Bandwidth and Session	traffic

```
select
  saasuser,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
  sum(sessions) as sessions,
  sum(session_block) as session_block,
  (
    sum(sessions) - sum(session_block)
  ) as session_pass,
  count(distinct app_s) as total_app
from
```

###(select saasuser, app_s, sum(sentbyte+rcvdbyte) as bandwidth, sum(rcvdbyte) as traffic_
in, sum(sentbyte) as traffic_out, count(*) as sessions, sum(is_blocked) as session_block
from (select coalesce(nullifna(`user`), nullifna(`clouduser`), nullifna(`unauthuser`),
srcname, ipstr(`srcip`)) as saasuser, unnest(apps) as app_s, unnest(saasinfo) as saas_s,
coalesce(sentbyte, 0) as sentbyte, coalesce(rcvdbyte, 0) as rcvdbyte, (CASE WHEN
(logflag&2>0) THEN 1 ELSE 0 END) as is_blocked from \$log where \$filter and apps is not null)
t where saas_s>=10 group by saasuser, app_s order by bandwidth desc)### t group by saasuser
order by bandwidth desc

Dataset Name	Description	Log Category
saas-Top-Category-by-SaaS- Application-Usage	Top Categories by SaaS Application Usage	traffic

```
select
  app_cat,
  (
```

```
case saas_cat when 0 then 'Sanctioned' else 'Unsactioned' end
) as saas_cat_str,
count(distinct app_s) as total_app
from
###(select app_s, saas_s%10 as saas_cat from (select unnest(apps) as app_s, unnest
(saasinfo) as saas_s from $log where $filter and apps is not null) t where saas_s>=10 group
by app_s, saas_cat)### t1 inner join app_mdata t2 on t1.app_s=t2.name where saas_cat in (0,
1) group by app_cat, saas_cat order by total_app desc
```

Dataset Name	Description	Log Category
saas-Top-SaaS-Category-by-Number- of-User	Top SaaS Categories by Number of Users	traffic

```
select
  app_cat,
  (
    case saas_cat when 0 then 'Sanctioned' else 'Unsactioned' end
) as saas_cat_str,
  count(distinct saasuser) as total_user
from
  ###(select app_s, saas_s%10 as saas_cat, saasuser from (select unnest(apps) as app_s,
  unnest(saasinfo) as saas_s, coalesce(nullifna(`user`), nullifna(`clouduser`), nullifna
  (`unauthuser`), srcname, ipstr(`srcip`)) as saasuser from $log where $filter and apps is not
  null) t where saas_s>=10 group by app_s, saas_cat, saasuser order by saas_cat desc)### t1
  inner join app_mdata t2 on t1.app_s=t2.name where saas_cat in (0, 1) group by app_cat, saas_cat order by total_user desc
```

Dataset Name	Description	Log Category
saas-Top-User-by-Number-of-SaaS- Application	Top Users by Number of SaaS Applications	traffic

```
saasuser,
  (
    case saas_cat when 0 then 'Sanctioned' else 'Unsactioned' end
) as saas_cat_str,
  count(distinct app_s) as total_app
from
  ###(select app_s, saas_s%10 as saas_cat, saasuser from (select unnest(apps) as app_s,
  unnest(saasinfo) as saas_s, coalesce(nullifna(`user`), nullifna(`clouduser`), nullifna
  (`unauthuser`), srcname, ipstr(`srcip`)) as saasuser from $log where $filter and apps is not
  null) t where saas_s>=10 group by app_s, saas_cat, saasuser order by saas_cat desc)### t
  where saas cat in (0, 1) group by saasuser, saas cat order by total app desc
```

Dataset Name	Description	Log Category
saas-Top-SaaS-Application-by- Bandwidth-Session	Top SaaS Applications by Sessions and Bandwidth	traffic

```
select
  t2.id as app_id,
  app_s,
  app_cat,
  sum(bandwidth) as bandwidth,
```

select

```
sum(traffic_in) as traffic_in,
sum(traffic_out) as traffic_out,
sum(sessions) as sessions,
sum(session_block) as session_block,
(
    sum(sessions) - sum(session_block)
) as session_pass
from
    ###(select app_s, sum(sentbyte+rcvdbyte) as bandwidth, sum(rcvdbyte) as traffic_in, sum
(sentbyte) as traffic_out, count(*) as sessions, sum(is_blocked) as session_block from
(select unnest(apps) as app_s, unnest(saasinfo) as saas_s, coalesce(sentbyte, 0) as
sentbyte, coalesce(rcvdbyte, 0) as rcvdbyte, (CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END) as
is_blocked from $log where $filter and apps is not null) t where saas_s>=10 group by app_
s)### t1 inner join app_mdata t2 on t1.app_s=t2.name group by app_id, app_s, app_cat order
by bandwidth desc
```

Dataset Name	Description	Log Category
saas-Top-Tolerated-SaaS-Application- by-Bandwidth	Top Tolerated SaaS Applications by Bandwidth	traffic

```
select
 app s,
  sum(sentbyte + rcvdbyte) as bandwidth
    select
     unnest(apps) as app_s,
     unnest(saasinfo) as saas s,
      coalesce(sentbyte, 0) as sentbyte,
      coalesce(rcvdbyte, 0) as rcvdbyte
    from
     $log
    where
      and apps is not null
  ) t
where
 saas s = 12
group by
 app s
order by
 bandwidth desc
```

Dataset Name	Description	Log Category
saas-drilldown-Top-Tolerated-SaaS- Application	Top Tolerated SaaS Applications	traffic

```
select
  app_s,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
  sum(sessions) as sessions,
  sum(session block) as session block,
```

```
sum(sessions) - sum(session block)
) as session pass
```

###(select saasuser, app s, sum(sentbyte+rcvdbyte) as bandwidth, sum(rcvdbyte) as traffic in, sum(sentbyte) as traffic out, count(*) as sessions, sum(is blocked) as session block from (select coalesce(nullifna(`user`), nullifna(`clouduser`), nullifna(`unauthuser`), srcname, ipstr(`srcip`)) as saasuser, unnest(apps) as app s, unnest(saasinfo) as saas s, coalesce (sentbyte, 0) as sentbyte, coalesce (rcvdbyte, 0) as rcvdbyte, (CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END) as is blocked from \$log where \$filter and apps is not null) t where saas s=12 group by saasuser, app s order by bandwidth desc)### t where \$filterdrilldown group by app s order by bandwidth desc

Dataset Name	Description	Log Category
saas-Top-User-by-Tolerated-SaaS- Application-Drilldown	Top Users by Tolerated SaaS Applications	traffic

```
select
 saasuser,
 count (distinct app s) as total app
```

###(select saasuser, app s, sum(sentbyte+rcvdbyte) as bandwidth, sum(rcvdbyte) as traffic in, sum(sentbyte) as traffic out, count(*) as sessions, sum(is blocked) as session block from (select coalesce(nullifna(`user`), nullifna(`clouduser`), nullifna(`unauthuser`), srcname, ipstr(`srcip`)) as saasuser, unnest(apps) as app s, unnest(saasinfo) as saas s, coalesce (sentbyte, 0) as sentbyte, coalesce (rcvdbyte, 0) as rcvdbyte, (CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END) as is blocked from \$log where \$filter and apps is not null) t where saas s=12 group by saasuser, app s order by bandwidth desc)### t group by saasuser order by total app desc

Dataset Name	Description	Log Category
saas-drilldown-Top-File-Sharing- SaaS-Application-Detail	Top File Sharing SaaS Applications Detail	traffic

```
select
 saasuser,
 sum (bandwidth) as bandwidth,
  sum(traffic in) as traffic in,
  sum(traffic out) as traffic out,
 sum (sessions) as sessions,
 sum(session block) as session block,
   sum(sessions) - sum(session block)
 ) as session pass
```

###(select app_group_name(app_s) as app_group, saasuser, sum(sentbyte+rcvdbyte) as bandwidth, sum(rcvdbyte) as traffic in, sum(sentbyte) as traffic out, count(*) as sessions, sum(is blocked) as session block from (select coalesce(nullifna(`user`), nullifna (`clouduser`), nullifna(`unauthuser`), srcname, ipstr(`srcip`)) as saasuser, unnest(apps) as app s, unnest(saasinfo) as saas s, coalesce(sentbyte, 0) as sentbyte, coalesce(rcvdbyte, 0) as rcvdbyte, (CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END) as is blocked from \$log where \$filter and apps is not null) t where saas s>=10 group by app group, saasuser order by bandwidth desc) ### t where \$filter-drilldown group by saasuser order by sessions desc

Dataset Name	Description	Log Category
saas-Top-File-Sharing-SaaS- Application	Top File Sharing Applications	traffic

```
select
 t2.id as appid,
   case t2.risk when '5' then 'Critical' when '4' then 'High' when '3' then 'Medium' when
'2' then 'Info' else 'Low' end
 ) as risk,
 app group,
 bandwidth,
 traffic in,
 traffic out,
 sessions,
 session block,
 session pass,
 total user
from
   select
     app_group,
     count(distinct saasuser) as total_user,
     sum (bandwidth) as bandwidth,
      sum(traffic in) as traffic in,
     sum(traffic_out) as traffic out,
     sum(sessions) as sessions,
     sum(session block) as session block,
       sum(sessions) - sum(session block)
     ) as session pass
    from
      ###(select app_group_name(app_s) as app_group, saasuser, sum(sentbyte+rcvdbyte) as
```

###(select app_group_name(app_s) as app_group, saasuser, sum(sentbyte+rcvdbyte) as
bandwidth, sum(rcvdbyte) as traffic_in, sum(sentbyte) as traffic_out, count(*) as sessions,
sum(is_blocked) as session_block from (select coalesce(nullifna(`user`), nullifna
(`clouduser`), nullifna(`unauthuser`), srcname, ipstr(`srcip`)) as saasuser, unnest(apps) as
app_s, unnest(saasinfo) as saas_s, coalesce(sentbyte, 0) as sentbyte, coalesce(rcvdbyte, 0)
as rcvdbyte, (CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END) as is_blocked from \$log where
\$filter and apps is not null) t where saas_s>=10 group by app_group, saasuser order by
bandwidth desc)### t group by app_group) t1 inner join app_mdata t2 on lower(t1.app_
group)=lower(t2.name) where t2.app_cat='Storage.Backup' order by total_user desc, bandwidth
desc

Dataset Name	Description	Log Category
saas-Top-File-Sharing-SaaS- Application-Drilldown	Top File Sharing Applications	traffic

```
select
  t2.id as appid,
  (
    case t2.risk when '5' then 'Critical' when '4' then 'High' when '3' then 'Medium' when
'2' then 'Info' else 'Low' end
  ) as risk,
  app_group,
```

```
bandwidth,
  traffic in,
  traffic out,
  sessions,
 session block,
 session pass,
 total user
from
    select
     app group,
     count (distinct saasuser) as total user,
     sum (bandwidth) as bandwidth,
     sum(traffic in) as traffic in,
     sum(traffic out) as traffic out,
     sum(sessions) as sessions,
     sum(session block) as session block,
       sum(sessions) - sum(session block)
      ) as session pass
    from
```

###(select app_group_name(app_s) as app_group, saasuser, sum(sentbyte+rcvdbyte) as
bandwidth, sum(rcvdbyte) as traffic_in, sum(sentbyte) as traffic_out, count(*) as sessions,
sum(is_blocked) as session_block from (select coalesce(nullifna(`user`), nullifna
(`clouduser`), nullifna(`unauthuser`), srcname, ipstr(`srcip`)) as saasuser, unnest(apps) as
app_s, unnest(saasinfo) as saas_s, coalesce(sentbyte, 0) as sentbyte, coalesce(rcvdbyte, 0)
as rcvdbyte, (CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END) as is_blocked from \$log where
\$filter and apps is not null) t where saas_s>=10 group by app_group, saasuser order by
bandwidth desc)### t group by app_group) t1 inner join app_mdata t2 on lower(t1.app_
group)=lower(t2.name) where t2.app_cat='Storage.Backup' order by total_user desc, bandwidth
desc

Dataset Name	Description	Log Category
aware-Device-By-Location	Device by Location	traffic

```
select
  'All' : :text as country,
  count(distinct devid) as device_count
from
  ###(select devid from $log where $filter group by devid)### t
```

Dataset Name	Description	Log Category
aware-Network-Endpoint-Devices	Endpoint Devices on Network	

```
select
  category,
  total_num
from
  (
    select
    'Seen Devices' as category,
    1 as idx,
    count(distinct epname) as total_num
  from
```

```
(
    select
      epname,
     map_dev.devid,
     map dev.vd,
     max(lastseen) as itime
      $ADOM ENDPOINT t
      inner join $ADOM_EPEU_DEVMAP map_dev on t.epid = map_dev.epid
    where
      $filter - drilldown
      and epname is not null
    group by
     epname,
     map dev.devid,
     map_dev.vd
 ) t
where
 $filter
 and $filter - drilldown
union all
select
 'New Devices' as category,
 2 as idx,
 count(distinct epname) as total_num
from
   select
     epname,
     map dev.devid,
     map dev.vd,
     min(firstseen) as itime
    from
      $ADOM ENDPOINT t
      inner join $ADOM_EPEU_DEVMAP map_dev on t.epid = map_dev.epid
      epname is not null
    group by
      epname,
     map_dev.devid,
     map_dev.vd
  ) t
where
 $filter
 and $filter - drilldown
union all
select
  'Unseen Devices' as category,
 3 as idx,
 count(distinct t1.epname) as total num
  $ADOM ENDPOINT t1
where
 not exists (
   select
      1
```

```
from
            select
              epname,
              map dev.devid,
              map dev.vd,
              max(lastseen) as itime
            from
              $ADOM ENDPOINT t
              inner join $ADOM_EPEU_DEVMAP map_dev on t.epid = map_dev.epid
              epname is not null
            group by
              epname,
              map dev.devid,
              map dev.vd
          ) t2
        where
          $filter
          and $filter - drilldown
          and t1.epname = t2.epname
  ) t
order by
  idx
```

```
    Dataset Name
    Description
    Log Category

    aware-New-Endpoint-Devices
    New Endpoint Devices
```

```
table if exists devmap tmp; create temporary table devmap tmp as (
    select
      epid,
     max(euid) as max_euid
      $ADOM EPEU DEVMAP
    where
     $filter - drilldown
     and euid >= 1024
   group by
      epid
  );
select
 timestamp,
 epname as hostname,
 max(osname) as osname,
 max(devtype) as devtype,
 max(srcip) as srcip,
  string_agg(distinct epname, ',') as user_agg
from
    select
      from_itime(itime) as timestamp,
      osname,
      epname,
```

```
epdevtype as devtype,
      epip as srcip,
      epid
    from
        select
         max(osname) as osname,
         max(epname) as epname,
         max(epdevtype) as epdevtype,
         max(epip) as epip,
         t.epid,
         map dev.devid,
         map dev.vd,
         min(firstseen) as itime
        from
          $ADOM ENDPOINT t
          inner join $ADOM_EPEU_DEVMAP map_dev on t.epid = map_dev.epid
          epname is not null
        group by
         epname,
         t.epid,
         map dev.devid,
         map_dev.vd
      ) t
   where
     $filter
     and $filter - drilldown
 inner join devmap tmp on devmap tmp.epid = t1.epid
 inner join $ADOM ENDUSER as teu on devmap tmp.max euid = teu.euid
group by
 timestamp,
 hostname
order by
 timestamp desc
```

Dataset Name	Description	Log Category
aware-New-Endpoint-Devices-Trend	New Endpoint Devices Trend	

```
select
  $flex_timescale(itime) as hodex,
  count(distinct epname) as total_num

from
  (
    select
    epname,
    map_dev.devid,
    map_dev.vd,
    min(firstseen) as itime
  from
    $ADOM_ENDPOINT t
    inner join $ADOM_EPEU_DEVMAP map_dev on t.epid = map_dev.epid
  where
    $filter - drilldown
```

```
and epname is not null
group by
epname,
map_dev.devid,
map_dev.vd
) t
where
$filter
and $filter - drilldown
group by
hodex
order by
hodex
```

Dataset Name	Description	Log Category
aware-Top-Endpoint-Operating- Systems	Top Endpoint Operating Systems	fct-traffic

```
select
  os1 as os,
  count(distinct hostname) as total_num
from
  ###(select split_part(os, ',', 1) as os1, hostname from $log where $filter and nullifna
(os) is not null group by os1, hostname)### t group by os order by total_num desc
```

Dataset Name	Description	Log Category
aware-Top-Endpoint-Applications- Windows	Top Endpoint Applications Windows	fct-traffic

```
select
    srcname1 as srcname,
    count(distinct hostname) as total_num
from
    ###(select split_part(srcname, '.', 1) as srcname1, hostname from $log where $filter and
nullifna(srcname) is not null and lower(os) like '%windows%' group by srcname, hostname)###
t group by srcname order by total num desc
```

Dataset Name	Description	Log Category
aware-Top-Endpoint-Applications-Mac	Top Endpoint Applications Mac	fct-traffic

```
select
   srcname1 as srcname,
   count(distinct hostname) as total_num
from
```

###(select split_part(srcname, '.', 1) as srcname1, hostname from \$log where \$filter and
nullifna(srcname) is not null and lower(os) like '%mac os%' group by srcname, hostname)### t
group by srcname order by total num desc

Dataset Name	Description	Log Category
aware-Top-SaaS-Application-by- Number-of-Users	Top SaaS Applications by Number of Users	traffic

```
select
  app_group,
  count(distinct saasuser) as total_user
from
  ###(select app_group_name(app_s) as app_group, saasuser from (select unnest(apps) as app_s, unnest(saasinfo) as saas_s, coalesce(nullifna(`user`), nullifna(`clouduser`), nullifna
(`unauthuser`), srcname, ipstr(`srcip`)) as saasuser from $log where $filter and
(logflag&1>0) and apps is not null) t where saas_s>=10 group by app_group, saasuser)### t
group by app_group order by total_user desc
```

Dataset Name	Description	Log Category
aware-Summary-Of-Changes	Summary of Changes	event
select		
<pre>regexp_replace(msg, '[^]*: count(*) as total num</pre>	3', '') as msg_trim,	
from		
\$log		
where		
\$filter		
and $logid_to_int(logid) = 44$	1547	
group by		
msg_trim		
order by		

Dataset Name	Description	Log Category
aware-Change-Details	Change Details	event

```
select
   $calendar_time as timestamp,
   `user`,
   ui,
   msg
from
   $log
where
   $filter
   and logid_to_int(logid) = 44547
order by
   timestamp desc
```

total_num desc

Dataset Name	Description	Log Category
aware-Vulnerabilities-By-Severity	Vulnerabilities by Security	fct-netscan

```
select
  vulnseverity,
  count(distinct vulnname) as vuln_num
from
```

###(select vulnseverity, vulnname from \$log where \$filter and nullifna(vulnname) is not
null and nullifna(vulnseverity) is not null group by vulnseverity, vulnname)### t group by
vulnseverity order by vuln num desc

Dataset Name	Description	Log Category
aware-Vulnerabilities-Trend	Vulnerabilities Trend	fct-netscan

```
select
  $flex_timescale(timestamp) as timescale,
  sum(critical) as critical,
  sum(high) as high,
  sum(medium) as medium,
  sum(low) as low
from
```

###(select \$flex_timestamp as timestamp, sum(case when lower(vulnseverity) = 'critical'
then 1 else 0 end) as critical, sum(case when lower(vulnseverity) = 'high' then 1 else 0
end) as high, sum(case when lower(vulnseverity) = 'medium' then 1 else 0 end) as medium, sum
(case when lower(vulnseverity) = 'notice' then 1 else 0 end) as Low from \$log where \$filter
group by timestamp order by timestamp desc)### t group by timescale order by timescale

Dat	taset Name	Description	Log Category
awa	are-Top-Critical-Vulnerabilities	Top Critical Vulnerabilities	fct-netscan

```
select
  vulnname,
  vulnseverity,
  vulncat,
  count(distinct hostname) as total_num
from
```

###(select hostname, vulnname, vulnseverity, vulncat, count(*) as total_num from \$log
where \$filter and nullifna(vulnname) is not null and vulnseverity='Critical' group by
hostname, vulnname, vulnseverity, vulncat order by total_num desc)### t group by vulnname,
vulnseverity, vulncat order by total num desc

Dataset Name	Description	Log Category
aware-Top-Vulnerabilities-Last-Period	Top Vulnerabilities Last Period	fct-netscan

```
select
  vulnname,
  vulnseverity,
  sev_num,
  vulncat,
  count(distinct hostname) as total_num
from
```

###(select hostname, vulnname, vulnseverity, (CASE vulnseverity WHEN 'Critical' THEN 5
WHEN 'High' THEN 4 WHEN 'Medium' THEN 3 WHEN 'Info' THEN 2 WHEN 'Low' THEN 1 ELSE 0 END) as
sev_num, vulncat, count(*) as total_num from \$log where \$pre_period \$filter and nullifna
(vulnname) is not null group by hostname, vulnname, vulnseverity, vulncat order by sev_num
desc, total_num desc)### t group by vulnname, vulnseverity, sev_num, vulncat order by sev_
num desc, total_num desc

Dataset Name	Description	Log Category
aware-Top-New-Vulnerabilities	Top New Vulnerabilities	fct-netscan

```
drop
  table if exists rpt_tmptbl_1;
```

```
drop
   table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
   vulnid,
   vulnname,
   vulnseverity,
   vulncat,
   hostname
from
```

###(select vulnid, vulnname, vulnseverity, vulncat, hostname from \$log where \$pre_period
\$filter and nullifna(vulnname) is not null group by vulnid, vulnname, vulnseverity, vulncat,
hostname)### t group by vulnid, vulnname, vulnseverity, vulncat, hostname; create temporary
table rpt_tmptbl_2 as select vulnid, vulnname, vulnseverity, vulncat, hostname from ###
(select vulnid, vulnname, vulnseverity, vulncat, hostname from \$log where \$filter and
nullifna(vulnname) is not null group by vulnid, vulnname, vulnseverity, vulncat,
hostname)### t group by vulnid, vulnname, vulnseverity, vulncat, hostname; select vulnname,
(case when vulnseverity='Critical' then 5 when vulnseverity='High' then 4 when
vulnseverity='Medium' then 3 when vulnseverity='Low' then 2 when vulnseverity='Info' then 1
else 0 end) as sev, vulnseverity, vulncat, count(distinct hostname) as host_num, cve_id from
rpt_tmptbl_2 t1 left join fct_mdata t2 on t1.vulnid=t2.vid::int where not exists (select 1
from rpt_tmptbl_1 where t1.vulnid=rpt_tmptbl_1.vulnid) group by vulnname, sev, vulnseverity,
vulncat, cve id order by sev desc, host num desc

Dataset Name	Description	Log Category
aware-Top-User-With-Critical- Vulnerabilities	Top Users with Critical Vulnerabilities	fct-netscan

```
select
 hostname,
  `user` as user src,
 vulnname,
 vulncat,
 count(*) as total num
from
  $log
where
 $filter
  and nullifna(`user`) is not null
  and vulnseverity = 'Critical'
group by
 hostname,
 user src,
 vulnname,
  vulncat
order by
  total num desc
```

Dataset Name	Description	Log Category
aware-Ingress-Data-Flow-By-Zone	Ingress Data Flow By Zone	traffic

```
select
  app,
  tag,
  sum(rcvdbyte) as rcvdbyte
```

from

###(select dvid, app, dstintf, sum(coalesce(rcvdbyte, 0)) as rcvdbyte from \$log where
\$filter group by dvid, app, dstintf having sum(coalesce(rcvdbyte, 0)) > 0 order by rcvdbyte
desc)### ttl inner join (select dvid, intfname, unnest(tags) as tag from intfinfo) tt2 on
ttl.dvid=tt2.dvid and ttl.dstintf=tt2.intfname group by app, tag order by rcvdbyte desc

Dataset Name	Description	Log Category	
aware-Egress-Data-Flow-By-Zone	Egress Data Flow By Zone	traffic	
select			
app, tag,			
<pre>sum(sentbyte) as sentbyte from</pre>			
<pre>###(select dvid, app, srcintf, sum(coalesce(sentbyte, 0)) as sentbyte from \$log where \$filter group by dvid, app, srcintf having sum(coalesce(sentbyte, 0)) > 0 order by sentbyte desc)### tt1 inner join (select dvid, intfname, unnest(tags) as tag from intfinfo) tt2 on</pre>			

Dataset Name	Description	Log Category
aware-Top-Device-Attack-Targets	Top Device Attack Targets	fct-netscan

tt1.dvid=tt2.dvid and tt1.srcintf=tt2.intfname group by app, tag order by sentbyte desc

```
select
  hostname,
  count(*) as total_num
from
  $log
where
  $filter
  and nullifna(hostname) is not null
  and nullifna(vulnname) is not null
group by
  hostname
order by
  total_num desc
```

Dataset Name	Description	Log Category
aware-Top-Attack-Targets	Top Attack Targets	fct-netscan

```
select
hostname,
srcip,
os,
vuln_num,
(
    CASE sevid WHEN 5 THEN 'Critical' WHEN 4 THEN 'High' WHEN 3 THEN 'Medium' WHEN '2' THEN
'Info' ELSE 'Low' END
) as vulnseverity,
sevid as severity_num,
left(cve_agg, 512) as cve_agg
from
    (
    select
```

```
hostname,
     max(srcip) as srcip,
     string agg(distinct os1, '/') as os,
      count (distinct vulnname) as vuln num,
     max(
        (
          CASE vulnseverity WHEN 'Critical' THEN 5 WHEN 'High' THEN 4 WHEN 'Medium' THEN 3
WHEN 'Info' THEN 2 WHEN 'Low' THEN 1 ELSE 0 END
      ) as sevid,
      string agg(distinct cve id, ',') as cve agg
```

###(select hostname, max(deviceip) as srcip, split_part(os, ',', 1) as os1, vulnname, vulnseverity, vulnid from \$log where \$filter and nullifna(vulnname) is not null and nullifna (vulnseverity) is not null group by hostname, os1, vulnname, vulnseverity, vulnid) ### t1 left join fct mdata t2 on t1.vulnid=t2.vid::int group by hostname) t order by severity num desc, vuln num desc

Dataset Name	Description	Log Category
aware-Threats-By-Severity	Threats by Severity	attack

```
select
 initcap(sev) as severity,
  sum(total num) as total num
from
```

###(select crlevel::text as sev, count(*) as total num from \$log-virus where \$filter and nullifna(virus) is not null and crlevel is not null group by sev order by total num desc) ### union all ###(select severity::text as sev, count(*) as total num from \$log-attack where \$filter and nullifna(attack) is not null and severity is not null group by sev order by total num desc) ### union all ###(select apprisk::text as sev, count(*) as total num from \$log-app-ctrl where \$filter and lower(appcat)='botnet' and apprisk is not null group by sev order by total num desc) ###) t group by severity order by total num desc

Dataset Name	Description	Log Category
aware-Threats-Type-By-Severity	Threats Type by Severity	virus

```
select
 threat type,
 sum(critical) as critical,
 sum (high) as high,
 sum (medium) as medium,
 sum(low) as low
from
```

###(select (case when eventtype='botnet' then 'Botnets' else 'Malware' end) as threat type, sum(case when crlevel = 'critical' then 1 else 0 end) as critical, sum(case when crlevel = 'high' then 1 else 0 end) as high, sum(case when crlevel = 'medium' then 1 else 0 end) as medium, sum(case when crlevel = 'low' then 1 else 0 end) as low from \$log-virus where \$filter and nullifna(virus) is not null group by threat type) ### union all ###(select 'Intrusions' as threat type, sum(case when severity = 'critical' then 1 else 0 end) as critical, sum(case when severity = 'high' then 1 else 0 end) as high, sum(case when severity = 'medium' then 1 else 0 end) as medium, sum(case when severity = 'low' then 1 else 0 end) as low from \$log-attack where \$filter and nullifna(attack) is not null group by threat

type) ### union all ###(select 'Botnets' as threat_type, sum(case when apprisk = 'critical' then 1 else 0 end) as critical, sum(case when apprisk = 'high' then 1 else 0 end) as high, sum(case when apprisk = 'medium' then 1 else 0 end) as medium, sum(case when apprisk = 'low' then 1 else 0 end) as low from \$log-app-ctrl where \$filter and lower(appcat)='botnet' group by threat type) ###) t group by threat type

Dataset Name	Description	Log Category
aware-Threats-By-Day	Threats by Day	virus
<pre>select daystamp, sum(total_num) as total_nu from /</pre>	m	
<pre>###(select \$day_of_week as daystamp, count(*) as total_num from \$log-virus where \$filte and nullifna(virus) is not null group by daystamp)### union all ###(select \$day_of_week as daystamp, count(*) as total_num from \$log-attack where \$filter and nullifna(attack) is not null group by daystamp)### union all ###(select \$day_of_week as daystamp, count(*) as total num from \$log-app-ctrl where \$filter and lower(appcat)='botnet' group by daystamp)###) t group by daystamp order by daystamp</pre>		

Dataset Name	Description	Log Category
aware-Threats-By-Day-Radar	Threats by Day	virus

```
select
 daystamp,
 sum(total num) as total num
from
```

###(select \$day_of_week as daystamp, count(*) as total_num from \$log-virus where \$filter and nullifna(virus) is not null group by daystamp) ### union all ###(select \$day_of_week as daystamp, count(*) as total num from \$log-attack where \$filter and nullifna(attack) is not null group by daystamp)### union all ###(select \$day_of_week as daystamp, count(*) as total_ num from \$log-app-ctrl where \$filter and lower(appcat)='botnet' group by daystamp)###) t group by daystamp order by daystamp

Dataset Name	Description	Log Category
aware-Count-Of-Malware-Events	Count of Malware Events	virus

```
select
 virus,
 count(*) as total_num
from
  $log
where
 $filter
 and nullifna(virus) is not null
group by
 virus
order by
 total num desc
```

Dataset Name	Description	Log Category
aware-Top-Malware-By-Count	Top Malware by Count	app-ctrl

```
select
  virus,
  malware_type,
  risk_level,
  count(distinct victim) as victim,
  count(distinct source) as source,
  sum(total_num) as total_num
from
  (
```

###(select app as virus, 'Botnet C&C' as malware_type, apprisk::text as risk_level, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source, (CASE WHEN direction='incoming' THEN srcip ELSE dstip END) as victim, count(*) as total num from \$logapp-ctrl where \$filter and lower(appcat)='botnet' and apprisk is not null group by app, malware type, apprisk, victim, source order by total num desc) ### union all ###(select virus, (case when eventtype='botnet' then 'Botnet C&C' else 'Virus' end) as malware type, crlevel::text as risk level, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source, (CASE WHEN direction='incoming' THEN srcip ELSE dstip END) as victim, count(*) as total num from \$log-virus where \$filter and nullifna(virus) is not null and crlevel is not null group by virus, malware type, crlevel, victim, source order by total num desc)### union all ###(select attack as virus, (case when eventtype='botnet' then 'Botnet C&C' else 'Virus' end) as malware type, crlevel::text as risk level, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source, (CASE WHEN direction='incoming' THEN srcip ELSE dstip END) as victim, count(*) as total num from \$log-attack where \$filter and (logflag&16>0) and crlevel is not null group by virus, malware type, crlevel, victim, source order by total num desc) ###) t group by virus, malware type, risk level order by total num desc

Dataset Name	Description	Log Category
aware-Top-Failed-Login-Attempts	Top Failed Login Attempts	event

```
select
  `user` as f user,
 ui,
 dstip,
 count(status) as total_failed
from
  $log
where
  $filter
  and nullifna(`user`) is not null
  and logid to int(logid) = 32002
group by
 ui,
  f user,
  dstip
order by
  total failed desc
```

Dataset Name	Description	Log Category
aware-Top-Failed-Authentication- Attempts	VPN failed logins	event

```
select
  f_user,
  tunneltype,
  sum(total_num) as total_num
from
###(select coalesce(nullifna(`xauthuser`), `user`) as f_user, tunneltype, count(*) as
total_num from $log where $filter and subtype='vpn' and (tunneltype='ipsec' or left
(tunneltype, 3)='ssl') and action in ('ssl-login-fail', 'ipsec-login-fail') and coalesce
(nullifna(`xauthuser`), nullifna(`user`)) is not null group by f_user, tunneltype)### t
group by f_user, tunneltype order by total_num desc
```

Dataset Name	Description	Log Category
aware-Top-Denied-Connections	Top Denied Connections	traffic

```
select
 coalesce(
   nullifna(`user`),
   ipstr(`srcip`)
 ) as user src,
 service || '(' || ipstr(srcip) || ')' as interface,
 dstip,
 count(*) as total num
from
  $log
where
 $filter
 and (
   logflag&1>0
 and action = 'deny'
group by
 user_src,
 interface,
 dstip
order by
 total num desc
```

Dataset Name	Description	Log Category
aware-Failed-Compliance-Checked- By-Device	Failed Compliance Checked by Device	event

```
select
  devid,
  'Failed' as results,
  count(distinct reason) as total_num
from
  ###(select devid, reason from $log where $filter and subtype='compliance-check' and
result='fail' group by devid, reason)### t group by devid, results order by total_num desc
```

Dataset Name	Description	Log Category
aware-loc-Blacklist-Summary	IOC Blacklist Summary	app-ctrl

```
drop
 table if exists tmp_ep_eu_map; create temporary table tmp_ep_eu_map as (
   select
     epid,
     euid
   from
     $ADOM EPEU DEVMAP
   where
     euid >= 1024
 );
select
 coalesce(
   nullifna(epname),
   nullifna(
     ipstr(`srcip`)
   ),
   'Unknown'
 ) as epname,
 user agg,
 sevid,
   CASE sevid WHEN 5 THEN 'Critical' WHEN 4 THEN 'High' WHEN 3 THEN 'Medium' WHEN '2' THEN
'Info' ELSE 'Low' END
 ) as severity,
 threats,
 bl_count as total_bl
from
   select
     th1.epid,
     srcip,
     sevid,
     bl count,
     threats
    from
      (
       select
         epid,
         srcip,
         max(verdict) + 1 as sevid,
          sum(bl_count) as bl_count
        from
              select
               epid,
                srcip,
                day_st as itime,
               bl count,
                verdict,
                unnest(dvid) as dvid s
                $ADOMTBL PLHD IOC VERDICT
              where
                bl count>0
```

```
union all
        (
          select
            epid,
            srcip,
           day_st as itime,
           bl count,
            verdict,
            unnest(dvid) as dvid_s
            $ADOMTBL PLHD INTERIM IOC VERDICT
            bl_count>0
        )
    ) tvdt
    inner join devtable ext td on td.dvid = tvdt.dvid s
  where
    $filter
    and $filter - drilldown
    and $dev_filter
  group by
    epid,
    srcip
) th1
inner join (
  select
    epid,
    string_agg(name, ',') as threats
  from
        select
          epid,
          thid
        from
              select
                epid,
                thid,
                itime,
                unnest(dvid) as dvid_s
              from
                  select
                    unnest(threatid) as thid,
                    day_st as itime,
                    dvid
                    $ADOMTBL_PLHD_IOC_VERDICT
                  where
                    bl count>0
                ) ta1
            union all
```

```
(
                      select
                        epid,
                        thid,
                        itime,
                        unnest(dvid) as dvid s
                      from
                        (
                          select
                            epid,
                            unnest(threatid) as thid,
                            day st as itime,
                            dvid
                          from
                            $ADOMTBL PLHD INTERIM IOC VERDICT
                            bl_count>0
                        ) ta2
                    )
                inner join devtable_ext td on td.dvid = t.dvid_s
              where
               $filter
               and $filter - drilldown
                and $dev_filter
              group by
                epid,
                thid
            ) thr
            inner join td threat name mdata tm on tm.id = thr.thid
          ) t
       group by
          epid
     ) th2 on th1.epid = th2.epid
 ) t1
 left join (
   select
     epid,
     string_agg(distinct euname, ',') as user_agg
     tmp_ep_eu_map tpu
     inner join $ADOM ENDUSER as teu on tpu.euid = teu.euid
   group by
     epid
 ) t2 on t2.epid = t1.epid
 inner join $ADOM_ENDPOINT as tep on tep.epid = t1.epid
order by
 total bl desc,
 sevid desc
```

Dataset Name	Description	Log Category
aware-loc-Potential-Breach-By-Day	IOC Potential Breach by Day	app-ctrl

```
select number,
```

```
day_st as itime
from
 (
   select
     count(epid) as number,
     to char(
       from itime(itime),
       'Day'
     ) as day_st
   from
       select
         epid,
         day_st as itime,
         unnest(dvid) as dvid s
          $ADOMTBL_PLHD_INTERIM_IOC_VERDICT
        where
         $filter - drilldown
          and cs count>0
        union all
         (
           select
             epid,
             day_st as itime,
             unnest(dvid) as dvid_s
              $ADOMTBL_PLHD_IOC_VERDICT
            where
             $filter - drilldown
             and cs count>0
          )
     ) t
      inner join devtable ext td on td.dvid = t.dvid s
     $filter
     and $filter - drilldown
   group by
     day_st
 ) tt
order by
 itime
```

Dataset Name	Description	Log Category
aware-loc-Potential-Breach-By-Day- Bar	IOC Potential Breach by Day	app-ctrl

```
select
  number,
  day_st as itime
from
  (
    select
    count(epid) as number,
    to_char(
```

```
from_itime(itime),
        'Day'
      ) as day_st
    from
      (
        select
         epid,
         day st as itime,
         unnest(dvid) as dvid_s
        from
          $ADOMTBL PLHD INTERIM IOC VERDICT
       where
         $filter - drilldown
          and cs_count>0
       union all
            select
              epid,
             day_st as itime,
              unnest(dvid) as dvid_s
              $ADOMTBL_PLHD_IOC_VERDICT
            where
             $filter - drilldown
              and cs_count>0
          )
      ) t
     inner join devtable_ext td on td.dvid = t.dvid_s
   where
     $filter
     and $filter - drilldown
   group by
     day_st
 ) tt
order by
 itime
```

Dataset Name	Description	Log Category
aware-loc-Suspicion-Summary	IOC Suspicion Summary	app-ctrl

```
select
  coalesce(
    nullifna(epname),
    nullifna(
       ipstr(`srcip`)
    ),
    'Unknown'
  ) as epname,
  cs_count as total_cs,
  cs_score as max_cs,
  verdict as max_verdict,
  threats
from
  (
    select
```

```
th1.epid,
 srcip,
 itime,
 cs count,
 verdict,
 cs score,
 threats
from
    select
      epid,
      srcip,
     min(itime) as itime,
      sum(cs_count) as cs_count,
     max(verdict) as verdict,
     max(cs_score) as cs_score
    from
          select
           epid,
            srcip,
           day_st as itime,
           cs_count,
           verdict,
            cs_score,
            unnest(dvid) as dvid s
            $ADOMTBL PLHD IOC VERDICT
          where
            $filter - drilldown
            and bl count = 0
            and cs_count>0
        union all
          (
            select
             epid,
             srcip,
             day_st as itime,
             cs_count,
              verdict,
             cs score,
              unnest(dvid) as dvid_s
              $ADOMTBL_PLHD_INTERIM_IOC_VERDICT
              $filter - drilldown
              and bl count = 0
              and cs_count>0
          )
      inner join devtable ext td on td.dvid = tvdt.dvid s
      $filter
      and $filter - drilldown
```

```
group by
    epid,
    srcip
) th1
inner join (
  select
   epid,
    string agg(name, ',') as threats
  from
        select
          epid,
          thid
        from
              select
                epid,
                thid,
                itime,
                unnest(dvid) as dvid_s
              from
                  select
                    epid,
                    unnest(threatid) as thid,
                    day_st as itime,
                    dvid
                    $ADOMTBL PLHD IOC VERDICT
                  where
                    bl count = 0
                    and cs count>0
                ) ta1
            )
            union all
              (
                select
                  epid,
                  thid,
                  itime,
                  unnest(dvid) as dvid_s
                from
                    select
                      unnest(threatid) as thid,
                      day st as itime,
                      dvid
                      $ADOMTBL_PLHD_INTERIM_IOC_VERDICT
                    where
                      bl count = 0
                      and cs_count>0
                  ) ta2
```

```
)
                ) tt1
                inner join devtable_ext td on td.dvid = tt1.dvid_s
              where
                $filter
                and $filter - drilldown
              group by
                epid,
                thid
            ) thr
            inner join td_threat_name_mdata tm on tm.id = thr.thid
        group by
          epid
     ) th2 on th1.epid = th2.epid
 inner join $ADOM ENDPOINT as tep on tep.epid = t.epid
order by
 max verdict desc,
 max cs desc,
 total_cs desc
```

Dataset Name	Description	Log Category
aware-Botnet-IP	Top Source IP Affected by Botnet	virus

```
select
 f user,
 source,
 string_agg(distinct `virus`, ',') as virus_agg,
 count (
   distinct ipstr(`victim`)
 ) as dstip_cnt,
 max(action) as action,
 sum(total_num) as total_num,
 min(
   from itime(first seen)
 ) as first_seen,
 max(
   from itime(last seen)
 ) as last seen
from
 ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f user, virus, (CASE WHEN
direction='incoming' THEN dstip ELSE srcip END) as source, (CASE WHEN direction='incoming'
THEN srcip ELSE dstip END) as victim, max(action) as action, count(*) as total num, min
(itime) as first seen, max(itime) as last seen from $log where $filter and logid in
('0202009248', '0202009249') and virus is not null group by f_user, virus, source, victim
```

Dataset Name	Description	Log Category
aware-Botnet-Domain	New Botnet Domains	dns

order by total num desc) ### t group by source, f user order by total num desc

```
select
botnet,
count(distinct `qname`) as qname_cnt,
```

```
count(
    distinct ipstr(`dstip`)
) as dnssvr_cnt,
sum(total_num) as total_num,
min(
    from_itime(first_seen)
) as first_seen,
max(
    from_itime(last_seen)
) as last_seen
from
    ###(select coalesce(`botnetdomain`, ipstr(`botnetip`)) as botnet, qname, dstip, count(*)
as total_num, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime))
as last_seen from $log where $filter and logid in ('1501054601', '1501054600') group by
botnet, qname, dstip order by total_num desc)### t group by botnet order by first_seen desc
```

Dataset Name	Description	Log Category
aware-High-Risk-URL-Category	Category of High Risk URLs	webfilter

```
select
  catdesc,
  string_agg(distinct hostname, ',') as hostname_agg,
  max(action) as action,
  sum(total_num) as total_num,
  min(
    from_itime(first_seen)
) as first_seen,
  max(
    from_itime(last_seen)
) as last_seen
from
  ###(select catdesc, hostname, max(action) as action, count(*) as total_num, min(itime) as
first_seen, max(itime) as last_seen from $log where $filter and cat in (26, 61, 86, 88, 90,
91, 93) group by catdesc, hostname order by total num desc)### t group by catdesc order by
```

Dataset Name	Description	Log Category
aware-Malicious-Files	Type of Malicious Files from AV and Sandbox	virus

```
select
  virus,
  left(url_agg, 1000) as url_agg,
  left(filename_agg, 1000) as filename_agg,
  quarskip,
  action,
  from_sandbox,
  total_num,
  first_seen,
  last_seen
from
  (
    select
    virus,
    string_agg(distinct url, '<br/>') as url_agg,
```

total num desc

```
string_agg(distinct filename, '<br/>') as filename_agg,
max(quarskip) as quarskip,
max(action) as action,
max(from_sandbox) as from_sandbox,
sum(total_num) as total_num,
min(
   from_itime(first_seen)
) as first_seen,
max(
   from_itime(last_seen)
) as last_seen
from
```

###(select virus, url, filename, max(quarskip) as quarskip, max(action) as action,
(case when logid in ('0211009234', '0211009235') then 1 else 0 end) as from_sandbox, count
(*) as total_num, min(itime) as first_seen, max(itime) as last_seen from \$log where \$filter
and virus is not null and logid in ('0211009234', '0201009235', '0211008192', '0211008193',
'0211008194', '0211008195') group by virus, url, filename, from_sandbox order by total_num
desc)### t group by virus) t order by total_num desc

Dataset Name	Description	Log Category
newthing-New-Users	New users	fct-traffic

```
drop
   table if exists rpt_tmptbl_1;
drop
   table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
   f_user,
   min(start_time) as start_time
from
```

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as f_user, min(dtime) as start_time
from \$log where \$pre_period \$filter group by f_user order by start_time desc)### t group by
f_user; create temporary table rpt_tmptbl_2 as select f_user, min(start_time) as start_time
from ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as f_user, min(dtime) as start_
time from \$log where \$filter group by f_user order by start_time desc)### t group by f_user;
select f_user, from_dtime(min(start_time)) as start_time from rpt_tmptbl_2 where f_user is
not null and not exists (select 1 from rpt_tmptbl_1 where rpt_tmptbl_2.f_user=rpt_tmptbl_
1.f_user) group by f_user order by start_time desc

Dataset Name	Description	Log Category
newthing-New-Devices	New devices	fct-traffic

```
drop
   table if exists rpt_tmptbl_1;
drop
   table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
   hostname,
   os,
   srcip,
   fctver
from
```

###(select hostname, os, srcip, fctver from \$log where \$pre_period \$filter and hostname is
not null group by hostname, os, srcip, fctver order by hostname) ### t group by hostname, os,

srcip, fctver; create temporary table rpt_tmptbl_2 as select hostname, os, srcip, fctver from ###(select hostname, os, srcip, fctver from \$log where \$filter and hostname is not null group by hostname, os, srcip, fctver order by hostname)### t group by hostname, os, srcip, fctver; select hostname, max(fctos_to_devtype(os)) as devtype, string_agg(distinct os, '/') as os_agg, string_agg(distinct ipstr(srcip), '/') as srcip_agg, string_agg(distinct fctver, '/') as fctver_agg from rpt_tmptbl_2 where not exists (select 1 from rpt_tmptbl_1 where rpt_tmptbl_2.hostname=rpt_tmptbl_1.hostname) group by hostname order by hostname

Dataset Name	Description	Log Category
newthing-New-Software-Installed	New software installed	fct-traffic

```
table if exists rpt_tmptbl_1;
drop
  table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
  srcproduct,
  hostname
from
```

###(select srcproduct, hostname from \$log where \$pre_period \$filter and nullifna
(srcproduct) is not null group by srcproduct, hostname order by srcproduct)### t group by
srcproduct, hostname; create temporary table rpt_tmptbl_2 as select srcproduct, hostname
from ###(select srcproduct, hostname from \$log where \$filter and nullifna(srcproduct) is not
null group by srcproduct, hostname order by srcproduct)### t group by srcproduct, hostname;
select srcproduct, string_agg(distinct hostname, ',') as host_agg from rpt_tmptbl_2 where
not exists (select 1 from rpt_tmptbl_1 where rpt_tmptbl_2.srcproduct=rpt_tmptbl_
1.srcproduct) group by srcproduct order by srcproduct

Dataset Name	Description	Log Category
newthing-New-Security-Threats	New security threats	virus

```
drop
   table if exists rpt_tmptbl_1;
drop
   table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
   threat_name,
   cat_id,
   source
from
   (
```

###(select app as threat_name, 1 as cat_id, (CASE WHEN direction='incoming' THEN dstip
ELSE srcip END) as source from \$log-app-ctrl where \$pre_period \$filter and nullifna(app) is
not null and lower(appcat)='botnet' group by threat_name, cat_id, source)### union all ###
(select virus as threat_name, 2 as cat_id, (CASE WHEN direction='incoming' THEN dstip ELSE
srcip END) as source from \$log-virus where \$pre_period \$filter and nullifna(virus) is not
null group by threat_name, cat_id, source)### union all ###(select attack as threat_name, 3
as cat_id, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source from \$logattack where \$pre_period \$filter and nullifna(attack) is not null group by threat_name, cat_
id, source)###) t; create temporary table rpt_tmptbl_2 as select daystamp, threat_name, cat_
id, source from (###(select \$DAY_OF_MONTH as daystamp, app as threat_name, 1 as cat_id,
(CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source from \$log-app-ctrl
where \$filter and nullifna(app) is not null and lower(appcat)='botnet' group by daystamp,
threat_name, cat_id, source order by daystamp)### union all ###(select \$DAY_OF_MONTH as

daystamp, virus as threat_name, 2 as cat_id, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source from \$log-virus where \$filter and nullifna(virus) is not null group by daystamp, threat_name, cat_id, source order by daystamp)### union all ###(select \$DAY_OF_MONTH as daystamp, attack as threat_name, 3 as cat_id, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source from \$log-attack where \$filter and nullifna(attack) is not null group by daystamp, threat_name, cat_id, source order by daystamp)###) t; select threat_name, (case cat_id when 1 then 'Botnet' when 2 then 'Malware' when 3 then 'Attack' end) as threat_cat, count(distinct source) as host_num, string_agg(distinct cve, ',') as cve_agg from rpt_tmptbl_2 left join ips_mdata t2 on rpt_tmptbl_2.threat_name=t2.name where not exists (select 1 from rpt_tmptbl_1 where rpt_tmptbl_2.threat_name=rpt_tmptbl_1.threat_name) group by threat name, threat cat order by host num desc

Dataset Name	Description	Log Category
newthing-dns-Botnet-Domain-IP	New Queried Botnet C&C Domains and IPs	dns

```
drop
   table if exists rpt_tmptbl_1;
drop
   table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
   domain,
   malware_type,
   action_s as action,
   srcip,
   sevid
from
```

###(select coalesce(botnetdomain, ipstr(botnetip)) as domain, cast('Botnet C&C' as char (32)) as malware type, (case when action='block' then 'Blocked' when action='redirect' then 'Redirected' else 'Passed' end) as action s, srcip, (CASE WHEN level IN ('critical', 'alert', 'emergency') THEN 5 WHEN level='error' THEN 4 WHEN level='warning' THEN 3 WHEN level='notice' THEN 2 ELSE 1 END) as sevid, coalesce(botnetdomain, ipstr(botnetip)) as sources s, count(*) as total num from \$log where \$pre period \$filter and (botnetdomain is not null or botnetip is not null) group by domain, action_s, srcip, sevid order by sevid desc) ### t group by domain, malware_type, action, srcip, sevid; create temporary table rpt_ tmptbl 2 as select domain, malware type, action s as action, srcip, sevid from ###(select coalesce (botnetdomain, ipstr(botnetip)) as domain, cast('Botnet C&C' as char(32)) as malware type, (case when action='block' then 'Blocked' when action='redirect' then 'Redirected' else 'Passed' end) as action s, srcip, (CASE WHEN level IN ('critical', 'alert', 'emergency') THEN 5 WHEN level='error' THEN 4 WHEN level='warning' THEN 3 WHEN level='notice' THEN 2 ELSE 1 END) as sevid, coalesce(botnetdomain, ipstr(botnetip)) as sources_s, count(*) as total_num from \$log where \$filter and (botnetdomain is not null or botnetip is not null) group by domain, action_s, srcip, sevid order by sevid desc)### t group by domain, malware type, action, srcip, sevid; select domain, srcip, sevid, (CASE sevid WHEN 5 THEN 'Critical' WHEN 4 THEN 'High' WHEN 3 THEN 'Medium' WHEN '2' THEN 'Info' ELSE 'Low' END) as severity from rpt tmptbl 2 where (domain is not null and not exists (select 1 from rpt tmptbl 1 where rpt tmptbl 2.domain=rpt tmptbl 1.domain)) or (srcip is not null and not exists (select 1 from rpt tmptbl 1 where rpt tmptbl 2.srcip=rpt tmptbl 1.srcip)) group by domain, srcip, sevid order by sevid desc, domain

Dataset Name	Description	Log Category
newthing-New-Security-Threats- Timeline	New security threats timeline	virus

```
drop
   table if exists rpt_tmptbl_1;
drop
   table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
   threat_name,
   cat_id,
   source
from
```

###(select app as threat name, 1 as cat id, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source from \$log-app-ctrl where \$pre period \$filter and nullifna(app) is not null and lower(appcat)='botnet' group by threat_name, cat_id, source)### union all ### (select virus as threat name, 2 as cat id, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source from \$log-virus where \$pre period \$filter and nullifna(virus) is not null group by threat name, cat id, source) ### union all ###(select attack as threat name, 3 as cat id, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source from \$logattack where \$pre period \$filter and nullifna(attack) is not null group by threat name, cat id, source) ###) t; create temporary table rpt tmptbl 2 as select timestamp, threat name, cat id, source from (###(select \$flex timestamp as timestamp, app as threat name, 1 as cat id, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source from \$log-app-ctrl where \$filter and nullifna(app) is not null and lower(appcat)='botnet' group by timestamp, threat name, cat id, source order by timestamp) ### union all ###(select \$flex timestamp as timestamp, virus as threat name, 2 as cat id, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source from \$log-virus where \$filter and nullifna(virus) is not null group by timestamp, threat name, cat id, source order by timestamp) ### union all ###(select \$flex timestamp as timestamp, attack as threat name, 3 as cat id, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source from \$log-attack where \$filter and nullifna(attack) is not null group by timestamp, threat name, cat id, source order by timestamp) ###) t; select \$flex datetime(timestamp) as timescale, count(distinct source) as host num, (case cat id when 1 then 'Botnet' when 2 then 'Malware' when 3 then 'Attack' end) as threat cat from rpt tmptbl 2 where not exists (select 1 from rpt tmptbl 1 where rpt tmptbl 2.threat name=rpt tmptbl 1.threat name) group by timescale, cat id order by timescale, cat id

Dataset Name	Description	Log Category
newthing-New-Vulnerability	New vulnerabilities	fct-netscan

```
drop
  table if exists rpt_tmptbl_1;
drop
  table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
  vulnid,
  vulnname,
  vulnseverity,
  vulncat,
  hostname
```

###(select vulnid, vulnname, vulnseverity, vulncat, hostname from \$log where \$pre_period
\$filter and nullifna(vulnname) is not null group by vulnid, vulnname, vulnseverity, vulncat,
hostname)### t group by vulnid, vulnname, vulnseverity, vulncat, hostname; create temporary
table rpt_tmptbl_2 as select vulnid, vulnname, vulnseverity, vulncat, hostname from ###
(select vulnid, vulnname, vulnseverity, vulncat, hostname from \$log where \$filter and
nullifna(vulnname) is not null group by vulnid, vulnname, vulnseverity, vulncat,

hostname) ### t group by vulnid, vulnname, vulnseverity, vulncat, hostname; select vulnname, (case when vulnseverity='Critical' then 5 when vulnseverity='High' then 4 when vulnseverity='Medium' then 3 when vulnseverity='Low' then 2 when vulnseverity='Info' then 1 else 0 end) as sev, vulnseverity, vulncat, count(distinct hostname) as host_num, cve_id from rpt_tmptbl_2 t1 left join fct_mdata t2 on t1.vulnid=t2.vid::int where not exists (select 1 from rpt_tmptbl_1 where t1.vulnid=rpt_tmptbl_1.vulnid) group by vulnname, sev, vulnseverity, vulncat, cve id order by sev desc, host num desc

Dataset Name	Description	Log Category
newthing-New-Vulnerability-Graph	New vulnerabilities (Graph)	fct-netscan

```
drop
   table if exists rpt_tmptbl_1;
drop
   table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
   vulnid,
   vulnname,
   vulnseverity,
   vulncat,
   hostname
from
```

###(select vulnid, vulnname, vulnseverity, vulncat, hostname from \$log where \$pre_period
\$filter and nullifna(vulnname) is not null group by vulnid, vulnname, vulnseverity, vulncat,
hostname)### t group by vulnid, vulnname, vulnseverity, vulncat, hostname; create temporary
table rpt_tmptbl_2 as select vulnid, vulnname, vulnseverity, vulncat, hostname from ###
(select vulnid, vulnname, vulnseverity, vulncat, hostname from \$log where \$filter and
nullifna(vulnname) is not null group by vulnid, vulnname, vulnseverity, vulncat,
hostname)### t group by vulnid, vulnname, vulnseverity, vulncat, hostname; select
vulnseverity, count (distinct vulnid) as vuln_num from rpt_tmptbl_2 where not exists (select
1 from rpt_tmptbl_1 where rpt_tmptbl_2.vulnid=rpt_tmptbl_1.vulnid) group by vulnseverity
order by (case when vulnseverity='Critical' then 5 when vulnseverity='High' then 4 when
vulnseverity='Medium' then 3 when vulnseverity='Low' then 2 when vulnseverity='Info' then 1
else 0 end) desc

Dataset Name	Description	Log Category
newthing-System-Alerts	System Alerts	local-event

```
select
  from_itime(itime) as timestamp,
  msg
from
  $log
where
  $filter
  and msg is not null
  and level = 'critical'
order by
  timestamp desc
```

Dataset Name	Description	Log Category
newthing-Configuration-Changes	Configuration Changes	event

```
select
  `user` as f_user,
  devid,
  from_dtime(dtime) as time_s,
  ui,
  msg
from
  $log
where
  $filter
  and cfgtid>0
order by
  time_s desc
```

Dataset Name	Description	Log Category
newthing-FortiGate-Upgrades	FortiGate Upgrades	event

```
select
 devid,
 from dtime(dtime) as time s,
 info[1] as intf,
 info[2] as prev ver,
 info[3] as new ver
from
   select
     devid,
     dtime,
     regexp matches (
      msg, 'from ([^ ]+) \\(([^ ]+) -> ([^)]+)\\)'
     ) as info
   from
     $log
   where
     $filter
     and action = 'restore-image'
 ) t
order by
 time_s desc
```

Dataset Name	Description	Log Category
newthing-User-Upgrades	User Upgrades	fct-event

```
drop
   table if exists rpt_tmptbl_1;
drop
   table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_1 as
select
   fgtserial,
   hostname,
   deviceip,
   os,
   dtime
from
```

###(select distinct on (fgtserial, hostname) fgtserial, hostname, deviceip, os, dtime from \$log where \$pre_period \$filter and hostname is not null order by fgtserial, hostname, dtime desc)### t; create temporary table rpt_tmptbl_2 as select fgtserial, hostname, deviceip, os, dtime from ###(select distinct on (fgtserial, hostname) fgtserial, hostname, deviceip, os, dtime from \$log where \$filter and hostname is not null order by fgtserial, hostname, dtime desc)### t; select distinct on (1, 2) t2.fgtserial as devid, t2.hostname, t2.deviceip, t1.os as prev_os, t2.os as cur_os, from_dtime(t1.dtime) as time_s from rpt_tmptbl_2 t2 inner join rpt_tmptbl_1 t1 on t2.fgtserial=t1.fgtserial and t2.hostname=t1.hostname and t2.os!=t1.os order by devid, t2.hostname, t1.dtime desc

Dataset Name	Description	Log Category
GTP-List-of-APN-Used	List of APNs Used	gtp

```
select
  apn,
  from_dtime(
    min(first_seen)
) as first_seen,
  from_dtime(
    max(last_seen)
) as last_seen
from
```

###(select apn, min(dtime) as first_seen, max(dtime) as last_seen from \$log where \$filter
and nullifna(apn) is not null group by apn order by last_seen desc)### t group by apn order
by last seen desc, first seen

Dataset Name	Description	Log Category
GTP-Top-APN-by-Bytes	Top APNs by Bytes	gtp

```
select
 apn,
  sum(
   coalesce(`u-bytes`, 0)
 ) as total_bytes
from
  $log
where
  $filter
  and nullifna(apn) is not null
 and status = 'traffic-count'
group by
  apn
having
   coalesce(`u-bytes`, 0)
 ) > 0
order by
 total bytes desc
```

Dataset Name	Description	Log Category
GTP-Top-APN-by-Duration	Top APNs by Duration	gtp

```
select
  apn,
  sum(
   coalesce(duration, 0)
  ) as total_dura
from
  $log
where
  $filter
  and nullifna(apn) is not null
  and status = 'traffic-count'
group by
  apn
having
 sum(
   coalesce(duration, 0)
 ) > 0
order by
  total_dura desc
```

Dataset Name	Description	Log Category
GTP-Top-APN-by-Packets	Top APNs by Number of Packets	gtp

```
select
  apn,
 sum(
   coalesce(`u-pkts`, 0)
 ) as total num
from
  $log
where
  $filter
  and nullifna(apn) is not null
  and status = 'traffic-count'
group by
  apn
having
  sum(
   coalesce(`u-pkts`, 0)
  ) > 0
order by
  total num desc
```

Dataset Name	Description	Log Category
Top10-dns-Botnet-Domain-IP	Top Queried Botnet C&C Domains and IPs	dns

```
select
  domain,
  malware_type,
  action,
  count(distinct srcip) as victims,
  count(distinct sources_s) as sources,
  sum(total_num) as total_num
from
```

###(select coalesce(botnetdomain, ipstr(botnetip)) as domain, qname, cast('Botnet C&C' as
char(32)) as malware_type, (case when action='block' then 'Blocked' when action='redirect'
then 'Redirected' else 'Passed' end) as action, srcip, (CASE WHEN level IN ('critical',
'alert', 'emergency') THEN 5 WHEN level='error' THEN 4 WHEN level='warning' THEN 3 WHEN
level='notice' THEN 2 ELSE 1 END) as sevid, coalesce(botnetdomain, ipstr(botnetip)) as
sources_s, count(*) as total_num from \$log where \$filter and (botnetdomain is not null or
botnetip is not null) group by domain, qname, action, srcip, sevid order by sevid desc)### t
group by domain, malware type, action order by total num desc

Dataset Name	Description	Log Category
dns-Botnet-Usage	Top Queried Botnet C&C Domains and IPs	dns

```
select
  domain,
  malware_type,
  action,
  count(distinct srcip) as victims,
  count(distinct sources_s) as sources,
  sum(total_num) as total_num
from
```

###(select coalesce(botnetdomain, ipstr(botnetip)) as domain, qname, cast('Botnet C&C' as
char(32)) as malware_type, (case when action='block' then 'Blocked' when action='redirect'
then 'Redirected' else 'Passed' end) as action, srcip, (CASE WHEN level IN ('critical',
'alert', 'emergency') THEN 5 WHEN level='error' THEN 4 WHEN level='warning' THEN 3 WHEN
level='notice' THEN 2 ELSE 1 END) as sevid, coalesce(botnetdomain, ipstr(botnetip)) as
sources_s, count(*) as total_num from \$log where \$filter and (botnetdomain is not null or
botnetip is not null) group by domain, qname, action, srcip, sevid order by sevid desc)### t
group by domain, malware_type, action order by total_num desc

Dataset Name	Description	Log Category
Dns-Detected-Botnet	Top Queried Botnet C&C Domains and IPs	dns

```
select
  domain,
  malware_type,
  action,
  count(distinct srcip) as victims,
  count(distinct sources_s) as sources,
  sum(total_num) as total_num
from
```

###(select coalesce(botnetdomain, ipstr(botnetip)) as domain, qname, cast('Botnet C&C' as
char(32)) as malware_type, (case when action='block' then 'Blocked' when action='redirect'
then 'Redirected' else 'Passed' end) as action, srcip, (CASE WHEN level IN ('critical',
'alert', 'emergency') THEN 5 WHEN level='error' THEN 4 WHEN level='warning' THEN 3 WHEN
level='notice' THEN 2 ELSE 1 END) as sevid, coalesce(botnetdomain, ipstr(botnetip)) as
sources_s, count(*) as total_num from \$log where \$filter and (botnetdomain is not null or
botnetip is not null) group by domain, qname, action, srcip, sevid order by sevid desc)### t
group by domain, malware type, action order by total num desc

Dataset Name	Description	Log Category
dns-Botnet-Domain-IP	Queried Botnet C&C Domains and IPs	dns

```
select
  domain,
  srcip,
  sevid,
  (
    CASE sevid WHEN 5 THEN 'Critical' WHEN 4 THEN 'High' WHEN 3 THEN 'Medium' WHEN '2' THEN
'Info' ELSE 'Low' END
) as severity
from
  ###(select coalesce(botnetdomain, ipstr(botnetip)) as domain, qname, cast('Botnet C&C' as char(32)) as malware_type, (case when action='block' then 'Blocked' when action='redirect'
then 'Redirected' else 'Passed' end) as action, srcip, (CASE WHEN level IN ('critical',
'alert', 'emergency') THEN 5 WHEN level='error' THEN 4 WHEN level='warning' THEN 3 WHEN
level='notice' THEN 2 ELSE 1 END) as sevid, coalesce(botnetdomain, ipstr(botnetip)) as
sources_s, count(*) as total_num from $log where $filter and (botnetdomain is not null or
botnetip is not null) group by domain, qname, action, srcip, sevid order by sevid desc)### t
group by domain, srcip, sevid order by sevid desc, domain
```

Dataset Name	Description	Log Category
dns-High-Risk-Source	High Risk Sources	dns

```
select
    srcip,
    sum(total_num) as total_num,
    sum(
        case when sevid = 5 then total_num else 0 end
) as num_cri,
    sum(
        case when sevid = 4 then total_num else 0 end
) as num_hig,
    sum(
        case when sevid = 3 then total_num else 0 end
) as num_med
from
```

###(select srcip, (CASE WHEN level IN ('critical', 'alert', 'emergency') THEN 5 WHEN
level='error' THEN 4 WHEN level='warning' THEN 3 WHEN level='notice' THEN 2 ELSE 1 END) as
sevid, count(*) as total_num from \$log where \$filter and srcip is not null group by srcip,
sevid order by total_num desc) ### t where sevid>=3 group by srcip having sum(total_num)>0
order by total_num desc

Dataset Name	Description	Log Category
dns-DNS-Request-Over-Time	DNS Request Over Time	dns

```
select
  $flex_timescale(timestamp) as timescale,
  sum(
    case when sevid = 5 then total_num else 0 end
) as num_cri,
  sum(
    case when sevid = 4 then total_num else 0 end
) as num_hig,
  sum(
    case when sevid = 3 then total_num else 0 end
) as num med,
```

```
sum(
   case when sevid = 2 then total_num else 0 end
) as num_inf,
sum(
   case when sevid = 1 then total_num else 0 end
) as num_low
from
   ###(select $flex_timestamp as timestamp, (CASE WHEN level IN ('critical', 'alert',
'emergency') THEN 5 WHEN level='error' THEN 4 WHEN level='warning' THEN 3 WHEN
level='notice' THEN 2 ELSE 1 END) as sevid, count(*) as total_num from $log where $filter
group by timestamp, sevid order by total_num desc)### t group by timescale order by
timescale
```

Dataset Name	Description	Log Category
dns-Top-Queried-Domain	Top Queried Domain	dns

```
select
   qname,
   count(*) as total_num
from
   $log
where
   $filter
   and qname is not null
group by
   qname
order by
   total_num desc
```

Dataset Name	Description	Log Category
dns-Top-Domain-Lookup-Failure-Bar	Top Domain Lookup Failures	dns

```
select
 qname,
 srcip,
 count(*) as total num
from
  $log
where
 $filter
 and gname is not null
 and (
   action = 'block'
   or logid to int(logid) = 54200
group by
 qname,
 srcip
order by
 total_num desc
```

Dataset Name	Description	Log Category
dns-Top-Domain-Lookup-Failure- Table	Top Domain Lookup Failures	dns

```
select
 qname,
 srcip,
 count(*) as total_num
  $log
where
 $filter
 and qname is not null
 and (
   action = 'block'
   or logid_to_int(logid) = 54200
group by
 qname,
 srcip
order by
 total_num desc
```

Dataset Name	Description	Log Category
dns-Query-Timeout	Query Timeout	dns

```
select
    srcip,
    qname,
    count(*) as total_num
from
    $log
where
    $filter
    and srcip is not null
    and logid_to_int(logid) = 54200
group by
    qname,
    srcip
order by
    total num desc
```

Dataset Name	Description	Log Category
dns-Blocked-Query	Blocked Queries	dns

```
select
   srcip,
   msg,
   count(*) as total_num
from
   $log
where
   $filter
```

```
and srcip is not null
and action = 'block'
group by
    srcip,
    msg
order by
    total num desc
```

 Dataset Name
 Description
 Log Category

 perf-stat-cpu-usage-drilldown
 Fortigate resource detail timeline
 event

```
select
 hodex,
 cast(
   sum(cpu ave)/ count(*) as decimal(6, 0)
 ) as cpu ave,
 cast(
   sum(mem_ave)/ count(*) as decimal(6, 0)
 ) as mem_ave,
 cast(
   sum(disk ave) / count(*) as decimal(6, 0)
 ) as disk ave,
 cast(
   sum(log rate) / count(*) as decimal(10, 2)
 ) as log rate,
 cast(
   sum(sessions)/ count(*) as decimal(10, 0)
 ) as sessions,
 cast(
   sum(sent kbps) / count(*) as decimal(10, 0)
 ) as sent kbps,
   sum(recv kbps) / count(*) as decimal(10, 0)
 ) as recv_kbps,
 cast(
   sum(transmit kbps)/ count(*) as decimal(10, 0)
 ) as transmit_kbps,
 max(mem_peak) as mem_peak,
 max(disk_peak) as disk_peak,
 max(cpu_peak) as cpu_peak,
 max(lograte_peak) as lograte_peak,
 max(session peak) as session peak,
 max(transmit kbps peak) as transmit kbps peak,
 cast(
   sum(cps ave)/ count(*) as decimal(10, 0)
 ) as cps ave,
 max(cps peak) as cps peak
from
   select
     hodex,
     devid,
     get fgt role(devid, slot) as role,
        sum(cpu ave) / count(*) as decimal(6, 0)
```

```
) as cpu_ave,
 cast(
   sum(mem ave) / count(*) as decimal(6, 0)
 ) as mem ave,
   sum(disk ave) / count(*) as decimal(6, 0)
 ) as disk ave,
 cast(
   sum(log rate) as decimal(10, 2)
 ) as log rate,
 cast(
   sum(sessions) as decimal(10, 0)
 ) as sessions,
 cast(
   sum(sent kbps) as decimal(10, 0)
 ) as sent kbps,
 cast(
   sum(recv kbps) as decimal(10, 0)
 ) as recv kbps,
   sum(transmit_kbps) as decimal(10, 0)
 ) as transmit_kbps,
 max(mem peak) as mem peak,
 max(disk peak) as disk peak,
 max(cpu_peak) as cpu_peak,
 cast(
   max(lograte peak) as decimal(10, 2)
 ) as lograte peak,
 max(session peak) as session peak,
 max(transmit kbps peak) as transmit kbps peak,
   sum(cps ave) as decimal(10, 0)
 ) as cps ave,
 sum(cps peak) as cps peak
from
  (
     $flex timescale(timestamp) as hodex,
     devid,
      slot,
      sum(total_cpu) / sum(count) cpu ave,
      sum(total mem) / sum(count) as mem ave,
      sum(total_disk)/ sum(count) as disk_ave,
       total trate + total erate + total orate
      )/ 100.00 / sum(count) as log rate,
      sum(totalsession) / sum(count) as sessions,
      sum(sent) / sum(count) as sent_kbps,
      sum(recv) / sum(count) as recv kbps,
      sum(sent + recv) / sum(count) as transmit kbps,
     max(mem peak) as mem peak,
     max(disk peak) as disk peak,
     max(cpu peak) as cpu peak,
     max(lograte peak) / 100.00 as lograte peak,
     max(session peak) as session peak,
      max(transmit peak) as transmit kbps peak,
```

```
sum(cps) / sum(count) as cps ave,
          max(cps_peak) as cps_peak
        from
          ###(select $flex timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as
total trate, sum(coalesce(erate, 0)) as total erate, sum(coalesce(orate, 0)) as total orate,
min(itime) as first seen, max(itime) as last seen, sum(coalesce(mem, 0)) as total mem, max
(coalesce(mem, 0)) as mem peak, sum(coalesce(disk, 0)) as total disk, max(coalesce(disk, 0))
as disk peak, sum(coalesce(cpu, 0)) as total cpu, max(coalesce(cpu, 0)) as cpu peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session peak, sum(cast
(coalesce(split part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split
part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split part(bandwidth,
'/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps peak,
count (*) as count from $log where $filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total mem desc) ### t where $filter-drilldown group by
hodex, devid, slot) t group by hodex, devid, role) t group by hodex order by hodex
```

Dataset NameDescriptionLog Categoryperf-stat-mem-usage-drilldownFortigate resource detail timelineevent

```
select
 hodex,
 cast(
   sum(cpu ave) / count(*) as decimal(6, 0)
 ) as cpu ave,
 cast(
   sum(mem ave) / count(*) as decimal(6, 0)
 ) as mem_ave,
    sum(disk ave) / count(*) as decimal(6, 0)
  ) as disk ave,
 cast(
   sum(log rate) / count(*) as decimal(10, 2)
  ) as log rate,
   sum(sessions)/ count(*) as decimal(10, 0)
  ) as sessions,
  cast(
   sum(sent kbps) / count(*) as decimal(10, 0)
  ) as sent kbps,
  cast(
   sum(recv kbps)/ count(*) as decimal(10, 0)
  ) as recv kbps,
 cast(
   sum(transmit kbps)/ count(*) as decimal(10, 0)
  ) as transmit kbps,
 max(mem peak) as mem peak,
 max(disk peak) as disk peak,
 max(cpu peak) as cpu peak,
 max(lograte peak) as lograte peak,
 max(session peak) as session peak,
 max(transmit kbps peak) as transmit kbps peak,
  cast(
    sum(cps ave) / count(*) as decimal(10, 0)
```

```
) as cps_ave,
 max(cps_peak) as cps_peak
from
   select
     hodex,
     devid,
     get fgt role(devid, slot) as role,
       sum(cpu ave) / count(*) as decimal(6, 0)
     ) as cpu ave,
     cast(
       sum(mem ave) / count(*) as decimal(6, 0)
     ) as mem ave,
       sum(disk ave) / count(*) as decimal(6, 0)
     ) as disk ave,
     cast(
       sum(log rate) as decimal(10, 2)
     ) as log rate,
     cast(
       sum(sessions) as decimal(10, 0)
     ) as sessions,
       sum(sent_kbps) as decimal(10, 0)
     ) as sent_kbps,
     cast(
       sum(recv kbps) as decimal(10, 0)
     ) as recv kbps,
     cast(
       sum(transmit kbps) as decimal(10, 0)
     ) as transmit kbps,
     max(mem peak) as mem peak,
     max(disk peak) as disk peak,
     max(cpu peak) as cpu peak,
     cast(
      max(lograte peak) as decimal(10, 2)
     ) as lograte peak,
     max(session peak) as session peak,
     max(transmit_kbps_peak) as transmit_kbps_peak,
     cast(
       sum(cps ave) as decimal(10, 0)
     ) as cps ave,
     sum(cps_peak) as cps_peak
    from
          $flex_timescale(timestamp) as hodex,
          devid,
          slot,
          sum(total_cpu) / sum(count) cpu_ave,
          sum(total mem) / sum(count) as mem ave,
          sum(total disk) / sum(count) as disk ave,
            total trate + total erate + total orate
          )/ 100.00 / sum(count) as log rate,
```

```
sum(totalsession) / sum(count) as sessions,
sum(sent) / sum(count) as sent_kbps,
sum(recv) / sum(count) as recv_kbps,
sum(sent + recv) / sum(count) as transmit_kbps,
max(mem_peak) as mem_peak,
max(disk_peak) as disk_peak,
max(cpu_peak) as cpu_peak,
max(lograte_peak) / 100.00 as lograte_peak,
max(session_peak) as session_peak,
max(transmit_peak) as transmit_kbps_peak,
sum(cps) / sum(count) as cps_ave,
max(cps_peak) as cps_peak
rom
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as
total_trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate,
min(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth,
''/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t where \$filter-drilldown group by
hodex, devid, slot) t group by hodex, devid, role) t group by hodex order by hodex

Dataset Na	ame	Description	Log Category
perf-stat-dis	sk-usage-drilldown	Fortigate resource detail timeline	event

```
select
 hodex,
 cast(
   sum(cpu ave)/ count(*) as decimal(6, 0)
 ) as cpu ave,
 cast(
   sum(mem ave) / count(*) as decimal(6, 0)
  ) as mem ave,
  cast(
   sum(disk_ave) / count(*) as decimal(6, 0)
  ) as disk ave,
   sum(log_rate) / count(*) as decimal(10, 2)
  ) as log rate,
  cast(
   sum(sessions)/ count(*) as decimal(10, 0)
  ) as sessions.
   sum(sent kbps)/ count(*) as decimal(10, 0)
 ) as sent kbps,
  cast (
   sum(recv kbps)/ count(*) as decimal(10, 0)
  ) as recv kbps,
  cast(
```

```
sum(transmit kbps)/ count(*) as decimal(10, 0)
 ) as transmit kbps,
 max(mem_peak) as mem_peak,
 max(disk_peak) as disk_peak,
 max(cpu peak) as cpu peak,
 max(lograte peak) as lograte peak,
 max(session peak) as session peak,
 max(transmit kbps peak) as transmit kbps peak,
   sum(cps ave)/ count(*) as decimal(10, 0)
 ) as cps ave,
 max(cps peak) as cps peak
from
   select
     hodex,
     devid,
     get fgt role(devid, slot) as role,
       sum(cpu ave) / count(*) as decimal(6, 0)
     ) as cpu_ave,
     cast(
       sum(mem ave) / count(*) as decimal(6, 0)
     ) as mem ave,
     cast(
       sum(disk ave) / count(*) as decimal(6, 0)
     ) as disk ave,
       sum(log rate) as decimal(10, 2)
     ) as log rate,
       sum(sessions) as decimal(10, 0)
     ) as sessions,
     cast(
       sum(sent kbps) as decimal(10, 0)
     ) as sent kbps,
     cast(
       sum(recv kbps) as decimal(10, 0)
     ) as recv kbps,
     cast(
       sum(transmit kbps) as decimal(10, 0)
     ) as transmit kbps,
     max(mem peak) as mem peak,
     max(disk_peak) as disk_peak,
     max(cpu_peak) as cpu_peak,
     cast(
       max(lograte peak) as decimal(10, 2)
     ) as lograte_peak,
     max(session peak) as session peak,
     max(transmit kbps peak) as transmit kbps peak,
     cast(
       sum(cps ave) as decimal(10, 0)
     ) as cps ave,
     sum(cps peak) as cps peak
    from
      (
```

```
select
  $flex timescale(timestamp) as hodex,
  devid,
  slot,
  sum(total_cpu) / sum(count) cpu_ave,
  sum(total mem) / sum(count) as mem ave,
  sum(total disk) / sum(count) as disk ave,
  sum(
   total trate + total erate + total orate
  )/ 100.00 / sum(count) as log rate,
  sum(totalsession) / sum(count) as sessions,
  sum(sent) / sum(count) as sent kbps,
  sum(recv) / sum(count) as recv kbps,
  sum(sent + recv) / sum(count) as transmit kbps,
  max(mem_peak) as mem peak,
  max(disk peak) as disk peak,
  max(cpu peak) as cpu peak,
  max(lograte peak) / 100.00 as lograte peak,
  max(session peak) as session peak,
 max(transmit peak) as transmit kbps peak,
  sum(cps) / sum(count) as cps_ave,
 max(cps_peak) as cps_peak
from
```

###(select \$flex timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min(itime) as first seen, max(itime) as last seen, sum(coalesce(mem, 0)) as total mem, max (coalesce(mem, 0)) as mem peak, sum(coalesce(disk, 0)) as total disk, max(coalesce(disk, 0)) as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu peak, max (coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte peak, sum(coalesce (totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session peak, sum(cast (coalesce(split part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split part(bandwidth, '/', 1), '0') as integer)+cast(coalesce(split part(bandwidth, '/', 2), '0') as integer)) as transmit peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps peak, count (*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group by timestamp, devid, slot order by total mem desc) ### t where \$filter-drilldown group by hodex, devid, slot) t group by hodex, devid, role) t group by hodex order by hodex

Dataset Name	Description	Log Category
perf-stat-sessions-drilldown	Fortigate resource detail timeline	event

```
select
 hodex,
   sum(cpu ave)/ count(*) as decimal(6, 0)
 ) as cpu ave,
   sum(mem ave) / count(*) as decimal(6, 0)
 ) as mem ave,
  cast(
   sum(disk ave) / count(*) as decimal(6, 0)
  ) as disk ave,
   sum(log rate) / count(*) as decimal(10, 2)
  ) as log rate,
```

```
cast(
   sum(sessions)/ count(*) as decimal(10, 0)
 ) as sessions,
 cast(
   sum(sent kbps)/ count(*) as decimal(10, 0)
 ) as sent kbps,
   sum(recv kbps)/ count(*) as decimal(10, 0)
 ) as recv kbps,
 cast(
   sum(transmit kbps)/ count(*) as decimal(10, 0)
 ) as transmit kbps,
 max(mem_peak) as mem_peak,
 max(disk peak) as disk peak,
 max(cpu peak) as cpu peak,
 max(lograte peak) as lograte peak,
 max(session_peak) as session_peak,
 max(transmit_kbps_peak) as transmit_kbps_peak,
 cast(
   sum(cps ave)/ count(*) as decimal(10, 0)
 ) as cps_ave,
 max(cps_peak) as cps_peak
from
   select
     hodex,
     devid,
     get fgt role(devid, slot) as role,
       sum(cpu ave) / count(*) as decimal(6, 0)
     ) as cpu ave,
     cast(
       sum(mem ave) / count(*) as decimal(6, 0)
     ) as mem ave,
       sum(disk ave) / count(*) as decimal(6, 0)
     ) as disk ave,
     cast(
       sum(log rate) as decimal(10, 2)
     ) as log_rate,
     cast(
       sum(sessions) as decimal(10, 0)
     ) as sessions,
     cast(
       sum(sent kbps) as decimal(10, 0)
     ) as sent kbps,
     cast(
       sum(recv_kbps) as decimal(10, 0)
     ) as recv kbps,
       sum(transmit kbps) as decimal(10, 0)
     ) as transmit kbps,
     max(mem peak) as mem peak,
     max(disk peak) as disk peak,
     max(cpu peak) as cpu peak,
     cast(
```

```
max(lograte peak) as decimal(10, 2)
  ) as lograte_peak,
 max(session peak) as session peak,
 max(transmit kbps peak) as transmit kbps peak,
 cast(
   sum(cps ave) as decimal(10, 0)
 ) as cps ave,
 sum(cps peak) as cps peak
from
   select
      $flex timescale(timestamp) as hodex,
      devid,
      slot,
      sum(total cpu) / sum(count) cpu ave,
      sum(total mem) / sum(count) as mem ave,
      sum(total disk) / sum(count) as disk ave,
       total trate + total erate + total orate
      )/ 100.00 / sum(count) as log_rate,
      sum(totalsession)/ sum(count) as sessions,
      sum(sent) / sum(count) as sent kbps,
      sum(recv) / sum(count) as recv kbps,
      sum(sent + recv) / sum(count) as transmit kbps,
      max(mem peak) as mem_peak,
      max(disk_peak) as disk_peak,
      max(cpu peak) as cpu peak,
      max(lograte peak) / 100.00 as lograte peak,
     max(session peak) as session peak,
     max(transmit peak) as transmit kbps peak,
      sum(cps) / sum(count) as cps ave,
     max(cps peak) as cps peak
    from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as
total_trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate,
min(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth,
''', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t where \$filter-drilldown group by
hodex, devid, slot) t group by hodex, devid, role) t group by hodex order by hodex

Dataset Name	Description	Log Category
perf-stat-lograte-drilldown	Fortigate resource detail timeline	event

```
select
hodex,
cast(
   sum(cpu ave) / count(*) as decimal(6, 0)
```

```
) as cpu_ave,
 cast(
   sum(mem ave) / count(*) as decimal(6, 0)
 ) as mem ave,
 cast(
   sum(disk ave) / count(*) as decimal(6, 0)
 ) as disk ave,
   sum(log_rate) / count(*) as decimal(10, 2)
 ) as log_rate,
   sum(sessions)/ count(*) as decimal(10, 0)
 ) as sessions,
 cast(
   sum(sent kbps)/ count(*) as decimal(10, 0)
 ) as sent kbps,
 cast(
   sum(recv kbps) / count(*) as decimal(10, 0)
  ) as recv kbps,
 cast(
   sum(transmit_kbps)/ count(*) as decimal(10, 0)
 ) as transmit_kbps,
 max (mem peak) as mem peak,
 max(disk_peak) as disk_peak,
 max(cpu_peak) as cpu_peak,
 max(lograte_peak) as lograte_peak,
 max(session peak) as session peak,
 max(transmit kbps peak) as transmit kbps peak,
 cast(
   sum(cps ave) / count(*) as decimal(10, 0)
 ) as cps ave,
 max(cps peak) as cps peak
from
   select
     hodex,
     devid,
     get fgt role(devid, slot) as role,
       sum(cpu ave) / count(*) as decimal(6, 0)
     ) as cpu_ave,
     cast(
       sum(mem ave) / count(*) as decimal(6, 0)
     ) as mem_ave,
     cast(
       sum(disk ave) / count(*) as decimal(6, 0)
     ) as disk_ave,
     cast(
       sum(log rate) as decimal(10, 2)
     ) as log rate,
     cast(
       sum(sessions) as decimal(10, 0)
     ) as sessions,
       sum(sent kbps) as decimal(10, 0)
     ) as sent kbps,
```

```
sum(recv kbps) as decimal(10, 0)
      ) as recv kbps,
      cast(
        sum(transmit kbps) as decimal(10, 0)
      ) as transmit kbps,
     max(mem peak) as mem_peak,
     max(disk peak) as disk peak,
     max(cpu peak) as cpu peak,
     cast(
       max(lograte peak) as decimal(10, 2)
     ) as lograte peak,
     max(session peak) as session peak,
     max(transmit kbps peak) as transmit kbps peak,
        sum(cps ave) as decimal(10, 0)
      ) as cps ave,
      sum(cps peak) as cps peak
    from
        select
          $flex timescale(timestamp) as hodex,
          slot,
          sum(total_cpu)/ sum(count) cpu_ave,
          sum(total mem) / sum(count) as mem ave,
          sum(total disk) / sum(count) as disk ave,
          sum(
            total trate + total erate + total orate
          )/ 100.00 / sum(count) as log rate,
          sum(totalsession) / sum(count) as sessions,
          sum(sent) / sum(count) as sent kbps,
          sum(recv) / sum(count) as recv kbps,
          sum(sent + recv) / sum(count) as transmit kbps,
          max(mem peak) as mem peak,
          max(disk peak) as disk peak,
          max(cpu peak) as cpu peak,
          max(lograte_peak) / 100.00 as lograte peak,
          max(session peak) as session peak,
          max(transmit peak) as transmit kbps peak,
          sum(cps)/ sum(count) as cps ave,
          max(cps peak) as cps peak
          ###(select $flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as
total trate, sum(coalesce(erate, 0)) as total erate, sum(coalesce(orate, 0)) as total orate,
min(itime) as first seen, max(itime) as last seen, sum(coalesce(mem, 0)) as total mem, max
(coalesce(mem, 0)) as mem peak, sum(coalesce(disk, 0)) as total disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_
part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split part(bandwidth,
'/', 1), '0') as integer)+cast(coalesce(split part(bandwidth, '/', 2), '0') as integer)) as
transmit peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps peak,
count (*) as count from $log where $filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total mem desc)### t where $filter-drilldown group by
```

hodex, devid, slot) t group by hodex, devid, role) t group by hodex order by hodex

Dataset Name	Description	Log Category
perf-stat-connections-drilldown	Fortigate resource detail timeline	event

```
select
 hodex,
 cast(
   sum(cpu ave) / count(*) as decimal(6, 0)
 ) as cpu ave,
 cast(
   sum(mem ave) / count(*) as decimal(6, 0)
  ) as mem ave,
  cast(
    sum(disk ave) / count(*) as decimal(6, 0)
  ) as disk ave,
  cast(
    sum(log_rate)/ count(*) as decimal(10, 2)
  ) as log_rate,
  cast(
   sum(sessions)/ count(*) as decimal(10, 0)
  ) as sessions,
  cast(
   sum(sent kbps) / count(*) as decimal(10, 0)
  ) as sent kbps,
  cast(
   sum(recv kbps) / count(*) as decimal(10, 0)
  ) as recv kbps,
  cast(
   sum(transmit kbps) / count(*) as decimal(10, 0)
  ) as transmit kbps,
  max (mem peak) as mem peak,
 max(disk_peak) as disk_peak,
 max(cpu_peak) as cpu_peak,
 max(lograte peak) as lograte peak,
 max(session peak) as session peak,
 max(transmit_kbps_peak) as transmit_kbps_peak,
 cast(
   sum(cps ave) / count(*) as decimal(10, 0)
 ) as cps_ave,
 max(cps_peak) as cps_peak
from
    select
     hodex,
     devid,
     get fgt role(devid, slot) as role,
     cast(
       sum(cpu ave) / count(*) as decimal(6, 0)
      ) as cpu ave,
        sum(mem ave) / count(*) as decimal(6, 0)
      ) as mem ave,
      cast(
        sum(disk ave) / count(*) as decimal(6, 0)
```

```
) as disk ave,
      cast (
        sum(log_rate) as decimal(10, 2)
      ) as log rate,
        sum(sessions) as decimal(10, 0)
      ) as sessions,
       sum(sent kbps) as decimal(10, 0)
      ) as sent kbps,
      cast(
       sum(recv kbps) as decimal(10, 0)
      ) as recv kbps,
      cast(
       sum(transmit kbps) as decimal(10, 0)
      ) as transmit kbps,
      max(mem peak) as mem peak,
      max(disk peak) as disk peak,
      max(cpu peak) as cpu peak,
      cast(
       max(lograte_peak) as decimal(10, 2)
      ) as lograte_peak,
      max(session peak) as session peak,
      max(transmit kbps peak) as transmit kbps peak,
       sum(cps ave) as decimal(10, 0)
      ) as cps ave,
      sum(cps peak) as cps peak
    from
        select
          $flex timescale(timestamp) as hodex,
          devid,
          slot,
          sum(total cpu) / sum(count) cpu ave,
          sum(total_mem) / sum(count) as mem_ave,
          sum(total disk) / sum(count) as disk ave,
          sum(
           total trate + total erate + total orate
          )/ 100.00 / sum(count) as log rate,
          sum(totalsession) / sum(count) as sessions,
          sum(sent) / sum(count) as sent kbps,
          sum(recv) / sum(count) as recv kbps,
          sum(sent + recv)/ sum(count) as transmit_kbps,
          max(mem peak) as mem peak,
          max(disk peak) as disk peak,
          max(cpu peak) as cpu peak,
          max(lograte_peak) / 100.00 as lograte_peak,
          max(session peak) as session peak,
          max(transmit peak) as transmit kbps peak,
          sum(cps) / sum(count) as cps ave,
          max(cps peak) as cps peak
        from
          ###(select $flex timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as
total trate, sum(coalesce(erate, 0)) as total erate, sum(coalesce(orate, 0)) as total orate,
min(itime) as first seen, max(itime) as last seen, sum(coalesce(mem, 0)) as total mem, max
```

(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0)) as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max (coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce (totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast (coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split_part(bandwidth, '/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak, count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group by timestamp, devid, slot order by total_mem desc)### t where \$filter-drilldown group by hodex, devid, slot) t group by hodex order by hodex

Dataset Name	Description	Log Category
perf-stat-bandwidth-drilldown	Fortigate resource detail timeline	event

```
select
 hodex,
  cast(
   sum(cpu ave) / count(*) as decimal(6, 0)
 ) as cpu ave,
   sum(mem ave) / count(*) as decimal(6, 0)
 ) as mem ave,
 cast(
   sum(disk ave) / count(*) as decimal(6, 0)
  ) as disk ave,
 cast(
   sum(log rate) / count(*) as decimal(10, 2)
 ) as log rate,
 cast (
   sum(sessions)/ count(*) as decimal(10, 0)
  ) as sessions,
  cast(
   sum(sent kbps) / count(*) as decimal(10, 0)
  ) as sent kbps,
   sum(recv kbps) / count(*) as decimal(10, 0)
  ) as recv kbps,
  cast(
   sum(transmit kbps) / count(*) as decimal(10, 0)
  ) as transmit_kbps,
 max (mem peak) as mem peak,
 max(disk peak) as disk peak,
 max(cpu peak) as cpu peak,
 max(lograte_peak) as lograte peak,
 max(session peak) as session peak,
 max(transmit kbps peak) as transmit kbps peak,
 cast(
   sum(cps ave) / count(*) as decimal(10, 0)
 ) as cps ave,
 max(cps peak) as cps peak
from
   select
     hodex,
```

```
get fgt role(devid, slot) as role,
 cast(
   sum(cpu ave) / count(*) as decimal(6, 0)
 ) as cpu ave,
 cast(
   sum(mem ave) / count(*) as decimal(6, 0)
 ) as mem ave,
   sum(disk ave) / count(*) as decimal(6, 0)
 ) as disk ave,
 cast(
   sum(log rate) as decimal(10, 2)
 ) as log rate,
 cast(
   sum(sessions) as decimal(10, 0)
 ) as sessions,
 cast(
   sum(sent kbps) as decimal(10, 0)
 ) as sent kbps,
 cast(
   sum(recv kbps) as decimal(10, 0)
 ) as recv kbps,
   sum(transmit_kbps) as decimal(10, 0)
 ) as transmit kbps,
 max(mem peak) as mem peak,
 max(disk peak) as disk peak,
 max(cpu peak) as cpu peak,
 cast(
   max(lograte peak) as decimal(10, 2)
 ) as lograte peak,
 max(session peak) as session peak,
 max(transmit kbps peak) as transmit kbps peak,
   sum(cps_ave) as decimal(10, 0)
 ) as cps ave,
 sum(cps peak) as cps peak
from
      $flex timescale(timestamp) as hodex,
     devid,
      slot,
      sum(total_cpu) / sum(count) cpu_ave,
      sum(total mem) / sum(count) as mem ave,
      sum(total disk) / sum(count) as disk ave,
       total trate + total erate + total orate
      )/ 100.00 / sum(count) as log_rate,
      sum(totalsession) / sum(count) as sessions,
      sum(sent) / sum(count) as sent kbps,
      sum(recv) / sum(count) as recv kbps,
      sum(sent + recv) / sum(count) as transmit kbps,
     max(mem peak) as mem peak,
      max(disk peak) as disk peak,
```

```
max(cpu peak) as cpu peak,
          max(lograte peak) / 100.00 as lograte peak,
          max(session peak) as session peak,
          max(transmit peak) as transmit kbps peak,
          sum(cps)/ sum(count) as cps ave,
         max(cps_peak) as cps_peak
          ###(select $flex timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as
total trate, sum(coalesce(erate, 0)) as total erate, sum(coalesce(orate, 0)) as total orate,
min(itime) as first seen, max(itime) as last seen, sum(coalesce(mem, 0)) as total mem, max
(coalesce(mem, 0)) as mem peak, sum(coalesce(disk, 0)) as total disk, max(coalesce(disk, 0))
as disk peak, sum(coalesce(cpu, 0)) as total cpu, max(coalesce(cpu, 0)) as cpu peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session peak, sum(cast
(coalesce(split part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split
part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split part(bandwidth,
'/', 1), '0') as integer)+cast(coalesce(split part(bandwidth, '/', 2), '0') as integer)) as
transmit peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps peak,
count (*) as count from $log where $filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total mem desc) ### t where $filter-drilldown group by
```

Dataset Name	Description	Log Category
perf-stat-usage-summary-average	Fortigate resource summary view	event

hodex, devid, slot) t group by hodex, devid, role) t group by hodex order by hodex

```
select
 devid,
 get fgt role(devid, slot) as role,
 cast (
   sum(cpu ave)/ count(*) as decimal(6, 0)
 ) as cpu ave,
  cast(
   sum(mem ave) / count(*) as decimal(6, 0)
 ) as mem ave,
  cast(
   sum(disk ave) / count(*) as decimal(6, 0)
  ) as disk ave,
  cast(
   sum(log rate) as decimal(10, 2)
  ) as log rate,
 cast(
   sum(sessions) as decimal(10, 0)
  ) as sessions,
 cast(
   sum(sent kbps) as decimal(10, 0)
  ) as sent kbps,
   sum(recv kbps) as decimal(10, 0)
  ) as recv kbps,
  cast(
   sum(transmit kbps) as decimal(10, 0)
  ) as transmit kbps,
 max (mem peak) as mem peak,
 max(disk peak) as disk peak,
 max(cpu peak) as cpu peak,
```

```
cast(
   max(lograte_peak) as decimal(10, 2)
  ) as lograte peak,
 max(session peak) as session peak,
 max(transmit kbps peak) as transmit kbps peak
from
    select
     devid,
     slot,
     sum(total cpu) / sum(count) as cpu ave,
      sum(total mem) / sum(count) as mem ave,
      sum(total disk) / sum(count) as disk ave,
       total trate + total erate + total orate
     )/ 100.00 / sum(count) as log rate,
      sum(totalsession) / sum(count) as sessions,
      sum(sent) / sum(count) as sent kbps,
      sum(recv) / sum(count) as recv kbps,
      sum(sent + recv) / sum(count) as transmit kbps,
     max(mem peak) as mem peak,
     max(disk peak) as disk peak,
     max(cpu peak) as cpu peak,
     max(lograte peak) / 100.00 as lograte peak,
     max(session peak) as session_peak,
     max(transmit peak) as transmit kbps peak
      ###(select $flex timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as
total trate, sum(coalesce(erate, 0)) as total erate, sum(coalesce(orate, 0)) as total orate,
min(itime) as first seen, max(itime) as last seen, sum(coalesce(mem, 0)) as total mem, max
(coalesce(mem, 0)) as mem peak, sum(coalesce(disk, 0)) as total disk, max(coalesce(disk, 0))
as disk peak, sum(coalesce(cpu, 0)) as total cpu, max(coalesce(cpu, 0)) as cpu peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_
part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split_part(bandwidth,
'/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps peak,
```

Dataset Name	Description	Log Category
perf-stat-usage-summary-peak	Fortigate resource summary view	event

count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total mem desc)### t group by devid, slot) t group by

```
select
  devid,
  get_fgt_role(devid, slot) as role,
  cast(
    sum(cpu_ave) / count(*) as decimal(6, 0)
) as cpu_ave,
  cast(
    sum(mem_ave) / count(*) as decimal(6, 0)
) as mem_ave,
  cast(
```

devid, role order by devid, role

```
sum(disk ave) / count(*) as decimal(6, 0)
  ) as disk ave,
  cast(
    sum(log rate) as decimal(10, 2)
  ) as log rate,
  cast(
   sum(sessions) as decimal(10, 0)
  ) as sessions,
   sum(sent kbps) as decimal(10, 0)
  ) as sent kbps,
  cast(
   sum(recv_kbps) as decimal(10, 0)
  ) as recv kbps,
 cast(
   sum(transmit kbps) as decimal(10, 0)
  ) as transmit kbps,
 max (mem peak) as mem peak,
 max(disk peak) as disk peak,
 max(cpu peak) as cpu peak,
 cast(
  max(lograte peak) as decimal(10, 2)
 ) as lograte peak,
 max(session peak) as session peak,
 max(transmit_kbps_peak) as transmit_kbps_peak
from
   select
     devid,
     slot,
     sum(total cpu) / sum(count) as cpu ave,
     sum(total mem) / sum(count) as mem ave,
     sum(total disk)/ sum(count) as disk ave,
     sum(
        total trate + total erate + total orate
      )/ 100.00 / sum(count) as log_rate,
      sum(totalsession) / sum(count) as sessions,
      sum(sent) / sum(count) as sent kbps,
      sum(recv) / sum(count) as recv kbps,
     sum(sent + recv) / sum(count) as transmit kbps,
     max(mem peak) as mem peak,
     max(disk peak) as disk peak,
     max(cpu peak) as cpu peak,
     max(lograte_peak) / 100.00 as lograte_peak,
     max(session peak) as session peak,
     max(transmit peak) as transmit kbps peak
    from
      ###(select $flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as
total trate, sum(coalesce(erate, 0)) as total erate, sum(coalesce(orate, 0)) as total orate,
min(itime) as first seen, max(itime) as last seen, sum(coalesce(mem, 0)) as total mem, max
(coalesce(mem, 0)) as mem peak, sum(coalesce(disk, 0)) as total disk, max(coalesce(disk, 0))
as disk peak, sum(coalesce(cpu, 0)) as total cpu, max(coalesce(cpu, 0)) as cpu peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session peak, sum(cast
(coalesce(split part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split
part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split part(bandwidth,
```

'/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak, count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group by timestamp, devid, slot order by total_mem desc)### t group by devid, slot) t group by devid, role order by devid, role

Dataset Name	Description	Log Category
perf-stat-usage-details-drilldown- master	Fortigate resource summary view	event

```
select
 devid,
 get_fgt_role(devid, slot) as role,
   sum(cpu ave)/ count(*) as decimal(6, 0)
 ) as cpu ave,
 cast(
   sum(mem ave) / count(*) as decimal(6, 0)
 ) as mem ave,
 cast(
   sum(disk ave) / count(*) as decimal(6, 0)
  ) as disk ave,
 cast(
   sum(log rate) as decimal(10, 2)
 ) as log rate,
   sum(sessions) as decimal(10, 0)
 ) as sessions,
 cast(
   sum(sent kbps) as decimal(10, 0)
  ) as sent kbps,
  cast(
   sum(recv kbps) as decimal(10, 0)
 ) as recv kbps,
 cast(
   sum(transmit kbps) as decimal(10, 0)
 ) as transmit kbps,
 max(mem peak) as mem_peak,
 max(disk peak) as disk peak,
 max(cpu peak) as cpu peak,
  max(lograte peak) as decimal(10, 2)
 ) as lograte peak,
 max(session peak) as session peak,
 max(transmit kbps peak) as transmit kbps peak
from
   select
     devid,
     slot,
     sum(total cpu) / sum(count) as cpu ave,
     sum(total mem) / sum(count) as mem ave,
     sum(total disk) / sum(count) as disk ave,
        total_trate + total_erate + total_orate
```

```
)/ 100.00 / sum(count) as log_rate,
sum(totalsession)/ sum(count) as sessions,
sum(sent)/ sum(count) as sent_kbps,
sum(recv)/ sum(count) as recv_kbps,
sum(sent + recv)/ sum(count) as transmit_kbps,
max(mem_peak) as mem_peak,
max(disk_peak) as disk_peak,
max(cpu_peak) as cpu_peak,
max(lograte_peak)/ 100.00 as lograte_peak,
max(session_peak) as session_peak,
max(transmit_peak) as transmit_kbps_peak
from
###(select Sflex timestamp as timestamp, device
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as
total_trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate,
min(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth,
'/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by devid, slot) t group by
devid, role order by devid, role

Dataset Name	Description	Log Category
incident-Incident-Count-by-Status	Incident status distribution	

```
select
  status,
  count(*) as cnt
from
  $incident
where
  $filter - drilldown
group by
  status
order by
  status
```

Dataset Name	Description	Log Category
incident-Incident-Count-by-Status- Donut	Incident status distribution	

```
select
  status,
  count(*) as cnt
from
  $incident
where
  $filter - drilldown
group by
```

```
status
order by
status
```

```
Dataset Name Description Log Category
```

incident-Open-Incident-Count-Timeline Incident count by status over time

```
select
  $flex_timescale(agg_time) as hodex,
  max(num_sta_draft) as num_sta_draft,
  max(num_sta_analysis) as num_sta_analysis,
  max(num_sta_response) as num_sta_response,
  max(num_sta_closed) as num_sta_closed,
  max(num_sta_cancelled) as num_sta_cancelled
from
  $incident_history
where
  $filter - drilldown
  and $cust_time_filter(agg_time)
group by
  hodex
order by
  hodex
```

Dataset Name	Description	Log Category
incident-Closed-Incident-Count- Timeline	Incident count by status over time	

```
select
   $flex_timescale(agg_time) as hodex,
   max(num_sta_draft) as num_sta_draft,
   max(num_sta_analysis) as num_sta_analysis,
   max(num_sta_response) as num_sta_response,
   max(num_sta_closed) as num_sta_closed,
   max(num_sta_cancelled) as num_sta_cancelled
from
   $incident_history
where
   $filter - drilldown
   and $cust_time_filter(agg_time)
group by
   hodex
order by
   hodex
```

Dataset Name	Description	Log Category
Top-10-Apps-by-Bandwidth	Top applications by bandwidth usage	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic out) as traffic out,
```

```
sum(sessions) as sessions
from
   ###(select app_group_name(app) as app_group, appcat, service, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from $log where $filter and (logflag&(1|32)>0) and nullifna(app) is not null
group by app_group, appcat, service order by bandwidth desc)### t group by app_group having
sum(bandwidth)>0 order by bandwidth desc
```

Dataset Name	Description	Log Category
Top-10-User-by-Bandwidth	Top users by bandwidth usage	traffic

```
select
  coalesce(
   nullifna(`user`),
   nullifna(`unauthuser`),
   ipstr(`srcip`)
  ) as user_src,
  srcip,
  sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) as bandwidth,
  sum(
   coalesce (rcvdbyte, 0)
  ) as traffic in,
  sum(
   coalesce(sentbyte, 0)
  ) as traffic out
from
  $log
where
  $filter
  and (
   logflag&1>0
  and srcip is not null
group by
  user src,
  srcip
having
  sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) > 0
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
Top-10-Applications-by-Number-of- Users	Top Applications by number of users	traffic

```
select
  app_group_name(app) as app_group,
  count(distinct user_src) as number
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
app, appcat from \$log where \$filter and (logflag&1>0) and nullifna(app) is not null group by
user_src, app, appcat)### t group by app_group order by number desc

Dataset Name	Description	Log Category
Top-10-User-by-Session	Top user by session count	traffic

```
select
  user_src,
  sum(sessions) as sessions
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
count(*) as sessions from \$log where \$filter and (logflag&1>0) group by user_src order by
sessions desc)### t group by user_src order by sessions desc

Dataset Name	Description	Log Category
Top-10-Apps-by-Session	Top applications by bandwidth usage	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
  sum(sessions) as sessions
from
```

###(select app_group_name(app) as app_group, appcat, service, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log where \$filter and (logflag&(1|32)>0) and nullifna(app) is not null
group by app_group, appcat, service order by bandwidth desc)### t group by app_group having
sum(bandwidth)>0 order by bandwidth desc

Dataset Name	Description	Log Category
Applications-by-Risk-Level	Applications by Risk Level	traffic

```
select
  app_group_name(app) as app_group,
  min(id) as id,
  appcat,
  max(risk) as d_risk,
  (
    case when max(risk) = '5' then 'Critical' when max(risk) = '4' then 'High' when max(risk) =
'3' then 'Medium' when max(risk) = '2' then 'Low' else 'Info' end
) as risk_level,
  sum(sessions) as sessions,
  sum(sent) as sent,
  sum(received) as received,
  sum(bandwidth) as bandwidth
from
```

###(select appid, app, appcat, sum(coalesce(sentbyte, 0)) as sent, sum(coalesce(rcvdbyte,
0)) as received, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as
sessions from \$log where \$filter and (logflag&1>0) group by appid, app, appcat order by

bandwidth desc)### t1 inner join app_mdata t2 on lower(t1.app)=lower(t2.name) group by app_
group, appcat order by d_risk desc, bandwidth desc

Dataset Name Description Log Category
soc-Event-vs-Incident-Today-Trend Events vs Incidents Today Trend

```
select
 item,
 num cur,
 num_pre,
 num_diff
from
  (
    select
      'Events' as item,
      num cur,
     num_pre,
      (num_cur - num_pre) as num_diff
    from
      (
        select
          (
           select
              count(*)
            from
              $event t1
              left join devtable ext t2 on t1.dvid = t2.dvid
              $filter - drilldown
              and $cust_time_filter(alerttime, TODAY)
          ) as num cur,
            select
              count(*)
            from
              left join devtable_ext t2 on t1.dvid = t2.dvid
            where
              $filter - drilldown
              and $cust_time_filter(alerttime, YESTERDAY)
          ) as num_pre
      ) t
    union all
      'Incidents' as item,
     num cur,
     num pre,
      (num_cur - num_pre) as num_diff
    from
      (
        select
          (
            select
              count(*)
            from
```

```
$incident
where
    $cust_time_filter(createtime, TODAY)
) as num_cur,
(
    select
    count(*)
    from
        $incident
    where
        $cust_time_filter(createtime, YESTERDAY)
) as num_pre
    ) t
) t
order by
item
```

Dataset Name Description Log Category

soc-Event-vs-Incident-History-Trend Events vs Incidents History Trend

```
select
 item,
 num cur,
 num pre,
 num diff
from
    select
      'Events' as item,
     num_cur,
     num pre,
      (num_cur - num_pre) as num_diff
    from
      (
        select
          (
            select
              count(*)
            from
              $event t1
              left join devtable_ext t2 on t1.dvid = t2.dvid
            where
              $filter - drilldown
              and $cust_time_filter(alerttime)
          ) as num_cur,
            select
              count(*)
            from
              $event t1
              left join devtable ext t2 on t1.dvid = t2.dvid
              $filter - drilldown
              and $cust_time_filter(alerttime, LAST_N_PERIOD, 1)
          ) as num_pre
```

```
) t
    union all
    select
     'Incidents' as item,
     num cur,
     num_pre,
      (num cur - num pre) as num diff
    from
        select
          (
           select
              count(*)
            from
              $incident
              $cust_time_filter(createtime)
          ) as num_cur,
            select
              count(*)
            from
              $incident
              $cust_time_filter(createtime, LAST_N_PERIOD, 1)
          ) as num_pre
      ) t
 ) t
order by
 item
```

Dataset Name Description Log Category

soc-Event-vs-Incident-Trend

Events vs Incidents Trend

```
select
 t1.item,
 t1.num_cur as num_today,
 t1.num_pre as num_yesterday,
 t1.num diff as num diff1,
  t2.num_cur as num_this_period,
  t2.num_pre as num_last_period,
  t2.num diff as num diff2
from
    select
     'Events' as item,
     num cur,
     num_pre,
      (num_cur - num_pre) as num_diff
    from
        select
          (
            select
              count(*)
```

```
from
            left join devtable_ext t2 on t1.dvid = t2.dvid
            $filter - drilldown
           and $cust_time_filter(alerttime, TODAY)
        ) as num cur,
          select
           count(*)
         from
            $event t1
            left join devtable_ext t2 on t1.dvid = t2.dvid
           $filter - drilldown
           and $cust_time_filter(alerttime, YESTERDAY)
        ) as num_pre
   ) t
 union all
  select
   'Incidents' as item,
   num_cur,
   num pre,
   (num_cur - num_pre) as num_diff
 from
      select
        (
         select
           count(*)
           $incident
            $cust time filter(createtime, TODAY)
        ) as num cur,
        (
         select
          count(*)
          from
           $incident
            $cust_time_filter(createtime, YESTERDAY)
        ) as num pre
   ) t
) t1 full
join (
   'Events' as item,
   num cur,
   num pre,
    (num_cur - num_pre) as num_diff
  from
    (
      select
       (
          select
```

```
count(*)
            from
              $event t1
              left join devtable_ext t2 on t1.dvid = t2.dvid
              $filter - drilldown
              and $cust time filter(alerttime)
          ) as num cur,
           select
             count(*)
           from
             $event t1
             left join devtable_ext t2 on t1.dvid = t2.dvid
             $filter - drilldown
             and $cust_time_filter(alerttime, LAST_N_PERIOD, 1)
          ) as num pre
     ) t
   union all
    select
     'Incidents' as item,
     num cur,
     num_pre,
     (num_cur - num_pre) as num_diff
   from
       select
           select
             count(*)
            from
              $incident
              $cust_time_filter(createtime)
          ) as num_cur,
            select
             count(*)
            from
             $incident
            where
              $cust_time_filter(createtime, LAST_N_PERIOD, 1)
          ) as num_pre
     ) t
 ) t2 on t1.item = t2.item
order by
 t1.item
```

Dataset Name	Description	Log Category
soc-Total-Event-by-Severity	Total Events by Severity	

```
select
(
CASE severity WHEN 0 THEN 'Critical' WHEN 1 THEN 'High' WHEN 2 THEN 'Medium' WHEN 3 THEN
```

```
'Low' ELSE NULL END
) as sev,
count(*) as num_events
from
$event t1
left join devtable_ext t2 on t1.dvid = t2.dvid
where
$filter - drilldown
group by
severity
order by
severity
```

```
Dataset NameDescriptionLog Categorysoc-Total-Event-by-Severity-HistoryTotal Events by Severity History
```

```
select
 dom,
    CASE severity WHEN 0 THEN 'Critical' WHEN 1 THEN 'High' WHEN 2 THEN 'Medium' WHEN 3 THEN
'Low' ELSE NULL END
 ) as sev,
 sum(num events) as num events
    select
      dom,
     unnest(agg sev) as severity,
     unnest(agg_num) as num_events
    from
      (
        select
          $DAY_OF_MONTH(agg_time) as dom,
          array[0,
          1,
          2,
          3] as agg_sev,
          array[max(num_sev_critical),
          max(num_sev_high),
          max(num_sev_medium),
          max(num_sev_low) ] as agg_num
        from
          $event history
        where
          $filter - drilldown
          and $cust time filter(agg time)
        group by
          dom
        order by
          dom
      ) t
 ) t
group by
  dom,
  severity
```

```
order by
  dom,
  severity
```

```
Description
                                                                                    Log Category
 Dataset Name
soc-Total-Event-by-Severity-Category
                                   Total Events Count by Severity and Category
select
   CASE severity WHEN 0 THEN 'Critical' WHEN 1 THEN 'High' WHEN 2 THEN 'Medium' WHEN 3 THEN
'Low' ELSE NULL END
 ) as sev,
 triggername,
 count(*) as num_events
  $event t1
  left join devtable_ext t2 on t1.dvid = t2.dvid
 $filter - drilldown
group by
 severity,
 triggername
order by
```

```
    Dataset Name
    Description
    Log Category

    soc-Total-Incident-by-Severity
    Total Incidents by Severity
```

```
select
   severity,
   count(*) as num_inc
from
   $incident
where
   $filter - drilldown
group by
   severity
order by
   severity
```

severity, triggername

Dataset Name	Description	Log Category
soc-Total-Event-vs-Incident-History	Total Events vs Incidents History	

```
select
  coalesce(t1.hodex, t2.hodex) as hodex,
  coalesce(num_event_total, 0) as num_event_total,
  coalesce(num_inc_total, 0) as num_inc_total,
  coalesce(num_event_high, 0) as num_event_high
from
  (
    select
    $flex_timescale(agg_time) as hodex,
```

```
max(num_total) as num_event_total,
     max(num_sev_critical + num_sev_high) as num_event_high
   from
      $event_history
   where
     $cust_time_filter(agg_time)
   group by
     hodex
   order by
     hodex
  ) t1 full
  join (
   select
     $flex_timescale(agg_time) as hodex,
       num_sev_high + num_sev_medium + num_sev_low
     ) as num_inc_total
   from
     $incident_history
   where
     $cust_time_filter(agg_time)
   group by
     hodex
   order by
     hodex
 ) t2 on t1.hodex = t2.hodex
order by
 hodex
```

Dataset Name	Description	Log Category
soc-Incident-List	List of Incidents	

```
select
  incid_to_str(incid) as incnum,
  from_itime(createtime) as timestamp,
  inc_cat_encode(category) as category,
  severity,
  status,
  endpoint
from
  $incident
where
  $cust_time_filter(createtime)
order by
  createtime desc
```

Dataset Name	Description	Log Category
soc-Incident-by-Severity	Incidents by Severity	

```
select
  severity,
  count(*) as incnum
from
  $incident
```

```
where
   $filter - drilldown
   and $cust_time_filter(createtime)
group by
   severity
order by
   incnum desc
```

Dataset Name	Description	Log Category
soc-Incident-by-Status	Incidents by Status	

```
select
  status,
  count(*) as incnum
from
  $incident
where
  $filter - drilldown
  and $cust_time_filter(createtime)
group by
  status
order by
  incnum desc
```

Dataset Name	Description	Log Category
soc-Incident-by-Category-Unresolved	Unresolved Incidents by Category	

```
select
  inc_cat_encode(category) as category,
  count(*) as incnum
from
  $incident
where
  $filter - drilldown
  and $cust_time_filter(createtime)
  and status not in ('closed', 'cancelled')
group by
  category
order by
  incnum desc
```

Dataset Name	Description	Log Category
soc-Incident-by-Severity-Unresolved	Unresolved Incidents by Severity	

```
select
  severity,
  count(*) as incnum
from
  $incident
where
  $filter - drilldown
  and $cust_time_filter(createtime)
  and status not in ('closed', 'cancelled')
```

```
group by
severity
order by
incnum desc
```

```
        Dataset Name
        Description
        Log Category

        soc-Incident-Timeline-by-Category
        Incidents Timeline by Category
```

```
select
 $flex_timescale(agg_time) as hodex,
 max(num_cat_cat1) as num_cat1,
 max(num cat cat2) as num cat2,
 max(num cat cat3) as num cat3,
 max(num_cat_cat4) as num_cat4,
 max(num_cat_cat5) as num_cat5,
 max(num_cat_cat6) as num cat6
 $incident_history
where
 $filter - drilldown
 and $cust_time_filter(agg_time)
group by
 hodex
order by
 hodex
```

Dataset Name	Description	Log Category
soc-Incident-List-Unresolved	List of Unresolved Incidents	

```
select
  incid_to_str(incid) as incnum,
  from_itime(createtime) as timestamp,
  severity,
  status,
  endpoint,
  description
from
  $incident
where
  $filter - drilldown
  and $cust_time_filter(createtime)
  and status not in ('closed', 'cancelled')
order by
  severity desc
```

Dataset Name	Description	Log Category
fex-RSRQ-timeline	FortiExtender RSRQ timeline	event

```
select
  $flex_timescale(timestamp) as hodex,
  cast(
    sum(rsrq_sum) / sum(count) as decimal(18, 2)
) || 'dB' as rsrq
```

from

###(select \$flex_timestamp(dtime) as timestamp, sum(to_number(rsrq, '999999.99')) as rsrq_
sum, sum(to_number(sinr, '999999.99')) as sinr_sum, count(*) as count from \$log where
\$filter and logid='0111046409' group by timestamp order by timestamp desc)### t group by
hodex order by hodex desc

Dataset Name	Description	Log Category
fex-SINR-timeline	FortiExtender SINR timeline	event
-	amp) as hodex, ount) as decimal(18, 0)	
<pre>) 'dB' as sinr from ###(select \$flex_timestamp(dtime) as timestamp, sum(to_number(rsrq, '999999.99')) as rsrc sum, sum(to_number(sinr, '999999.99')) as sinr_sum, count(*) as count from \$log where \$filter and logid='0111046409' group by timestamp order by timestamp desc)### t group by hodex order by hodex desc</pre>		

Dataset Name	Description	Log Category
fgt-device-monitoring-inventory	FortiGate Device Monitoring Inventory	event

```
select
 devname,
 (' ' || devid) as id_devid,
 ip,
 platform,
 os,
 '1' as total_num
 $func - fgt - inventory as t1
where
 exists (
   select
     1
   from
     devtable_ext t2
   where
     $dev filter
     and t2.devid = t1.devid
 )
order by
 devname
```

Dataset Name	Description	Log Category
fgt-inventory-hardware	FortiGate Monitoring Inventory Hardware	event

```
select
  platform,
  count(*) as total_num
from
  $func - fgt - inventory as t1
```

```
where
  exists (
    select
        1
    from
        devtable_ext t2
    where
        $dev_filter
        and t2.devid = t1.devid
)
group by
   platform
order by
   total_num desc
```

Dataset Name	Description	Log Category
fgt-inventory-software	FortiGate Monitoring Inventory Software	event

```
select
 'FortiOS' as sf_name,
 (platform || ' ' || os) as firmware,
 count(*) as total_num
  $func - fgt - inventory as t1
where
 exists (
  select
     1
    from
     devtable_ext t2
   where
     $dev filter
     and t2.devid = t1.devid
 )
group by
 platform,
 os
order by
  total_num desc
```

Dataset Name	Description	Log Category
cup-utilization-timeline-for-each-device	FortiGate cpu utilization timeline	event

```
elect
   $flex_timescale(timestamp) as hodex,
   devid,
   cast(
      sum(total_cpu) / sum(count) as decimal(6, 0)
   ) as cpu_ave,
   cast(
      sum(total_mem) / sum(count) as decimal(6, 0)
   ) as mem_ave,
   cast(
      sum(total_disk) / sum(count) as decimal(6, 0)
```

```
) as disk_ave,
cast(
    sum(sent) / sum(count) as decimal(10, 0)
) as sent_kbps,
cast(
    sum(recv) / sum(count) as decimal(10, 0)
) as recv_kbps
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth,
'/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t where \$filter-drilldown group by
hodex, devid order by hodex

Dataset Name	Description	Log Category
status-timeline-by-device-cpu- utilization	FortiGate cpu summary view	event

```
select
  devid,
  cast(
    sum(total_cpu) / sum(count) as decimal(6, 0)
  ) as cpu_ave,
  max(cpu_peak) as cpu_peak
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by devid order by cpu_peak
desc

Dataset Name	Description	Log Category
event-cpu-utilization-dev	FortiGate cpu summary view	event

select devid,

```
cast(
   sum(total cpu) / sum(count) as decimal(6, 0)
  ) as cpu ave,
 max(cpu peak) as cpu peak
  ###(select $flex timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total
trate, sum(coalesce(erate, 0)) as total erate, sum(coalesce(orate, 0)) as total orate, min
(itime) as first seen, max(itime) as last seen, sum(coalesce(mem, 0)) as total mem, max
(coalesce(mem, 0)) as mem peak, sum(coalesce(disk, 0)) as total disk, max(coalesce(disk, 0))
as disk peak, sum(coalesce(cpu, 0)) as total cpu, max(coalesce(cpu, 0)) as cpu peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_
part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split part(bandwidth,
'/', 1), '0') as integer)+cast(coalesce(split part(bandwidth, '/', 2), '0') as integer)) as
transmit peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps peak,
count (*) as count from $log where $filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total mem desc) ### t group by devid order by cpu peak
desc
```

Dataset Name	Description	Log Category
memory-utilization-timeline-for-each- device	FortiGate cpu utilization timeline	event

```
select
 $flex timescale(timestamp) as hodex,
 devid,
 cast(
    sum(total cpu) / sum(count) as decimal(6, 0)
  ) as cpu ave,
  cast(
   sum(total mem) / sum(count) as decimal(6, 0)
  ) as mem ave,
   sum(total disk) / sum(count) as decimal(6, 0)
 ) as disk ave,
 cast(
   sum(sent) / sum(count) as decimal(10, 0)
 ) as sent kbps,
 cast(
   sum(recv) / sum(count) as decimal(10, 0)
 ) as recv kbps
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth,
'/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group

by timestamp, devid, slot order by total_mem desc)### t where \$filter-drilldown group by hodex, devid order by hodex

Dataset Name	Description	Log Category
status-timeline-by-device-mem- utilization	FortiGate memory summary view	event

```
select
  devid,
  cast(
    sum(total_mem) / sum(count) as decimal(6, 0)
  ) as mem_ave,
  max(mem_peak) as mem_peak
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth,
''', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by devid order by mem_peak
desc

Dataset Name	Description	Log Category
event-mem-utilization-dev	FortiGate memory summary view	event

```
select
  devid,
  cast(
    sum(total_mem) / sum(count) as decimal(6, 0)
  ) as mem_ave,
  max(mem_peak) as mem_peak
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by devid order by mem_peak
desc

Dataset Name	Description	Log Category
disk-utilization-timeline-for-each- device	FortiGate cpu utilization timeline	event

```
select
 $flex timescale(timestamp) as hodex,
 cast(
   sum(total cpu) / sum(count) as decimal(6, 0)
  ) as cpu ave,
  cast (
    sum(total mem) / sum(count) as decimal(6, 0)
  ) as mem ave,
 cast(
   sum(total disk)/ sum(count) as decimal(6, 0)
  ) as disk ave,
   sum(sent) / sum(count) as decimal(10, 0)
  ) as sent kbps,
 cast(
   sum(recv) / sum(count) as decimal(10, 0)
 ) as recv kbps
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t where \$filter-drilldown group by
hodex, devid order by hodex

D	Pataset Name	Description	Log Category
	tatus-timeline-by-device-disk- tilization	FortiGate disk summary view	event

```
select
  devid,
  cast(
    sum(total_disk) / sum(count) as decimal(6, 0)
  ) as disk_ave,
  max(disk_peak) as disk_peak
from

###(select_Sflex_timestamp_as_timestamp_devid_slot_
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max

(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce (totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast (coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split_part(bandwidth, '/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak, count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group by timestamp, devid, slot order by total_mem desc)### t group by devid order by disk_peak desc

Dataset Name	Description	Log Category
event-disk-utilization-dev	FortiGate disk summary view	event

```
select
  devid,
  cast(
    sum(total_disk) / sum(count) as decimal(6, 0)
  ) as disk_ave,
  max(disk_peak) as disk_peak
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by devid order by disk_peak
desc

Dataset Name	Description	Log Category
event-total-session-summary	FortiGate Total Sessions	event

(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max

```
select
  devid,
  max(session_peak) as max_session,
  cast(
    sum(totalsession) / sum(count) as decimal(10, 0)
) as sessions,
  max(cps_peak) as cps_peak,
  cast(
    sum(cps) / sum(count) as decimal(10, 0)
) as cps_ave
from
  ###(select $flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first seen, max(itime) as last seen, sum(coalesce(mem, 0)) as total mem, max
```

(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce (totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast (coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split_part(bandwidth, '/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak, count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group by timestamp, devid, slot order by total_mem desc)### t group by devid order by max_session desc

Dataset Name	Description	Log Category
event-session-rate-summary	FortiGate Session Rate	event

```
select
  devid,
  max(cps_peak) as max_rate
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by devid order by max_rate
desc

Dataset Name	Description	Log Category
event-session-summary-dev	FortiGate Total Sessions	event

```
select
  devid,
  max(session_peak) as max_session,
  cast(
    sum(totalsession) / sum(count) as decimal(10, 0)
  ) as sessions,
  max(cps_peak) as cps_peak,
  cast(
    sum(cps) / sum(count) as decimal(10, 0)
  ) as cps_ave
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_

part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split_part(bandwidth, '/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak, count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group by timestamp, devid, slot order by total_mem desc)### t group by devid order by max_session desc

Dataset Name	Description	Log Category
fgt-intf-down-timeline-for-each-device	FortiGate Interface Down Timeline	event

```
select
  $flex_timescale(timestamp) as hodex,
  devid,
  sum(total_num) as total_num
```

###(select \$flex_timestamp as timestamp, devid, status, count(*) as total_num from \$log
where \$filter and logid_to_int(logid)=20099 and status='DOWN' group by timestamp, devid,
status)### t where \$filter-drilldown group by hodex, devid order by hodex

Dataset Name	Description	Log Category
fgt-intf-down-timeline-by-device	FortiGate Interface Down by Device	event

```
select
  devid,
  status,
  sum(total_num) as total_num
from
```

###(select \$flex_timestamp as timestamp, devid, status, count(*) as total_num from \$log
where \$filter and logid_to_int(logid)=20099 and status='DOWN' group by timestamp, devid,
status)### t group by devid, status order by total_num desc

Dataset Name	Description	Log Category
fgt-intf-down-dev-donut	FortiGate Interface Down by Device	event

```
select
  devid,
  status,
  sum(total_num) as total_num
from
```

###(select \$flex_timestamp as timestamp, devid, status, count(*) as total_num from \$log
where \$filter and logid_to_int(logid)=20099 and status='DOWN' group by timestamp, devid,
status)### t group by devid, status order by total_num desc

Dataset Name	Description	Log Category
fgt-intf-down-dev-tbl	FortiGate Interface Down by Device	event

```
select
  devid,
  status,
  sum(total_num) as total_num
from
  ###(select $flex timestamp as timestamp, devid, status, count(*) as total num from $log
```

where \$filter and logid_to_int(logid)=20099 and status='DOWN' group by timestamp, devid, status)### t group by devid, status order by total num desc

Dataset Name	Description	Log Category
intf-sent-timeline-for-each-device	FortiGate cpu utilization timeline	event

```
select
 $flex timescale(timestamp) as hodex,
 devid,
 cast (
   sum(total cpu) / sum(count) as decimal(6, 0)
 ) as cpu ave,
 cast(
   sum(total mem) / sum(count) as decimal(6, 0)
  ) as mem ave,
  cast(
   sum(total disk) / sum(count) as decimal(6, 0)
  ) as disk ave,
   sum(sent) / sum(count) as decimal(10, 0)
 ) as sent kbps,
 cast(
   sum(recv) / sum(count) as decimal(10, 0)
 ) as recv kbps
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t where \$filter-drilldown group by
hodex, devid order by hodex

Dataset Name	Description	Log Category
status-timeline-by-device-intf-sent	FortiGate interface summary view	event

```
select
  devid,
  cast(
    sum(sent) / sum(count) as decimal(10, 0)
) as sent_kbps,
  cast(
    sum(recv) / sum(count) as decimal(10, 0)
) as recv_kbps,
  cast(
    sum(sent + recv) / sum(count) as decimal(10, 0)
) as transmit kbps,
```

```
max(transmit_peak) as transmit_kbps_peak
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by devid order by transmit_
kbps_peak desc

 Dataset Name
 Description
 Log Category

 intf-recv-timeline-for-each-device
 FortiGate cpu utilization timeline
 event

```
$flex timescale(timestamp) as hodex,
devid,
cast(
 sum(total cpu) / sum(count) as decimal(6, 0)
) as cpu ave,
cast(
  sum(total mem) / sum(count) as decimal(6, 0)
) as mem_ave,
cast(
  sum(total disk) / sum(count) as decimal(6, 0)
) as disk ave,
cast(
  sum(sent) / sum(count) as decimal(10, 0)
) as sent kbps,
  sum(recv) / sum(count) as decimal(10, 0)
) as recv kbps
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t where \$filter-drilldown group by
hodex, devid order by hodex

Dataset Name	Description	Log Category
status-timeline-by-device-intf-recv	FortiGate interface summary view	event

```
select
  devid,
  cast(
    sum(sent) / sum(count) as decimal(10, 0)
) as sent_kbps,
  cast(
    sum(recv) / sum(count) as decimal(10, 0)
) as recv_kbps,
  cast(
    sum(sent + recv) / sum(count) as decimal(10, 0)
) as transmit_kbps,
  max(transmit_peak) as transmit_kbps_peak
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by devid order by transmit_
kbps_peak

Dataset Name	Description	Log Category
event-intf-summary-dev	FortiGate interface summary view	event

```
select
 devid.
   sum(sent) / sum(count) as decimal(10, 0)
 ) as sent kbps,
   sum(recv) / sum(count) as decimal(10, 0)
 ) as recv kbps,
 cast(
   sum(sent + recv) / sum(count) as decimal(10, 0)
 ) as transmit kbps,
 max(transmit peak) as transmit kbps peak
 ###(select $flex timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total
trate, sum(coalesce(erate, 0)) as total erate, sum(coalesce(orate, 0)) as total orate, min
(itime) as first seen, max(itime) as last seen, sum(coalesce(mem, 0)) as total mem, max
(coalesce (mem, 0)) as mem peak, sum (coalesce (disk, 0)) as total disk, max (coalesce (disk, 0))
as disk peak, sum(coalesce(cpu, 0)) as total cpu, max(coalesce(cpu, 0)) as cpu peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session peak, sum(cast
```

(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split_part(bandwidth, '/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak, count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group by timestamp, devid, slot order by total_mem desc)### t group by devid order by transmit_kbps_peak desc

```
        Dataset Name
        Description
        Log Category

        fgt-intf-stats-timeline-util-in-each
        FortiGate Interface Statistics Timeline
        event
```

```
select
  $flex timescale(tmstamp) as hodex,
  (devname || ':' || intfname) as dev intf,
    sum(bps out) / sum(interval) / 1000 as decimal(10, 0)
  ) as kbps_out_avg,
  cast(
    sum(bps in) / sum(interval) / 1000 as decimal(10, 0)
  ) as kbps in avg,
    sum(util out) / sum(interval) / 100 as decimal(10, 2)
  ) as util out avg,
  cast(
    sum(util in) / sum(interval) / 100 as decimal(10, 2)
  ) as util in avg
from
    select
      $flex timestamp(timestamp) as tmstamp,
      dvid,
      intfname,
      sum(interval) as interval,
      sum(sentbps * interval) as bps out,
      sum(rcvdbps * interval) as bps in,
      sum(sentutil * interval) as util out,
      sum(rcvdutil * interval) as util in
    from
      intfstats
    where
      $cust_time_filter(timestamp)
    group by
      tmstamp,
      dvid,
      intfname
  ) t1
  left join devtable ext t2 on t1.dvid = t2.dvid
  $filter - drilldown
group by
 hodex,
 dev intf
order by
  hodex
```

Dataset Name	Description	Log Category
fgt-intf-stats-timeline-util-in	FortiGate Interface Received Utilization	event

```
(devname || ':' || intfname) as dev_intf,
   sum(bps out) / sum(interval) / 1000 as decimal(10, 0)
 ) as kbps out avg,
   sum(bps in) / sum(interval) / 1000 as decimal(10, 0)
  ) as kbps in avg,
  cast(
   sum(util out) / sum(interval) / 100 as decimal(10, 2)
 ) as util out avg,
   sum(util in) / sum(interval) / 100 as decimal(10, 2)
 ) as util in avg
from
    select
     $flex timestamp(timestamp) as tmstamp,
     tbl intf.dvid,
     intfname,
     sum(interval) as interval,
     sum(sentbps * interval) as bps out,
     sum(rcvdbps * interval) as bps in,
      sum(sentutil * interval) as util out,
      sum(rcvdutil * interval) as util_in
    from
      (
        select
         distinct dvid
        from
          ###(select dvid from $log-event where $filter and action='perf-stats' group by
dvid) ### t) tbl log inner join intfstats tbl intf on tbl log.dvid = tbl intf.dvid where
$cust time filter(timestamp) group by tmstamp, tbl intf.dvid, intfname) t1 left join
devtable ext t2 on t1.dvid = t2.dvid group by dev intf order by util in avg desc, kbps in
avg desc, kbps out avg desc
```

 Dataset Name
 Description
 Log Category

 fgt-intf-stats-timeline-util-out-each
 FortiGate Interface Statistics Timeline
 event

```
select
  $flex_timescale(tmstamp) as hodex,
  (devname || ':' || intfname) as dev_intf,
  cast(
     sum(bps_out) / sum(interval) / 1000 as decimal(10, 0)
) as kbps_out_avg,
  cast(
     sum(bps_in) / sum(interval) / 1000 as decimal(10, 0)
) as kbps_in_avg,
  cast(
     sum(util_out) / sum(interval) / 100 as decimal(10, 2)
) as util_out_avg,
```

```
cast(
    sum(util_in)/ sum(interval)/ 100 as decimal(10, 2)
  ) as util_in_avg
from
  (
    select
     $flex timestamp(timestamp) as tmstamp,
     intfname,
     sum(interval) as interval,
      sum(sentbps * interval) as bps out,
      sum(rcvdbps * interval) as bps_in,
      sum(sentutil * interval) as util_out,
      sum(rcvdutil * interval) as util_in
    from
      intfstats
    where
      $cust_time_filter(timestamp)
    group by
     tmstamp,
      dvid,
     intfname
  ) t1
  left join devtable_ext t2 on t1.dvid = t2.dvid
  $filter - drilldown
group by
 hodex,
 dev intf
order by
 hodex
```

Dataset Name	Description	Log Category
fgt-intf-stats-timeline-util-out	FortiGate Interface Sent Utilization	event

```
(devname || ':' || intfname) as dev_intf,
   sum(bps out) / sum(interval) / 1000 as decimal(10, 0)
  ) as kbps_out_avg,
  cast(
   sum(bps in) / sum(interval) / 1000 as decimal(10, 0)
  ) as kbps in avg,
 cast(
    sum(util out) / sum(interval) / 100 as decimal(10, 2)
  ) as util out avg,
    sum(util in) / sum(interval) / 100 as decimal(10, 2)
  ) as util in avg
from
    select
     $flex_timestamp(timestamp) as tmstamp,
      tbl intf.dvid,
      intfname,
```

Dataset NameDescriptionLog Categoryfgt-intf-stats-timeline-bit-rate-in-eachFortiGate Interface Statistics Timelineevent

```
select
 $flex timescale(tmstamp) as hodex,
  (devname || ':' || intfname) as dev intf,
   sum(bps out) / sum(interval) / 1000 as decimal(10, 0)
  ) as kbps out avg,
 cast(
   sum(bps in) / sum(interval) / 1000 as decimal(10, 0)
 ) as kbps in avg,
 cast (
   sum(util out) / sum(interval) / 100 as decimal(10, 2)
 ) as util out avg,
   sum(util in) / sum(interval) / 100 as decimal(10, 2)
 ) as util in avg
from
    select
     $flex_timestamp(timestamp) as tmstamp,
     intfname,
     sum(interval) as interval,
     sum(sentbps * interval) as bps out,
     sum(rcvdbps * interval) as bps in,
     sum(sentutil * interval) as util out,
     sum(rcvdutil * interval) as util in
   from
      intfstats
   where
     $cust time filter(timestamp)
   group by
     tmstamp,
     dvid,
     intfname
  ) t1
  left join devtable ext t2 on t1.dvid = t2.dvid
```

```
where
  $filter - drilldown
group by
  hodex,
  dev_intf
order by
  hodex
```

```
        Dataset Name
        Description
        Log Category

        fgt-intf-stats-timeline-bit-rate-in
        FortiGate Interface Received Bit Rate
        event
```

```
select
  (devname || ':' || intfname) as dev_intf,
   sum(bps out) / sum(interval) / 1000 as decimal(10, 0)
  ) as kbps out avg,
   sum(bps_in) / sum(interval) / 1000 as decimal(10, 0)
 ) as kbps_in_avg,
   sum(util out) / sum(interval) / 100 as decimal(10, 2)
 ) as util out avg,
   sum(util in) / sum(interval) / 100 as decimal(10, 2)
 ) as util in avg
from
   select
     $flex timestamp(timestamp) as tmstamp,
     tbl intf.dvid,
     intfname,
     sum(interval) as interval,
      sum(sentbps * interval) as bps_out,
     sum(rcvdbps * interval) as bps in,
     sum(sentutil * interval) as util out,
     sum(rcvdutil * interval) as util in
    from
        select
          distinct dvid
          ###(select dvid from $log-event where $filter and action='perf-stats' group by
dvid) ### t) tbl log inner join intfstats tbl intf on tbl log.dvid = tbl intf.dvid where
$cust time filter(timestamp) group by tmstamp, tbl intf.dvid, intfname) t1 left join
devtable ext t2 on t1.dvid = t2.dvid group by dev intf order by kbps in avg desc
```

Dataset NameDescriptionLog Categoryfgt-intf-stats-timeline-bit-rate-out-eachFortiGate Interface Statistics Timelineevent

```
select
  $flex_timescale(tmstamp) as hodex,
  (devname || ':' || intfname) as dev_intf,
  cast(
    sum(bps_out) / sum(interval) / 1000 as decimal(10, 0)
```

```
) as kbps_out_avg,
  cast(
    sum(bps in) / sum(interval) / 1000 as decimal(10, 0)
  ) as kbps_in_avg,
  cast(
    sum(util out) / sum(interval) / 100 as decimal(10, 2)
  ) as util out avg,
 cast(
   sum(util in) / sum(interval) / 100 as decimal(10, 2)
 ) as util in avg
from
    select
      $flex timestamp(timestamp) as tmstamp,
     dvid,
     intfname,
      sum(interval) as interval,
      sum(sentbps * interval) as bps out,
      sum(rcvdbps * interval) as bps_in,
      sum(sentutil * interval) as util_out,
      sum(rcvdutil * interval) as util_in
    from
      intfstats
    where
      $cust_time_filter(timestamp)
    group by
     tmstamp,
     dvid,
     intfname
  ) t1
  left join devtable ext t2 on t1.dvid = t2.dvid
  $filter - drilldown
group by
 hodex,
 dev intf
order by
 hodex
```

Dataset Name	Description	Log Category
fgt-intf-stats-timeline-bit-rate-out	FortiGate Interface Sent Bit Rate	event

```
select
  (devname || ':' || intfname) as dev_intf,
  cast(
    sum(bps_out) / sum(interval) / 1000 as decimal(10, 0)
) as kbps_out_avg,
  cast(
    sum(bps_in) / sum(interval) / 1000 as decimal(10, 0)
) as kbps_in_avg,
  cast(
    sum(util_out) / sum(interval) / 100 as decimal(10, 2)
) as util_out_avg,
  cast(
    sum(util in) / sum(interval) / 100 as decimal(10, 2)
```

```
) as util_in_avg
from
  (
   select
     $flex timestamp(timestamp) as tmstamp,
     tbl intf.dvid,
     intfname,
     sum(interval) as interval,
     sum(sentbps * interval) as bps out,
     sum(rcvdbps * interval) as bps in,
     sum(sentutil * interval) as util_out,
     sum(rcvdutil * interval) as util in
   from
       select
         distinct dvid
       from
          ###(select dvid from $log-event where $filter and action='perf-stats' group by
dvid) ### t) tbl log inner join intfstats tbl intf on tbl log.dvid = tbl intf.dvid where
$cust_time_filter(timestamp) group by tmstamp, tbl_intf.dvid, intfname) t1 left join
devtable_ext t2 on t1.dvid = t2.dvid group by dev_intf order by kbps_out_avg desc
```

Dataset NameDescriptionLog Categoryfgt-intf-stats-summary-viewFortiGate Interface Received Utilizationevent

```
select
 (devname | | ':' | | intfname) as dev intf,
   sum(bps out) / sum(interval) / 1000 as decimal(10, 0)
 ) as kbps out avg,
 cast(
   sum(bps in) / sum(interval) / 1000 as decimal(10, 0)
  ) as kbps_in_avg,
   sum(util out) / sum(interval) / 100 as decimal(10, 2)
 ) as util_out_avg,
 cast(
   sum(util_in)/ sum(interval)/ 100 as decimal(10, 2)
 ) as util in avg
from
   select
     $flex timestamp(timestamp) as tmstamp,
     tbl intf.dvid,
     intfname,
     sum(interval) as interval,
      sum(sentbps * interval) as bps out,
     sum(rcvdbps * interval) as bps in,
     sum(sentutil * interval) as util out,
     sum(rcvdutil * interval) as util in
    from
        select
         distinct dvid
        from
```

###(select dvid from \$log-event where \$filter and action='perf-stats' group by
dvid)### t) tbl_log inner join intfstats tbl_intf on tbl_log.dvid = tbl_intf.dvid where
\$cust_time_filter(timestamp) group by tmstamp, tbl_intf.dvid, intfname) t1 left join
devtable_ext t2 on t1.dvid = t2.dvid group by dev_intf order by util_in_avg desc, kbps_in_
avg desc, kbps_out_avg desc

Dataset Name	Description	Log Category
fgt-ha-failure-timeline	FortiGate HA Failure Timeline	event
<pre>select \$flex timescale(timestamp)</pre>	as hodex,	

\$flex_timescale(timestamp) as hodex,
count(*) as total_num

###(select \$flex_timestamp as timestamp, dtime, devid, coalesce(nullifna(logdesc), msg) as
msg_desc from \$log where \$filter and subtype='ha' and logid_to_int(logid) in (35011, 35012,
35013, 37892, 37893, 37897, 37898, 37901, 37902, 37907, 37908) order by dtime desc)### t
group by hodex order by hodex

Dataset Name	Description	Log Category
fgt-ha-failure-summary	FortiGate HA Failure Summary	event

```
select
  from_dtime(dtime) as time_s,
  devid,
  msg_desc
from
```

###(select \$flex_timestamp as timestamp, dtime, devid, coalesce(nullifna(logdesc), msg) as
msg_desc from \$log where \$filter and subtype='ha' and logid_to_int(logid) in (35011, 35012,
35013, 37892, 37893, 37897, 37898, 37901, 37902, 37907, 37908) order by dtime desc)### t
order by time s desc

Dataset Name	Description	Log Category
fgt-env-faults-power	FortiGate Power Supply Faults	event

```
select
  time_s,
  devid,
  msg_desc
from
```

###(select from_dtime(dtime) as time_s, devid, coalesce(nullifna(logdesc), msg) as msg_
desc, logid_to_int(logid) as logid from \$log where \$filter and logid_to_int(logid) in
(22105, 22107, 22108, 22109) order by time_s desc)### t where logid in (22105, 22107) order
by time_s desc

Dataset Name	Description	Log Category
fgt-env-faults-fan	FortiGate Fan Faults	event

```
select
  time_s,
  devid,
  msg_desc
from
```

###(select from_dtime(dtime) as time_s, devid, coalesce(nullifna(logdesc), msg) as msg_
desc, logid_to_int(logid) as logid from \$log where \$filter and logid_to_int(logid) in
(22105, 22107, 22108, 22109) order by time_s desc)### t where logid=22108 order by time_s
desc

Dataset Name	Description	Log Category
fgt-env-faults-temperature	FortiGate Temperatre Too High	event

```
select
  time_s,
  devid,
  msg_desc
from
  ###(select from_dtime(dtime) as time_s, devid, coalesce(nullifna(logdesc), msg) as msg_
desc, logid_to_int(logid) as logid from $log where $filter and logid_to_int(logid) in
  (22105, 22107, 22108, 22109) order by time_s desc)### t where logid=22109 order by time_s
desc
```

Dataset Name	Description	Log Category
Behaviour-Banned-Application	Bullying Chat Search and Message Logging	app-ctrl

```
select
 filename,
 string agg(distinct app, ' ') as app agg,
 string agg(
   distinct from_itime(itime): :text,
    1 1
 ) as itime agg,
 string agg(distinct user src, ' ') as user agg,
 string_agg(distinct `group`, ' ') as group_agg,
 string agg(
   distinct ipstr(`srcip`),
 ) as srcip agg,
 count(*) as requests
 ###(select filename, app, itime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user src, `group`, `srcip` from $log where $filter and (lower(app) in
('facebook post', 'facebook chat', 'twitter post', 'youtube video.access', 'gmail chat',
'gmail send.message', 'linkedin post', 'vimeo video.access', 'google.search search.phrase',
'bing.search search.phrase')) order by itime desc)### t where ($bully keywords) group by
filename order by requests desc
```

Dataset Name	Description	Log Category
Behaviour-Banned-User	Bullying Chat Search and Message Logging	app-ctrl

```
select
  filename,
  string_agg(distinct app, ' ') as app_agg,
  string_agg(
    distinct from_itime(itime): :text,
    ' '
) as itime_agg,
```

```
string agg(distinct user src, ' ') as user agg,
 string agg(distinct `group`, ' ') as group agg,
 string agg(
   distinct ipstr(`srcip`),
   1 1
 ) as srcip agg,
 count(*) as requests
 ###(select filename, app, itime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user src, `group`, `srcip` from $log where $filter and (lower(app) in
('facebook post', 'facebook chat', 'twitter post', 'youtube video.access', 'gmail chat',
'gmail_send.message', 'linkedin_post', 'vimeo_video.access', 'google.search_search.phrase',
'bing.search search.phrase')) order by itime desc)### t where ($bully keywords) group by
filename order by requests desc
```

Dataset Name	Description	Log Category
Behaviour-Banned-User-Drilldown	Bullying Chat Search and Message Logging	app-ctrl

```
select
 filename,
 string agg(distinct app, ' ') as app agg,
 string agg(
   distinct from_itime(itime): :text,
   1 1
 ) as itime agg,
 string agg(distinct user src, ' ') as user agg,
 string agg(distinct `group`, ' ') as group agg,
 string agg(
   distinct ipstr(`srcip`),
 ) as srcip_agg,
 count(*) as requests
from
 ###(select filename, app, itime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user src, `group`, `srcip` from $log where $filter and (lower(app) in
('facebook post', 'facebook chat', 'twitter post', 'youtube video.access', 'gmail chat',
'gmail_send.message', 'linkedin_post', 'vimeo_video.access', 'google.search_search.phrase',
'bing.search search.phrase')) order by itime desc)### t where ($bully keywords) group by
filename order by requests desc
```

Dataset Name	Description	Log Category
behaviour-banned	Bullying Chat Search and Message Logging	app-ctrl

```
select
 filename,
 string agg(distinct app, ' ') as app agg,
  string agg(
   distinct from itime(itime): :text,
 ) as itime agg,
  string agg(distinct user src, ' ') as user agg,
  string_agg(distinct `group`, ' ') as group_agg,
  string agg(
   distinct ipstr(`srcip`),
```

```
1 1
 ) as srcip_agg,
 count(*) as requests
 ###(select filename, app, itime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user_src, `group`, `srcip` from $log where $filter and (lower(app) in
('facebook post', 'facebook chat', 'twitter post', 'youtube video.access', 'gmail chat',
'qmail send.message', 'linkedin post', 'vimeo video.access', 'google.search search.phrase',
'bing.search search.phrase')) order by itime desc)### t where ($bully_keywords) group by
filename order by requests desc
```

Dataset Name	Description	Log Category
Self-Harm-Behaviour-Banned-User- Pie	Self-Harm Chat Search and Message Logging	app-ctrl

```
select
 filename,
 string agg(distinct app, ' ') as app agg,
 string agg(
   distinct from itime(itime): :text,
 ) as itime agg,
 string agg(distinct user src, ' ') as user agg,
 string agg(distinct `group`, ' ') as group agg,
 string agg(
   distinct ipstr(`srcip`),
 ) as srcip agg,
 count(*) as requests
 ###(select filename, app, itime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user_src, `group`, `srcip` from $log where $filter and (lower(app) in
('facebook post', 'facebook chat', 'twitter post', 'youtube video.access', 'gmail chat',
'gmail_send.message', 'linkedin_post', 'vimeo_video.access', 'google.search_search.phrase',
'bing.search_search.phrase')) order by itime desc)### t where ($banned_keywords) group by
filename order by requests desc
```

Dataset Name	Description	Log Category
Self-Harm-Behaviour-Banned- Application-Pie	Self-Harm Chat Search and Message Logging	app-ctrl

```
select
 filename,
 string_agg(distinct app, ' ') as app_agg,
 string agg(
   distinct from itime(itime): :text,
 ) as itime agg,
  string agg(distinct user src, ' ') as user agg,
  string agg(distinct `group`, ' ') as group agg,
  string agg(
   distinct ipstr(`srcip`),
  ) as srcip agg,
```

```
count(*) as requests
from
    ###(select filename, app, itime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user_src, `group`, `srcip` from $log where $filter and (lower(app) in
('facebook_post', 'facebook_chat', 'twitter_post', 'youtube_video.access', 'gmail_chat',
'gmail_send.message', 'linkedin_post', 'vimeo_video.access', 'google.search_search.phrase',
'bing.search_search.phrase')) order by itime desc)### t where ($banned_keywords) group by
filename order by requests desc
```

Dataset Name	Description	Log Category
Self-Harm-Behaviour-Banned-User- Bar	Self-Harm Chat Search and Message Logging	app-ctrl

```
select
 filename,
 string agg(distinct app, ' ') as app agg,
 string agg(
   distinct from itime(itime): :text,
 ) as itime agg,
 string agg(distinct user src, ' ') as user agg,
 string agg(distinct `group`, ' ') as group agg,
 string agg(
   distinct ipstr(`srcip`),
 ) as srcip_agg,
 count(*) as requests
 ###(select filename, app, itime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user_src, `group`, `srcip` from \log \theta where filter and (lower(app) in
('facebook_post', 'facebook_chat', 'twitter_post', 'youtube_video.access', 'gmail_chat',
'gmail_send.message', 'linkedin_post', 'vimeo_video.access', 'google.search_search.phrase',
'bing.search search.phrase')) order by itime desc)### t where ($banned keywords) group by
filename order by requests desc
```

Dataset Name	Description	Log Category
Self-Harm-Behaviour-Banned-User- Drilldown	Self-Harm Chat Search and Message Logging	app-ctrl

```
select
  filename,
  string_agg(distinct app, ' ') as app_agg,
  string_agg(
    distinct from_itime(itime): :text,
    ' '
) as itime_agg,
  string_agg(distinct user_src, ' ') as user_agg,
  string_agg(distinct `group`, ' ') as group_agg,
  string_agg(
    distinct ipstr(`srcip`),
    ' '
) as srcip_agg,
  count(*) as requests
from
```

###(select filename, app, itime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user_src, `group`, `srcip` from \$log where \$filter and (lower(app) in
('facebook_post', 'facebook_chat', 'twitter_post', 'youtube_video.access', 'gmail_chat',
'gmail_send.message', 'linkedin_post', 'vimeo_video.access', 'google.search_search.phrase',
'bing.search_search.phrase')) order by itime desc)### t where (\$banned_keywords) group by
filename order by requests desc

Dataset Name	Description	Log Category
Self-Harm-behaviour-banned	Self-Harm Chat Search and Message Logging	app-ctrl

```
select
 filename,
 string agg(distinct app, ' ') as app_agg,
 string agg(
   distinct from itime(itime): :text,
   1 1
 ) as itime agg,
 string_agg(distinct user_src, ' ') as user_agg,
 string_agg(distinct `group`, ' ') as group agg,
 string agg(
   distinct ipstr(`srcip`),
 ) as srcip agg,
 count(*) as requests
 ###(select filename, app, itime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user src, `group`, `srcip` from $log where $filter and (lower(app) in
('facebook post', 'facebook chat', 'twitter post', 'youtube video.access', 'qmail chat',
'gmail_send.message', 'linkedin_post', 'vimeo_video.access', 'google.search_search.phrase',
'bing.search search.phrase')) order by itime desc)### t where ($banned keywords) group by
filename order by requests desc
```

Dataset Name	Description	Log Category
Browsing-Time-per-Social-Media	Browsing Time vs. Domain	traffic

```
select
  domain,
  ebtr_value(
    ebtr_agg_flat(browsetime),
    null,
    $timespan
  ) as browsetime
from
```

###(select domain, f_user, srcip, ebtr_agg_flat(browsetime) as browsetime, sum(bandwidth)
as bandwidth from (select app_group_name(app) as app_group, coalesce(nullifna(`user`),
nullifna(`unauthuser`), ipstr(`srcip`)) as f_user, srcip, coalesce(nullifna(root_domain
(hostname)), ipstr(dstip), NULL) as domain, ebtr_agg_flat(\$browse_time) as browsetime, sum
(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter and
(logflag&1>0) group by app_group, f_user, hostname, domain, srcip, dstip) t1 inner join app_
mdata t2 on lower(t1.app_group)=lower(t2.name) where app_cat='Social.Media' group by domain,
f_user, srcip order by browsetime, bandwidth desc)### t where browsetime is not null group
by domain order by browsetime desc

Dataset Name	Description	Log Category
Social-Networking-Bar-Graph	Social Networking Browsing Time	traffic

```
select
  f_user,
  sum(bandwidth) as bandwidth
from
```

###(select domain, f_user, srcip, ebtr_agg_flat(browsetime) as browsetime, sum(bandwidth)
as bandwidth from (select app_group_name(app) as app_group, coalesce(nullifna(`user`),
nullifna(`unauthuser`), ipstr(`srcip`)) as f_user, srcip, coalesce(nullifna(root_domain
(hostname)), ipstr(dstip), NULL) as domain, ebtr_agg_flat(\$browse_time) as browsetime, sum
(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter and
(logflag&1>0) group by app_group, f_user, hostname, domain, srcip, dstip) t1 inner join app_
mdata t2 on lower(t1.app_group)=lower(t2.name) where app_cat='Social.Media' group by domain,
f_user, srcip order by browsetime, bandwidth desc)### t where bandwidth>0 group by f_user
order by bandwidth desc

Dataset Name	Description	Log Category
Top-Social-Networking-Durations- Sources-Drilldown	Top Social Networking Durations from Sources Drilldown	traffic

```
select
  f_user,
  ebtr_value(
     ebtr_agg_flat(browsetime),
     null,
     $timespan
  ) as browsetime
```

###(select domain, f_user, srcip, ebtr_agg_flat(browsetime) as browsetime, sum(bandwidth)
as bandwidth from (select app_group_name(app) as app_group, coalesce(nullifna(`user`),
nullifna(`unauthuser`), ipstr(`srcip`)) as f_user, srcip, coalesce(nullifna(root_domain
(hostname)), ipstr(dstip), NULL) as domain, ebtr_agg_flat(\$browse_time) as browsetime, sum
(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter and
(logflag&1>0) group by app_group, f_user, hostname, domain, srcip, dstip) t1 inner join app_
mdata t2 on lower(t1.app_group)=lower(t2.name) where app_cat='Social.Media' group by domain,
f_user, srcip order by browsetime, bandwidth desc)### t where \$filter-drilldown and
browsetime is not null group by f user order by browsetime desc

Dataset Name	Description	Log Category
Top-Social-Networking-Durations- Domains-Drilldown	Browsing Time vs. Domain	traffic

```
select
  domain,
  ebtr_value(
     ebtr_agg_flat(browsetime),
     null,
     $timespan
  ) as browsetime
from
  ###(select domain, f_user, srcip, ebtr_agg_flat(browsetime) as browsetime, sum(bandwidth)
as bandwidth from (select app_group_name(app) as app_group, coalesce(nullifna(`user`),
```

nullifna(`unauthuser`), ipstr(`srcip`)) as f_user, srcip, coalesce(nullifna(root_domain (hostname)), ipstr(dstip), NULL) as domain, ebtr_agg_flat(\$browse_time) as browsetime, sum (coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log where \$filter and (logflag&1>0) group by app_group, f_user, hostname, domain, srcip, dstip) t1 inner join app_mdata t2 on lower(t1.app_group)=lower(t2.name) where app_cat='Social.Media' group by domain, f_user, srcip order by browsetime, bandwidth desc)### t where browsetime is not null group by domain order by browsetime desc

Dataset Name	Description	Log Category
Facebook-Posts	Facebook Posts	app-ctrl

```
select
  i_time,
  f_user,
  srcip,
  filename
from
```

###(select from_itime(itime) as i_time, coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as f_user, srcip, filename, app from \$log where \$filter and filename is not
null order by i time desc)### t where lower(app)=lower('Facebook Post') order by i time desc

Dataset Name	Description	Log Category
Facebook-Chats	Facebook Chats	app-ctrl

```
select
filename,
string_agg(
    distinct from_itime(itime): :text,
    ''
) as itime_agg,
string_agg(distinct user_src, ' ') as user_agg,
string_agg(distinct `group`, ' ') as group_agg,
string_agg(
    distinct ipstr(srcip),
    ''
) as srcip_agg,
count(*) as requests
from
```

###(select filename, itime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user_src, `group`, srcip, app from \$log where \$filter and filename is not null
order by itime desc)### t where lower(app)=lower('Facebook_Chat') group by filename order by
requests desc

Dataset Name	Description	Log Category
Twitter-Posts	Twitter Posts	app-ctrl

```
select
  i_time,
  f_user,
  srcip,
  filename
from
  ###(select from_itime(itime) as i_time, coalesce(nullifna(`user`), nullifna(`unauthuser`),
```

ipstr(`srcip`)) as f_user, srcip, filename, app from \$log where \$filter and filename is not null order by i_time desc)### t where lower(app)=lower('Twitter_Post') order by i_time desc

Dataset Name	Description	Log Category
LinkedIn-Posts-and-Comments	LinkedIn Posts and Comments	app-ctrl

```
select
 filename,
 string agg(
   distinct from itime(itime): :text,
  ) as itime agg,
  string agg(distinct user src, ' ') as user agg,
  string agg(distinct `group`, ' ') as group agg,
  string agg(
   distinct ipstr(srcip),
   1 1
  ) as srcip_agg,
  count(*) as requests
  ###(select filename, itime, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user src, `group`, srcip, app from $log where $filter and filename is not null
order by itime desc) ### t where lower(app) = lower('LinkedIn Post') group by filename order by
requests desc
```

Dataset Name	Description	Log Category
sdwan-fw-Device-Interface-Quality_ Bibandwidth-drilldown	SD-WAN Device-Interface Statistic	event

```
select
  devid,
  sum(bibandwidth) / sum(count) as bibandwidth
from
```

###(select \$flex_timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link_status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link_ status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link_status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed_jitter, (CASE WHEN sla_failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed_ latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric,

(CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num (inbandwidthused) as inbandwidth, convert_unit_to_num(outbandwidthused) as outbandwidth, convert_unit_to_num(bibandwidthused) as bibandwidth from \$log where \$filter and logid_to_int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and bibandwidth is not null group by devid having sum(count)>0 order by bibandwidth desc

Dataset Name	Description	Log Category
sdwan-Device-Interface-Latency-Line	SD-WAN Device-Interface Latency Timeline	event

```
select
   $flex_timescale(timestamp) as hodex,
   t1.interface,
   min(latency) as latency
from
   (
    select
       timestamp,
       devid,
       interface,
       sum(latency) / sum(count) as latency
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla_rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum (jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum (inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert_unit_to_num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t group by timestamp, devid, interface having sum(count)>0) t1 inner join (select interface, count(*) as num intf from ###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter,

max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num (inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and interface is not null group by interface order by num intf desc limit \$ddown-top)t2 on t1.interface=t2.interface group by hodex, tl.interface order by hodex

Dataset Name	Description	Log Category
sdwan-Device-Interface-Jitter-Line	SD-WAN Device-Interface Jitter Timeline	event

```
select
  $flex_timescale(timestamp) as hodex,
  t1.interface,
  min(jitter) as jitter
from
  (
   select
     timestamp,
     devid,
     interface,
     sum(jitter)/ sum(count) as jitter
  from
```

###(select \$flex_timestamp as timestamp, csf, devname, devid, vd, interface,
healthcheck as sla_rule, sum(link_status) as link_status, sum(failed_latency) as failed_
latency, sum(failed_jitter) as failed_jitter, sum(failed_packetloss) as failed_packetloss,
sum(latency) as latency, max(latency) as latency_max, min(latency) as latency_min, sum
(jitter) as jitter, max(jitter) as jitter_max, min(jitter) as jitter_min, sum(packetloss) as
packetloss, max(packetloss) as packetloss_max, min(packetloss) as packetloss_min, sum
(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as
bibandwidth, count(*) as count, sum(CASE WHEN link_status=1 THEN 1 ELSE 0 END) AS count_
linkup, min(sdwan_status) as sdwan_status from (select itime, csf, devname, devid, vd,
interface, healthcheck, link_status, (CASE WHEN link_status=1 THEN latency ELSE 0 END) AS
latency, (CASE WHEN link_status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link_
status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla_failed=1 AND
metric='packetloss' THEN 1 ELSE 0 END) AS failed_packetloss, (CASE WHEN sla_failed=1 AND
metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla_failed=1 AND

metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t group by timestamp, devid, interface having sum(count)>0) t1 inner join (select interface, count(*) as num intf from ###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed_jitter) as failed_jitter, sum(failed_packetloss) as failed_packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric= packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num (inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and interface is not null group by interface order by num intf desc limit \$ddown-top)t2 on t1.interface=t2.interface group by hodex, tl.interface order by hodex

Dataset Name	Description	Log Category
sdwan-Device-Interface-Packetloss- Line	SD-WAN Device-Interface Packetloss Timeline	event

```
select
  $flex_timescale(timestamp) as hodex,
  t1.interface,
  min(packetloss) as packetloss
from
  (
    select
```

```
timestamp,
devid,
interface,
sum(packetloss) / sum(count) as packetloss
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum (jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum (inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan_status END) AS sdwan_status, (CASE WHEN link_status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link_status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num(inbandwidthused) as inbandwidth, convert_ unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/) ### t group by timestamp, devid, interface having sum(count)>0) t1 inner join (select interface, count(*) as num intf from ###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed_jitter) as failed_jitter, sum(failed_packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link_status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric= packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla_failed=1 THEN 3 ELSE sdwan_status END) AS sdwan_status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num (inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth,

convert_unit_to_num(bibandwidthused) as bibandwidth from \$log where \$filter and logid_to_int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and interface is not null group by interface order by num_intf desc limit \$ddown-top)t2 on t1.interface=t2.interface group by hodex, t1.interface order by hodex

Dataset Name	Description	Log Category
sdwan-Device-Latency-Line	SD-WAN Device Latency Timeline	event

```
select
  $flex_timescale(timestamp) as hodex,
  devid,
  min(latency) as latency
from
  (
   select
     timestamp,
     devid,
     interface,
     sum(latency) / sum(count) as latency
  from
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum (jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum (inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link_status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert_unit_to_num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and latency is not null group by timestamp, devid, interface having sum(count)>0) t1 group by hodex, devid order by hodex

Da	ntaset Name	Description	Log Category
sdv	wan-Device-Jitter-Line	SD-WAN Device Jitter Timeline	event

```
select
   $flex_timescale(timestamp) as hodex,
   devid,
   min(jitter) as jitter
from
   (
    select
        timestamp,
        devid,
        interface,
        sum(jitter) / sum(count) as jitter
   from
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum (jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum (inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan_status) as sdwan_status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed_packetloss, (CASE WHEN sla_failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan_status END) AS sdwan_status, (CASE WHEN link_status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert_unit_to_num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and jitter is not null group by timestamp, devid, interface having sum(count)>0) t1 group by hodex, devid order by hodex

Dataset Name	Description	Log Category
sdwan-Device-Packetloss-Line	SD-WAN Device Packet Loss Timeline	event

```
select
  $flex_timescale(timestamp) as hodex,
  devid,
  min(packetloss) as packetloss
from
  (
    select
        timestamp,
        devid,
        interface,
```

```
\operatorname{sum}\left(\operatorname{packetloss}\right)/\operatorname{sum}\left(\operatorname{count}\right) as packetloss from
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum (jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum (inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla_failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link_status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num(inbandwidthused) as inbandwidth, convert_ unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and packetloss is not null group by timestamp, devid, interface having sum(count)>0) t1 group by hodex, devid order by hodex

Dataset Name	Description	Log Category
sdwan-Device-Interface-Summary-by- Bibandwidth	SD-WAN Device Interface Summary by Bibandwidth	event

```
select
 devid,
 interface,
 sum(bibandwidth) / sum(count) as bibandwidth,
   min(latency min) as decimal(18, 2)
 ) as latency min,
 cast(
   sum(latency) / sum(count) as decimal(18, 2)
  ) as latency_avg,
   max(latency max) as decimal(18, 2)
 ) as latency_max,
 cast(
   min(jitter min) as decimal(18, 2)
  ) as jitter min,
 cast(
   sum(jitter) / sum(count) as decimal(18, 2)
  ) as jitter_avg,
```

```
cast(
  max(jitter_max) as decimal(18, 2)
) as jitter_max,
cast(
  min(packetloss_min) as decimal(18, 2)
) as packetloss_min,
cast(
  sum(packetloss) / sum(count) as decimal(18, 2)
) as packetloss_avg,
cast(
  max(packetloss_max) as decimal(18, 2)
) as packetloss_max
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan_status from (select itime, csf, devname, devid, vd, interface, healthcheck, link_ status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num (inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and interface is not null group by devid, interface having sum(count)>0 order by devid, interface

Dataset Name	Description	Log Category
sdwan-Top-App-By-Bandwidth	Top SD-WAN application by bandwidth	traffic

```
select
  appid,
  app_group,
  sum(bandwidth) as bandwidth,
  sum(sessions) as sessions
from
  ###(select $flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
  srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
  (vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
  (`srcip`),nullifna(`srcmac`)) as dev src, sum(crscore%65536) as crscore, coalesce(nullifna
```

(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user src, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*) as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0) group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc)### t where \$filter-drilldown group by appid, app group order by bandwidth desc

Dataset Name	Description	Log Category
sdwan-Top-App-By-Bandwidth-Sankey	Top SD-WAN application by bandwidth usage	traffic

```
select
  'SD-WAN Utilization' as summary,
 app_group,
 devid,
 dstintf as interface,
  sum (bandwidth) as bandwidth
from
```

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf, srcintfrole, dstintfrole, appid, appcat, app group name(app) as app group, coalesce (vwlname, vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr (`srcip`), nullifna(`srcmac`)) as dev src, sum(crscore%65536) as crscore, coalesce(nullifna (`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user src, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*) as sessions from $\log-t$ raffic where filter and filtergroup by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc) ### t where \$filter-drilldown group by app group, devid, interface order by bandwidth desc

Dataset Name	Description	Log Category
sdwan-Device-Interface-bandwidth- Drilldown	SD-WAN Device Statistic by Bibandwidth	event

```
select
 devid,
  sum(bibandwidth) / sum(count) as bibandwidth
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter_max, min(jitter) as jitter_min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN

outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link_status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link_status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla_failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num (inbandwidthused) as inbandwidth, convert_unit_to_num(outbandwidthused) as outbandwidth, convert_unit_to_num(bibandwidthused) as bibandwidth from \$log where \$filter and logid_to_int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and bibandwidth is not null group by devid having sum(count)>0 order by bibandwidth desc

Dataset Name	Description	Log Category
sdwan-Device-Rules-Donut-Bandwidth	Top SD-WAN Links bandwidth	traffic

```
select
  coalesce(rulename, 'Unknown') as rulename,
  sum(bandwidth) as bandwidth
```

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,
appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc)### t
where \$filter-drilldown group by rulename order by bandwidth desc limit 10

Dataset Name	Description	Log Category
sdwan-device-interface-bandwidth	Top SD-WAN Links bandwidth	traffic

```
select
  interface,
  sum(bandwidth) as bandwidth
from
  (
    (
       select
       srcintf as interface,
       sum(bandwidth) as bandwidth
  from
```

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf,
srcintf, srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,

appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc)### t where srcintfrole='wan' and \$filter-drilldown group by interface) union all (select dstintf as interface, sum(bandwidth) as bandwidth from ###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf, srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce (sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce (rcvddelta, rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*) as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0) group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc)### t where \$filter-drilldown group by interface)) t group by interface order by bandwidth desc limit 10

Dataset Name	Description	Log Category
sdwan-Top-Application-Session- Bandwidth	Top SD-WAN application by bandwidth	traffic

```
select
  appid,
  app_group,
  sum(bandwidth) as bandwidth,
  sum(sessions) as sessions
```

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,
appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc)### t
where \$filter-drilldown group by appid, app group order by bandwidth desc

Dataset Name	Description	Log Category
sdwan-Top-Users-By-Bandwidth-Bar	SD-WAN Top users by bandwidth usage	traffic

```
select
  user_src,
  sum(bandwidth) as bandwidth
from
```

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,

appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc) ### t where \$filter-drilldown group by user src order by bandwidth desc

Dataset Name	Description	Log Category
sdwan-top-user-app-Drilldown	SD-WAN Top users and Application by bandwidth	traffic

```
select
  user_src,
  app_group,
  sum(bandwidth) as bandwidth
from
```

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,
appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc)### t
where \$filter-drilldown group by user_src, app_group order by bandwidth desc

Dataset Name	Description	Log Category
sdwan-Device-Intfe-traffic-out-bandwidth-Line	SD-WAN Device-Interface traffic sent bandwidth Timeline	traffic

```
select
  $flex_timescale(timestamp) as hodex,
  t1.dstintf as interface,
  sum(traffic_out) as bandwidth
from
```

###(select \$flex timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf, srcintfrole, dstintfrole, appid, appcat, app group name (app) as app group, coalesce (vwlname, vwlservice) as rulename, service, coalesce(nullifna(`srcname`), ipstr (`srcip`), nullifna(`srcmac`)) as dev src, sum(crscore%65536) as crscore, coalesce(nullifna (`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user src, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*) as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0) group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc)### tl inner join (select dstintf, count(*) as num_intf from ###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf, srcintfrole, dstintfrole, appid, appcat, app group name(app) as app group, coalesce(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr(`srcip`),nullifna(`srcmac`)) as dev src, sum (crscore%65536) as crscore, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr (`srcip`)) as user src, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce (sentdelta, sentbyte, 0)) as traffic_out, count(*) as sessions from \$log-traffic where filter and fildstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc) ### t where \$filter-drilldown

group by dstintf order by num_intf desc limit \$ddown-top)t2 on t1.dstintf=t2.dstintf group by hodex, t1.dstintf order by hodex

Dataset Name	Description	Log Category
sdwan-Device-Intfe-traffic-in- bandwidth-Line	SD-WAN Device-Interface traffic received bandwidth Timeline	traffic

select

\$flex_timescale(timestamp) as hodex,
t1.srcintf as interface,
sum(traffic_in) as bandwidth
from

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf, srcintfrole, dstintfrole, appid, appcat, app group name(app) as app group, coalesce (vwlname, vwlservice) as rulename, service, coalesce(nullifna(`srcname`), ipstr (`srcip`), nullifna(`srcmac`)) as dev src, sum(crscore%65536) as crscore, coalesce(nullifna (`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user src, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*) as sessions from $\log-t$ raffic where filter and filtergroup by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc) ### tl inner join (select srcintf, count(*) as num intf from ###(select \$flex timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf, srcintfrole, dstintfrole, appid, appcat, app group name(app) as app group, coalesce(vwlname, vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr(`srcip`),nullifna(`srcmac`)) as dev src, sum (crscore%65536) as crscore, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr (`srcip`)) as user src, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce (sentdelta, sentbyte, 0)) as traffic_out, count(*) as sessions from \$log-traffic where filter and fildstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc) ### t where \$filter-drilldown and srcintf is not null and srcintfrole = 'wan' group by srcintf order by num intf desc limit \$ddown-top)t2 on t1.srcintf=t2.srcintf group by hodex, t1.srcintf order by hodex

Dataset Name	Description	Log Category
sdwan-Device-Intfe-traffic-bandwidth- Line	SD-WAN Device-Interface traffic sent bandwidth Timeline	traffic

select

\$flex_timescale(timestamp) as hodex,
t1.dstintf as interface,
sum(traffic_out) as bandwidth
from

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,

appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc) ###
tl inner join (select dstintf, count(*) as num_intf from ###(select \$flex_timestamp as
timestamp, csf, devid, vd, srccountry, dstintf, srcintf, srcintfrole, dstintfrole, appid,
appcat, app_group_name(app) as app_group, coalesce(vwlname,vwlservice) as rulename, service,
coalesce(nullifna(`srcname`),ipstr(`srcip`),nullifna(`srcmac`)) as dev_src, sum
(crscore%65536) as crscore, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr
(`srcip`)) as user_src, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte,
0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic_in, sum(coalesce
(sentdelta, sentbyte, 0)) as traffic_out, count(*) as sessions from \$log-traffic where
\$filter and vwlid IS NOT NULL and (logflag&(1|32)>0) group by timestamp, srccountry,
dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app_group,
rulename, service, user_src, dev_src order by bandwidth desc)### t where \$filter-drilldown
group by dstintf order by num_intf desc limit \$ddown-top)t2 on tl.dstintf=t2.dstintf group
by hodex, tl.dstintf order by hodex

Dataset Name	Description	Log Category
sdwan-Device-SLA-Interface- bandwidth-Drilldown	SD-WAN Device Statistic by Bibandwidth	event

select
 devid,
 sum(bibandwidth) / sum(count) as bibandwidth

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan_status from (select itime, csf, devname, devid, vd, interface, healthcheck, link_ status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msq LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num (inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and bibandwidth is not null group by devid having sum(count)>0 order by bibandwidth desc

Dataset Name	Description	Log Category
sdwan-Device-SLA-Rule-Latency-Line	SD-WAN Device-SLA-Rule Latency Line	event

```
select
   $flex_timescale(timestamp) as hodex,
   t1.intf_sla,
   sum(latency) / sum(count) as latency
from
   (
    select
        timestamp,
        interface || ':' || sla_rule as intf_sla,
        sum(latency) as latency,
        sum(count) as count
   from
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum (jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum (inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan_status) as sdwan_status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed_packetloss, (CASE WHEN sla_failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan_status END) AS sdwan_status, (CASE WHEN link_status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit_to_num(outbandwidthused) as outbandwidth, convert_unit_to_num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where latency is not null group by timestamp, intf_sla having sum(count)>0) t1 inner join (select interface || ':' || sla rule as intf sla, count(*) as num intf from ###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed_latency) as failed_latency, sum(failed_jitter) as failed_jitter, sum (failed packetloss) as failed_packetloss, sum(latency) as latency, max(latency) as latency_ max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min (jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth

ELSE 0 END) AS inbandwidth, (CASE WHEN link_status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link_status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link_status, latency::float as latency, jitter::float as jitter, trim (trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla_failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num(inbandwidthused) as inbandwidth, convert_unit_to_num(outbandwidthused) as outbandwidth, convert_unit_to_num (bibandwidthused) as bibandwidth from \$log where \$filter and logid_to_int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and sla_rule is not null group by intf_sla order by num_intf desc limit \$ddown-top)t2 on t1.intf sla=t2.intf sla group by hodex, t1.intf sla order by hodex

Dataset Name	Description	Log Category
sdwan-Device-SLA-Rule-Jitter-Line	SD-WAN Device-SLA-Rule Jitter Line	event

```
select
  $flex_timescale(timestamp) as hodex,
  t1.intf_sla,
  sum(jitter)/ sum(count) as jitter
from
  (
   select
    timestamp,
   interface || ':' || sla_rule as intf_sla,
   sum(jitter) as jitter,
   sum(count) as count
  from
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed_jitter) as failed_jitter, sum(failed_packetloss) as failed_packetloss, sum(latency) as latency, max(latency) as latency_max, min(latency) as latency_min, sum (jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum (inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla_failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link_status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface,

healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/) ### t where jitter is not null group by timestamp, intf sla having sum(count)>0) t1 inner join (select interface || ':' || sla rule as intf sla, count(*) as num intf from ###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum (failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min (jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link_status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim (trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num (bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filterdrilldown and sla rule is not null group by intf sla order by num intf desc limit \$ddowntop) t2 on t1.intf sla=t2.intf sla group by hodex, t1.intf sla order by hodex

Dataset Name	Description	Log Category
sdwan-Device-SLA-Rule-Packetloss- Line	SD-WAN Device-SLA-Rule Packetloss Line	event

```
select
   $flex_timescale(timestamp) as hodex,
   t1.intf_sla,
   sum(packetloss) / sum(count) as packetloss
from
   (
    select
        timestamp,
        interface || ':' || sla_rule as intf_sla,
        sum(packetloss) as packetloss,
        sum(count) as count
    from
```

###(select \$flex_timestamp as timestamp, csf, devname, devid, vd, interface,
healthcheck as sla_rule, sum(link_status) as link_status, sum(failed_latency) as failed_
latency, sum(failed_jitter) as failed_jitter, sum(failed_packetloss) as failed_packetloss,
sum(latency) as latency, max(latency) as latency_max, min(latency) as latency_min, sum
(jitter) as jitter, max(jitter) as jitter_max, min(jitter) as jitter_min, sum(packetloss) as
packetloss, max(packetloss) as packetloss_max, min(packetloss) as packetloss_min, sum
(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as

bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla_failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed_jitter, (CASE WHEN sla_failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/) ### t where packetloss is not null group by timestamp, intf_sla having sum(count)>0) t1 inner join (select interface || ':' || sla rule as intf sla, count(*) as num intf from ###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum(failed_packetloss) as failed_packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed_latency, (CASE WHEN sla_failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim (trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num (bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/) ### t where \$filterdrilldown and sla rule is not null group by intf sla order by num intf desc limit \$ddowntop)t2 on t1.intf sla=t2.intf sla group by hodex, t1.intf sla order by hodex

Dataset Name	Description	Log Category
sdwan-device-sla-intf-latency-pass- percent	SD-WAN Device Latency Pass Percentage by SLA rules and Interface	event

```
select
    sla_rule,
    interface,
    cast(
        100 *(
            1 - sum(failed_latency) / sum(count_linkup)
      ) as decimal(18, 2)
    ) as latency
from
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link_status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msq LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msq LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num (inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown group by sla_rule, interface having sum(count_ linkup)>0 order by latency desc

Dataset Name	Description	Log Category
sdwan-device-sla-intf-jitter-pass- percent	SD-WAN Device Jitter Pass Percentage by SLA rules and Interface	event

```
select
    sla_rule,
    interface,
    cast(
        100 *(
            1 - sum(failed_jitter)/ sum(count_linkup)
     ) as decimal(18, 2)
    ) as jitter
from
```

###(select \$flex_timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck
as sla_rule, sum(link_status) as link_status, sum(failed_latency) as failed_latency, sum
(failed_jitter) as failed_jitter, sum(failed_packetloss) as failed_packetloss, sum(latency)
as latency, max(latency) as latency_max, min(latency) as latency_min, sum(jitter) as jitter,

max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num (inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown group by sla rule, interface having sum(count linkup) > 0 order by jitter desc

Dataset Name	Description	Log Category
sdwan-device-sla-intf-packetloss-pass- percent	SD-WAN Device Packet Loss Pass Percentage by SLA rules and Interface	event

```
select
    sla_rule,
    interface,
    cast(
        100 *(
            1 - sum(failed_packetloss) / sum(count_linkup)
        ) as decimal(18, 2)
    ) as packetloss
from
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0

END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link_status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla_failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num (inbandwidthused) as inbandwidth, convert_unit_to_num(outbandwidthused) as outbandwidth, convert_unit_to_num(bibandwidthused) as bibandwidth from \$log where \$filter and logid_to_int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown group by sla_rule, interface having sum(count_linkup)>0 order by packetloss desc

Dataset Name	Description	Log Category
sdwan-Device-Intf-List-by-Availability	SD-WAN Device Interface List by Availability	event

select
 devname || ':' || interface as dev_intf,
 sum(count_linkup) / sum(count) as available

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla_failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num (inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown group by dev_intf having sum(count)>0 order by dev intf

Dataset Name	Description	Log Category
sdwan-Device-Intf-Updown-Timeline	SD-WAN Device Interface Updown Time Line	event

```
select
  $fv_line_timescale(timestamp) as hodex,
  devname || ':' || interface as dev intf,
```

```
cast(
  100 * sum(count_linkup) / sum(count) as decimal(10, 2)
) as sdwan_status
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link_status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link_status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link_status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num (inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t group by hodex, dev intf order by hodex

Dataset Name	Description	Log Category
sdwan-Device-Availability-status	SD-WAN Device Statistic by Bibandwidth	event

```
select
  devid,
  sum(bibandwidth) / sum(count) as bibandwidth
from
```

###(select \$flex_timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla_rule, sum(link_status) as link_status, sum(failed_latency) as failed_latency, sum (failed_jitter) as failed_jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN

outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link_status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link_status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla_failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num (inbandwidthused) as inbandwidth, convert_unit_to_num(outbandwidthused) as outbandwidth, convert_unit_to_num(bibandwidthused) as bibandwidth from \$log where \$filter and logid_to_int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and bibandwidth is not null group by devid having sum(count)>0 order by bibandwidth desc

```
Dataset NameDescriptionLog Categorysdwan-device-intf-availability-<br/>percentage-barSD-WAN Device Interface Availability Percentageevent
```

```
select
  'SD-WAN' as interface,
   sum(availcnt) * 100.0 / sum(count) as decimal(18, 2)
 ) as available
from
   select
      timestamp,
      devid,
      first value(count) OVER (
        PARTITION BY timestamp,
        devid
        ORDER BY
          link status / count desc,
          count desc
      ) as count,
      first value(link status) OVER (
        PARTITION BY timestamp,
        devid
        ORDER BY
          link status / count desc,
          count desc
      ) as availcnt
    from
      (
        select
          timestamp,
          devid,
          interface,
          sum(link status) as link status,
          sum(count) as count
        from
```

###(select \$flex_timestamp as timestamp, csf, devname, devid, vd, interface,
healthcheck as sla_rule, sum(link_status) as link_status, sum(failed_latency) as failed_
latency, sum(failed_jitter) as failed_jitter, sum(failed_packetloss) as failed_packetloss,
sum(latency) as latency, max(latency) as latency_max, min(latency) as latency_min, sum

(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss_max, min(packetloss) as packetloss_min, sum (inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit_to_num(outbandwidthused) as outbandwidth, convert_unit_to_num(bibandwidthused) as bibandwidth from \$log where \$filter and logid_to_int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and count>0 group by timestamp, devid, interface)t) t group by interface) union all (select interface, cast(sum(link_status)*100.0/sum(count) as decimal(18,2)) as available from ### (select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed_jitter) as failed_jitter, sum(failed_packetloss) as failed_packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link_status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla_failed=1 THEN 3 ELSE sdwan_status END) AS sdwan_status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link_status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num (inbandwidthused) as inbandwidth, convert_unit_to_num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown group by interface order by interface)

Dataset Name	Description	Log Category
sdwan-device-intf-availability-	SD-WAN Device Interface Availability Percentage Donut	event
percentage-donut		

```
select
 interface,
 unnest(avail) as avail,
 unnest(val) as val
  (
   select
     interface,
     array[ 'Available',
     'Unavailable' ] as avail,
     array[available,
     100 - available] as val
    from
          select
            'SD-WAN' as interface,
              sum(availcnt)* 100.0 / sum(count) as decimal(18, 2)
            ) as available
          from
              select
                timestamp,
                devid,
                first value(count) OVER (
                  PARTITION BY timestamp,
                  devid
                  ORDER BY
                    link status / count desc,
                    count desc
                ) as count,
                first value(link_status) OVER (
                  PARTITION BY timestamp,
                  devid
                  ORDER BY
                    link status / count desc,
                    count desc
                ) as availcnt
              from
                  select
                    timestamp,
                    devid,
                    interface,
                    sum(link status) as link status,
                    sum(count) as count
                  from
                    ###(select $flex timestamp as timestamp, csf, devname, devid, vd,
interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as
failed_latency, sum(failed_jitter) as failed_jitter, sum(failed_packetloss) as failed_
packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency
min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum
(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as
packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum
(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0
```

END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and count>0 group by timestamp, devid, interface)t) t group by interface) union all (select interface, cast(sum(link status)*100.0/sum(count) as decimal(18,2)) as available from ### (select \$flex_timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency_max, min(latency) as latency_min, sum(jitter) as jitter, max(jitter) as jitter_max, min(jitter) as jitter_min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link_ status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num (inbandwidthused) as inbandwidth, convert_unit_to_num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown group by interface order by interface)) t) t

Dataset Name	Description	Log Category
sdwan-Device-Application-sdwaRules-and-Ports-drilldown	an- SD-WAN Device Statistic by Bibandwidth	event

select devid, $\operatorname{sum}\left(\operatorname{bibandwidth}\right)/\operatorname{sum}\left(\operatorname{count}\right)$ as bibandwidth from

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan_status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link_status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num (inbandwidthused) as inbandwidth, convert_unit_to_num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and bibandwidth is not null group by devid having sum(count)>0 order by bibandwidth desc

Dataset Name	Description	Log Category
sdwan-Device-Interface-Application- Traffic-Sankey	Top SD-WAN application by bandwidth sankey	traffic

```
select
  'SD-WAN Rules' as summary,
  'Rule:' || coalesce(rulename, 'Unknown') as rule_name,
  app_group,
  devid,
  dstintf as interface,
  sum(bandwidth) as bandwidth
```

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,
appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc)### t
where \$filter-drilldown group by rule_name, app_group, devid, interface order by bandwidth
desc

Dataset Name	Description	Log Category
sdwan-fw-Device-Interface-test2	SD-WAN Device-Interface Statistic	event

```
select
  devid,
  sum(bibandwidth) / sum(count) as bibandwidth
from
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum (failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max (packetloss) as packetloss_max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla_failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed_ latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla_failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num (inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int (logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and bibandwidth is not null group by devid having sum(count)>0 order by bibandwidth desc

Dataset Name	Description	Log Category
sdwan-Device-Intf-Avail-Percentage- Timeline	SD-WAN Device Interface Availability Percentage Timeline	event

```
select
  hodex,
  interface,
  available
from
  (
     (
        select
        $flex_datetime(timestamp) as hodex,
        'SD-WAN' as interface,
        cast(
            sum(availcnt)* 100.0 / sum(count) as decimal(18, 2)
        ) as available
        from
```

```
(
 select
   timestamp,
   devid,
   first value(count) OVER (
     PARTITION BY timestamp,
     ORDER BY
       link status / count desc,
        count desc
   ) as count,
   first value(link status) OVER (
     PARTITION BY timestamp,
     devid
     ORDER BY
       link status / count desc,
        count desc
   ) as availcnt
 from
     select
       timestamp,
       devid,
        interface,
        sum(link_status) as link_status,
        sum(count) as count
      from
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum (jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter_min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum (inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla_failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan_status END) AS sdwan_status, (CASE WHEN link_status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit_to_num(outbandwidthused) as outbandwidth, convert_unit_to_num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and count>0 group by timestamp, devid, interface)t) t group by hodex order by hodex) union all (select \$flex datetime(timestamp) as hodex, interface, cast(sum(link status)*100.0/sum

(count) as decimal(18,2)) as available from ###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum (failed_latency) as failed_latency, sum(failed_jitter) as failed_jitter, sum(failed_ packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min (latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min (packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim (trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num (bibandwidthused) as bibandwidth from \$log where \$filter and logid_to_int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filterdrilldown group by hodex, interface order by hodex)) t order by hodex

Dataset Name	Description	Log Category
sdwan-Device-Intf-Inbandwidth- Timeline	SD-WAN Device-Interface Inbandwidth Timeline	event

```
select
  $flex_timescale(timestamp) as time,
  t1.interface,
  cast(
     sum(inbandwidth) / sum(count) as decimal(18, 2)
) as inbandwidth
from
  (
     select
        timestamp,
        devid,
        interface,
        sum(count) as count,
        sum(inbandwidth) as inbandwidth
     from
```

###(select \$flex_timestamp as timestamp, csf, devname, devid, vd, interface,
healthcheck as sla_rule, sum(link_status) as link_status, sum(failed_latency) as failed_
latency, sum(failed_jitter) as failed_jitter, sum(failed_packetloss) as failed_packetloss,
sum(latency) as latency, max(latency) as latency_max, min(latency) as latency_min, sum
(jitter) as jitter, max(jitter) as jitter_max, min(jitter) as jitter_min, sum(packetloss) as
packetloss, max(packetloss) as packetloss_max, min(packetloss) as packetloss_min, sum
(inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as

bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/) ### t group by timestamp, devid, interface) t1 inner join (select devid, interface, count(*) as num_intf from ###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max (latency) as latency_max, min(latency) as latency_min, sum(jitter) as jitter, max(jitter) as jitter max, min(jitter) as jitter min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum (outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan_status END) AS sdwan_status, (CASE WHEN link_status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla_failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan_status, convert_unit_to_num(inbandwidthused) as inbandwidth, convert_unit_to_num(outbandwidthused) as outbandwidth, convert_unit_to_num (bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filterdrilldown group by devid, interface order by num intf desc limit \$ddown-top)t2 on t1.interface=t2.interface and t1.devid=t2.devid group by time, t1.interface having sum (count) > 0 order by time

Dataset Name	Description	Log Category
sdwan-Device-Intf-Outbandwidth- Timeline	SD-WAN Device-Interface Outbandwidth Timeline	event

```
select
  $flex_timescale(timestamp) as time,
  t1.interface,
  cast(
     sum(outbandwidth) / sum(count) as decimal(18, 2)
) as outbandwidth
from
  (
     select
        timestamp,
        devid,
        interface,
        sum(count) as count,
        sum(outbandwidth) as outbandwidth
     from
```

###(select \$flex timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max(latency) as latency max, min(latency) as latency min, sum (jitter) as jitter, max(jitter) as jitter_max, min(jitter) as jitter_min, sum(packetloss) as packetloss, max(packetloss) as packetloss_max, min(packetloss) as packetloss_min, sum (inbandwidth) as inbandwidth, sum(outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num(bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t group by timestamp, devid, interface) t1 inner join (select devid, interface, count(*) as num_intf from ###(select \$flex_timestamp as timestamp, csf, devname, devid, vd, interface, healthcheck as sla_rule, sum(link status) as link status, sum(failed latency) as failed latency, sum(failed jitter) as failed jitter, sum(failed packetloss) as failed packetloss, sum(latency) as latency, max (latency) as latency max, min(latency) as latency min, sum(jitter) as jitter, max(jitter) as jitter_max, min(jitter) as jitter_min, sum(packetloss) as packetloss, max(packetloss) as packetloss max, min(packetloss) as packetloss min, sum(inbandwidth) as inbandwidth, sum (outbandwidth) as outbandwidth, sum(bibandwidth) as bibandwidth, count(*) as count, sum(CASE WHEN link status=1 THEN 1 ELSE 0 END) AS count linkup, min(sdwan status) as sdwan status from (select itime, csf, devname, devid, vd, interface, healthcheck, link status, (CASE WHEN link status=1 THEN latency ELSE 0 END) AS latency, (CASE WHEN link status=1 THEN jitter ELSE 0 END) AS jitter, (CASE WHEN link status=1 THEN packetloss ELSE 100 END) AS packetloss, (CASE WHEN sla failed=1 AND metric='packetloss' THEN 1 ELSE 0 END) AS failed packetloss, (CASE WHEN sla failed=1 AND metric='jitter' THEN 1 ELSE 0 END) AS failed jitter, (CASE WHEN

sla failed=1 AND metric='latency' THEN 1 ELSE 0 END) AS failed latency, (CASE WHEN sla failed=1 THEN 3 ELSE sdwan status END) AS sdwan status, (CASE WHEN link status=1 THEN inbandwidth ELSE 0 END) AS inbandwidth, (CASE WHEN link status=1 THEN outbandwidth ELSE 0 END) AS outbandwidth, (CASE WHEN link status=1 THEN bibandwidth ELSE 0 END) AS bibandwidth from (select itime, csf, devname, devid, vd, interface, healthcheck, (CASE WHEN status='down' THEN 0 ELSE 1 END) AS link status, latency::float as latency, jitter::float as jitter, trim(trailing '%' from packetloss)::float as packetloss, (CASE WHEN status='down' THEN 1 WHEN msg LIKE '%SLA failed%' THEN 1 ELSE 0 END) AS sla failed, metric, (CASE WHEN msg LIKE '%SLA status%' THEN 1 ELSE 0 END) AS sdwan status, convert unit to num(inbandwidthused) as inbandwidth, convert unit to num(outbandwidthused) as outbandwidth, convert unit to num (bibandwidthused) as bibandwidth from \$log where \$filter and logid to int(logid) in (22925, 22933, 22936) and interface is not null) t) t group by timestamp, csf, devname, devid, vd, interface, healthcheck /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filterdrilldown group by devid, interface order by num intf desc limit \$ddown-top)t2 on t1.interface=t2.interface and t1.devid=t2.devid group by time, t1.interface having sum (count) > 0 order by time

Dataset Name	Description	Log Category
Top-Web-Sites-by-Bandwidth	Top web sites by bandwidth usage	webfilter

select domain, sum (bandwidth) as bandwidth

###(select coalesce(nullifna(hostname), ipstr(`dstip`)) as domain, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from \$log-traffic where \$filter and (logflag&1>0) and (countweb>0 or ((logver is null or logver<502000000) and (hostname is not null or utmevent in ('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by domain having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0))>0 order by bandwidth desc)### t group by domain order by bandwidth desc

Dataset Name	Description	Log Category
Top-App-Category-by-Session	Application risk application usage by category	traffic

select appcat, sum(sessions) as total num

###(select appid, app, appcat, apprisk, sum(bandwidth) as bandwidth, sum(sessions) as sessions from ###base(/*tag:rpt base t top app*/select dvid, srcip, dstip, epid, euid, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app, appcat, apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, count(*) as sessions from \$log-traffic where \$filter and (logflag&(1|32)>0) and nullifna(app) is not null group by dvid, srcip, dstip, epid, euid, user src, appid, app, appcat, apprisk order by sessions desc)base### t group by appid, app, appcat, apprisk /*SkipSTART*/order by sessions desc, bandwidth desc/*SkipEND*/)### t where \$filter-drilldown group by appeat order by total num desc

Dataset Name	Description	Log Category
Top-Region-Name-by-Traffic	Traffic top destination countries by browsing time	traffic

select dstcountry,

```
sum(bandwidth) as bandwidth
from
```

###(select dstcountry, ebtr_agg_flat(browsetime) as browsetime, sum(bandwidth) as
bandwidth, sum(traffic_in) as traffic_in, sum(traffic_out) as traffic_out from (select
dstcountry, ebtr_agg_flat(\$browse_time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce
(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce
(sentbyte, 0)) as traffic_out from \$log where \$filter and (logflag&l>0) and \$browse_time is
not null group by dstcountry) t group by dstcountry /*SkipSTART*/order by ebtr_value(ebtr_
agg_flat(browsetime), null, null) desc/*SkipEND*/)### t where \$filter-drilldown group by
dstcountry order by bandwidth desc

Dataset Name	Description	Log Category
Top-App-By-Bandwidth-Chart	Top applications by bandwidth usage	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
  sum(sessions) as sessions
```

###(select app_group_name(app) as app_group, appcat, service, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log where \$filter and (logflag&(1|32)>0) and nullifna(app) is not null
group by app_group, appcat, service order by bandwidth desc)### t group by app_group having
sum(bandwidth)>0 order by bandwidth desc

Dataset Name	Description	Log Category
Top-Protocols-By-Traffic	Top applications by bandwidth usage	traffic

```
select
  service,
  sum(bandwidth) as bandwidth
from
```

###(select service, sum(bandwidth) as bandwidth from ###base(/*tag:rpt_base_t_bndwdth_
sess*/select \$flex_timestamp as timestamp, dvid, srcip, dstip, epid, euid, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, service, count(*) as
sessions, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as
bandwidth, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in from \$log-traffic where \$filter and (logflag&(1|32)>0) group by
timestamp, dvid, srcip, dstip, epid, euid, user_src, service /*SkipSTART*/order by timestamp
desc/*SkipEND*/)base### base_query group by service order by bandwidth desc)### t where
\$filter-drilldown group by service order by bandwidth desc

Dataset Name	Description	Log Category
Top-Web-Sites-by-Sessions	Top web sites by session count	webfilter

```
select
  domain,
  sum(sessions) as sessions
from
  ###(select coalesce(nullifna(hostname), ipstr(`dstip`)) as domain, count(*) as sessions
```

from \$log where \$filter and (eventtype is null or logver>=502000000) group by domain order by sessions desc)### t group by domain order by sessions desc

Dataset Name	Description	Log Category
Top-Attacks-by-Count	Threat attacks by severity	attack

```
select
  attack,
  sum(attack_count) as totalnum
from
```

###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, attack, (case when
severity in ('critical', 'high') then 1 else 0 end) as high_severity, count(*) as attack_
count from \$log where \$filter and nullifna(attack) is not null group by user_src, attack,
high_severity order by attack_count desc)### t where \$filter-drilldown and attack is not
null group by attack order by totalnum desc

Dataset Name	Description	Log Category
Top-Spams-by-Count	User drilldown top spam sources	emailfilter

```
select
  user_src,
  sum(totalnum) as totalnum
from
```

###(select \$flex_timestamp as timestamp, coalesce(nullifna(`user`), ipstr(`srcip`)) as
user_src, `from` as mf_sender, `to` as mf_receiver, action, eventtype, count(*) as totalnum
from \$log where \$filter group by timestamp, user_src, mf_sender, mf_receiver, action,
eventtype /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and
mf_sender is not null group by user_src order by totalnum desc

Dataset Name	Description	Log Category
utm-Top-Virus-Count	UTM top virus	virus

```
select
  virus,
  max(virusid_s) as virusid,
  (
    case when virus like 'Riskware%' then 'Spyware' when virus like 'Adware%' then 'Adware'
else 'Virus' end
  ) as malware_type,
  sum(totalnum) as totalnum
from
```

###(select virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*) as totalnum
from \$log where \$filter and (eventtype is null or logver>=502000000) and nullifna(virus) is
not null group by virus, virusid_s /*SkipSTART*/order by totalnum desc/*SkipEND*/)### t
group by virus, malware_type order by totalnum desc

Dataset Name	Description	Log Category
security-Antivirus-Inspections	Antivirus Inspections	virus

```
select
  action,
  sum(totalnum) as totalnum
```

from

###(select \$flex timestamp as timestamp, coalesce(nullifna(`user`), ipstr(`srcip`)) as user src, `from` as mf sender, `to` as mf receiver, action, eventtype, count(*) as totalnum from \$log where \$filter group by timestamp, user src, mf sender, mf receiver, action, eventtype /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t where \$filter-drilldown and action is not null group by action order by totalnum desc

Dataset Name	Description	Log Category
Top-DLP-by-Count	Email DLP Activity Summary	dlp

```
select
 profile,
 count(*) as total num
```

###(select itime, hostname, `from` as sender, `to` as receiver, profile, action, service, subtype, srcip, dstip, severity, filename, direction, filesize, (case when severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna (`user`), ipstr(`srcip`)) is not null then 'User Associated Data Loss' else NULL end) end) as data loss from \$log where \$filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where \$filter-drilldown and profile is not null group by profile order by total num desc

Dataset Name	Description	Log Category
wifi-Top-AP-By-Client	Top access point by client	traffic

```
ap srcintf as srcintf,
 count(distinct srcmac) as totalnum
from
    select
     coalesce(ap, srcintf) as ap_srcintf,
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_ src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce (nullifna (`srcname`), `srcmac`) as hostname mac, max(srcswversion) as srcswversion, max(osname) as osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from \$log-traffic where \$filter and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user src, ap, srcintf, srcssid, srcmac, hostname mac /*SkipSTART*/order by bandwidth desc, subtotal desc/*SkipEND*/)### t where srcmac is not null group by ap srcintf, srcmac union all (select ap as ap srcintf, stamac as srcmac from ###(select \$flex timestamp as timestamp, stamac, stamac as srcmac, ap, ssid, ssid as srcssid, user src, sum(coalesce(sentdelta, 0)) as sentdelta, sum(coalesce(rcvddelta, 0)) as rcvddelta, sum(coalesce(sentdelta, 0)+coalesce (rcvddelta, 0)) as bandwidth from (select itime, stamac, ap, ssid, coalesce(`user`, ipstr (`srcip`)) as user src, sentbyte-lag(coalesce(sentbyte, 0)) over (partition by stamac order by itime) as sentdelta, rcvdbyte-lag(coalesce(rcvdbyte, 0)) over (partition by stamac order by itime) as rcvddelta from \$log-event where \$filter and subtype='wireless' and stamac is not null and ssid is not null and action in ('sta-wl-bridge-traffic-stats', 'reassoc-req', 'assoc-req')) as t group by timestamp, stamac, ap, ssid, user src /*SkipSTART*/order by bandwidth desc/*SkipEND*/)### t where stamac is not null group by ap, stamac)) t group by srcintf order by totalnum desc

Dataset Name	Description	Log Category
wifi-Top-AP-By-Bandwidth	Top access point by bandwidth usage	traffic

```
select
 ap srcintf,
 sum (bandwidth) as bandwidth
   select
      coalesce(ap, srcintf) as ap srcintf,
      sum(bandwidth) as bandwidth
    from
      ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_
src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce (nullifna
(`srcname`), `srcmac`) as hostname mac, max(srcswversion) as srcswversion, max(osname) as
osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte,
0) + coalesce (rcvdbyte, 0)) as bandwidth, count(*) as subtotal from $log-traffic where $filter
and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user src, ap,
srcintf, srcssid, srcmac, hostname mac /*SkipSTART*/order by bandwidth desc, subtotal
desc/*SkipEND*/)### t group by ap srcintf having sum(bandwidth)>0 union all select ap as ap_
srcintf, sum(bandwidth) as bandwidth from ###(select $flex timestamp as timestamp, stamac,
stamac as srcmac, ap, ssid, ssid as srcssid, user src, sum(coalesce(sentdelta, 0)) as
sentdelta, sum(coalesce(rcvddelta, 0)) as rcvddelta, sum(coalesce(sentdelta, 0)+coalesce
(rcvddelta, 0)) as bandwidth from (select itime, stamac, ap, ssid, coalesce(`user`, ipstr
(`srcip`)) as user src, sentbyte-lag(coalesce(sentbyte, 0)) over (partition by stamac order
by itime) as sentdelta, rcvdbyte-lag(coalesce(rcvdbyte, 0)) over (partition by stamac order
by itime) as rcvddelta from $log-event where $filter and subtype='wireless' and stamac is
not null and ssid is not null and action in ('sta-wl-bridge-traffic-stats', 'reassoc-req',
'assoc-req')) as t group by timestamp, stamac, ap, ssid, user_src /*SkipSTART*/order by
```

Dataset Name	Description	Log Category
wifi-Top-SSID-By-Bandwidth	Top SSIDs by bandwidth usage	traffic

bandwidth desc/*SkipEND*/)### t group by ap having sum(bandwidth)>0) t group by ap srcintf

```
select
   srcssid,
   sum(bandwidth) as bandwidth
from
   (
   select
       srcssid,
       sum(bandwidth) as bandwidth
   from
```

order by bandwidth desc

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_
src, ap, srcintf, srcssid, srcssid as ssid, srcmac, srcmac as stamac, coalesce(nullifna
(`srcname`), `srcmac`) as hostname_mac, max(srcswversion) as srcswversion, max(osname) as
osname, max(osversion) as osversion, max(devtype) as devtype, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as subtotal from \$log-traffic where \$filter
and (logflag&1>0) and (srcssid is not null or dstssid is not null) group by user_src, ap,
srcintf, srcssid, srcmac, hostname_mac /*SkipSTART*/order by bandwidth desc, subtotal
desc/*SkipEND*/)### t where srcssid is not null group by srcssid having sum(bandwidth)>0
union all select ssid as srcssid, sum(bandwidth) as bandwidth from ###(select \$flex_
timestamp as timestamp, stamac, stamac as srcmac, ap, ssid, ssid as srcssid, user_src, sum

(coalesce(sentdelta, 0)) as sentdelta, sum(coalesce(rcvddelta, 0)) as rcvddelta, sum (coalesce(sentdelta, 0)+coalesce(rcvddelta, 0)) as bandwidth from (select itime, stamac, ap, ssid, coalesce(`user`, ipstr(`srcip`)) as user_src, sentbyte-lag(coalesce(sentbyte, 0)) over (partition by stamac order by itime) as sentdelta, rcvdbyte-lag(coalesce(rcvdbyte, 0)) over (partition by stamac order by itime) as rcvddelta from \$log-event where \$filter and subtype='wireless' and stamac is not null and ssid is not null and action in ('sta-wl-bridge-traffic-stats', 'reassoc-req', 'assoc-req')) as t group by timestamp, stamac, ap, ssid, user_src /*SkipSTART*/order by bandwidth desc/*SkipEND*/)### t group by ssid having sum(bandwidth)>0) t group by srcssid order by bandwidth desc

Dataset Name	Description	Log Category
sdwan-CTAP-Total-Bandwidth- Internal-And-External	CTAP SD-WAN Internal and External Bandwidth	traffic

###(select \$flex timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf, srcintfrole, dstintfrole, appid, appcat, app group name(app) as app group, coalesce (vwlname, vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr (`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna (`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*) as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0) group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc) ### t where \$filter-drilldown) union all (select 'External' as interface, coalesce(sum(bandwidth), 0) as bandwidth from ###(select \$flex timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf, srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce(vwlname, vwlservice) as rulename, service, coalesce(nullifna(`srcname`), ipstr (`srcip`), nullifna(`srcmac`)) as dev src, sum(crscore%65536) as crscore, coalesce(nullifna (`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user src, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*) as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0) group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc) ### t where \$filter-drilldown)) t where bandwidth>0

Dataset Name	Description	Log Category
sdwan-CTAP-Total-Bandwidth- External-Business-nonBusiness- Network	CTAP SD-WAN Bandwidth of External Business and nonBusiness	traffic

```
select
  (
   case when appeat not in (
      'Network.Service', 'Mobile', 'Social.Media',
      'Proxy', 'Video\/Audio', 'Game',
      'P2P', 'unknown'
    ) then 'Business' when appcat in (
      'Mobile', 'Social.Media', 'Proxy',
      'Video\/Audio', 'Game', 'P2P', 'unknown'
   ) then 'nonBusiness' when appcat in ('Network.Service') then 'Network Service' end
  ) as app cat,
  coalesce(
   sum (bandwidth),
 ) as bandwidth
  ###(select $flex timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app group name(app) as app group, coalesce
(vwlname, vwlservice) as rulename, service, coalesce(nullifna(`srcname`), ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*)
as sessions from $log-traffic where $filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,
appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc) ### t
where $filter-drilldown group by app cat order by bandwidth desc
```

Dataset Name	Description	Log Category
sdwan-CTAP-Top-Appcat-Appgroup- By-Bandwidth-Sankey	CTAP SD-WAN Top SD-WAN application by bandwidth usage	traffic

```
select
  'External' as summary,
 appcat,
 app group,
  sum(bandwidth) as bandwidth
  ###(select $flex timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app group name(app) as app group, coalesce
(vwlname, vwlservice) as rulename, service, coalesce(nullifna(`srcname`), ipstr
(`srcip`), nullifna(`srcmac`)) as dev src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*)
as sessions from $log-traffic where $filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,
appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc) ### t
where $filter-drilldown and bandwidth>0 group by appcat, app group order by bandwidth desc
```

Dataset Name	Description	Log Category
sdwan-CTAP-Business-Apps- Bandwidth	CTAP SD-WAN Business Application with Bandwidth	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth
from
```

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,
appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc)###
t1 inner join app_mdata t2 on lower(t1.app_group)=lower(t2.name) where \$filter-drilldown and
appcat not in ('Network.Service',

'Mobile','Social.Media','Proxy','Video\/Audio','Game','P2P','unknown') group by app_group order by bandwidth desc, app_group

Dataset Name	Description	Log Category
sdwan-CTAP-Cloud-IT-Apps- Bandwidth	CTAP SD-WAN Cloud IT Application Bandwidth	traffic

select
 app_group,
 sum(bandwidth) as bandwidth
from

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,
appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc)### t
where \$filter-drilldown and appcat='Cloud.IT' and bandwidth>0 group by app_group order by
bandwidth desc

Dataset Name	Description	Log Category
sdwan-CTAP-Storage-Backup-Apps- Bandwidth	CTAP SD-WAN Storage Backup Application Bandwidth	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth
from
```

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,

rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*) as sessions from $\log-t$ raffic where filter and filtergroup by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc) ### t where \$filter-drilldown and appcat='Storage.Backup' and bandwidth>0 group by app group order by bandwidth desc

Dataset Name	Description	Log Category
sdwan-CTAP-Collaboration-Apps- Bandwidth	CTAP SD-WAN Collaboration Application Bandwidth	traffic

select app group, sum(bandwidth) as bandwidth

###(select \$flex timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf, srcintfrole, dstintfrole, appid, appcat, app group name(app) as app group, coalesce (vwlname, vwlservice) as rulename, service, coalesce(nullifna(`srcname`), ipstr (`srcip`), nullifna(`srcmac`)) as dev src, sum(crscore%65536) as crscore, coalesce(nullifna (`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user src, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*) as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0) group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc) ### t where \$filter-drilldown and appeat='Collaboration' and bandwidth>0 group by app group order by bandwidth desc

Dataset Name	Description	Log Category
sdwan-CTAP-Top-Streaming-App-By-Bandwidth	CTAP SD-WAN Top Streaming Application by Bandwidth	traffic

select app group, sum (bandwidth) as bandwidth

###(select \$flex timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf, srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce (vwlname, vwlservice) as rulename, service, coalesce(nullifna(`srcname`), ipstr (`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna (`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*) as sessions from $\log-t$ raffic where filter and vwlid IS NOT NULL and $(\log flag \& (1|32)>0)$ group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole, appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc) ### t where \$filter-drilldown and appcat='Video\/Audio' and bandwidth>0 group by app group order by bandwidth desc

Dataset Name	Description	Log Category
sdwan-CTAP-Top-SocialMedia-App- By-Bandwidth	CTAP SD-WAN Top SocialMedia Application by Bandwidth	traffic

```
select
   app_group,
   sum(bandwidth) as bandwidth
from
   ###(select $flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
   srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
   (vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
   (`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
   (`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
   sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
   rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
   as sessions from $log-traffic where $filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
   group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,
   appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc)### t
   where $filter-drilldown and appcat='Social.Media' and bandwidth>0 group by app_group order
   by bandwidth desc
```

Dataset Name	Description	Log Category
sdwan-CTAP-App-Risk-Reputation-	Reputation Top Devices By-Scores	traffic
Top-Devices-By-Scores		

```
select
 coalesce(
   nullifna(`srcname`),
   ipstr(`srcip`),
   nullifna(`srcmac`)
  ) as dev src,
  sum(crscore % 65536) as scores
from
  $log
where
 $filter
  and (
    logflag&1>0
 and crscore is not null
group by
 dev src
having
 sum(crscore % 65536) > 0
order by
 scores desc
```

Dataset Name	Description	Log Category
sdwan-CTAP-SB-Top-Sandbox-Files	CTAP SD-WAN Sandbox Top Sandbox Files	virus

```
select
  filename,
  analyticscksum,
  service,
  sum(totalnum) as total_num,
  (
    case fsaverdict when 'malicious' then 'Malicious' when 'high risk' then 'High' when
'medium risk' then 'Medium' when 'low risk' then 'Low' else 'Other' end
```

```
) as risk,
(
    case fsaverdict when 'malicious' then 5 when 'high risk' then 4 when 'medium risk' then
3 when 'low risk' then 2 else 1 end
) as risk_level
from

###(select filename, analyticscksum, service, fsaverdict, dtype, coalesce(nullifna
('user'), ipstr('srcip')) as user_src, virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*) as totalnum from $log where $filter group by filename, analyticscksum, service,
fsaverdict, dtype, user_src, virus, virusid_s /*SkipSTART*/order by totalnum
desc/*SkipEND*/)### t where $filter-drilldown and filename is not null and
dtype='fortisandbox' and fsaverdict not in ('clean', 'submission failed') group by filename,
analyticscksum, risk_level, risk, service order by risk_level desc, total_num desc,
service, filename
```

Dataset Name	Description	Log Category
sdwan-CTAP-SB-Total-Number-of- Malicious-Suspicious-Files	CTAP SD-WAN Sandbox Malicious Suspicious Files Number	virus

```
select
  (
    case fsaverdict when 'malicious' then 'Malicious' when 'high risk' then 'High' when
'medium risk' then 'Medium' when 'low risk' then 'Low' else 'Other' end
  ) as risk,
    sum(totalnum) as total_num
from
    ###(select filename, analyticscksum, service, fsaverdict, dtype, coalesce(nullifna
(`user`), ipstr(`srcip`)) as user_src, virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*) as totalnum from $log where $filter group by filename, analyticscksum, service,
fsaverdict, dtype, user_src, virus, virusid_s /*SkipSTART*/order by totalnum
desc/*SkipEND*/)### t where $filter-drilldown and dtype='fortisandbox' and fsaverdict not in
('clean','submission failed') group by risk order by total_num desc
```

Dataset Name	Description	Log Category
sdwan-CTAP-Top-Source-Countries	CTAP SD-WAN Top Source Countries	traffic

```
select
  srccountry,
  sum(bandwidth) as bandwidth
from
```

###(select \$flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname,vwlservice) as rulename, service, coalesce(nullifna(`srcname`),ipstr
(`srcip`),nullifna(`srcmac`)) as dev_src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_out, count(*)
as sessions from \$log-traffic where \$filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,
appid, appcat, app_group, rulename, service, user_src, dev_src order by bandwidth desc)### t
where \$filter-drilldown and nullifna(srccountry) is not null and srccountry <> 'Reserved'
and bandwidth>0 group by srccountry order by bandwidth desc, srccountry

Dataset Name	Description	Log Category
sdwan-CTAP-Average-Bandwidth- Day-Hour	CTAP SD-WAN Average Bandwidth by Day of Week and Hour	traffic

```
select
 hourstamp,
 daystamp,
 round(
   sum(bandwidth) / count(*)
  ) as bandwidth
from
  (
   select
     $hour of day(timestamp) as hourstamp,
      $HOUR OF DAY(timestamp) as hour stamp,
      $day of week(timestamp) as daystamp,
      sum(bandwidth) as bandwidth
    from
      ###(select $flex_timestamp as timestamp, csf, devid, vd, srccountry, dstintf, srcintf,
srcintfrole, dstintfrole, appid, appcat, app_group_name(app) as app_group, coalesce
(vwlname, vwlservice) as rulename, service, coalesce(nullifna(`srcname`), ipstr
(`srcip`),nullifna(`srcmac`)) as dev src, sum(crscore%65536) as crscore, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta,
rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, count(*)
as sessions from $log-traffic where $filter and vwlid IS NOT NULL and (logflag&(1|32)>0)
group by timestamp, srccountry, dstintf, csf, devid, vd, srcintf, srcintfrole, dstintfrole,
appid, appcat, app group, rulename, service, user src, dev src order by bandwidth desc)### t
where $filter-drilldown group by hourstamp, hour stamp, daystamp) t group by hourstamp,
daystamp order by hourstamp
```

Dataset Name	Description	Log Category
sdwan-CTAP-Average-Log-Rate-By- Hour	CTAP SD-WAN Average Log Rate by Hour	event

```
select
    $hour_of_day(timestamp) as hourstamp,
    cast(
          (
                sum(
                     total_trate + total_erate + total_orate
                )
                / sum(count) / 100.0 as decimal(10, 2)
                ) as log_rate
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth,
part(bandwidth, '/', 2), '0') as integer)) as recv, max(cast(coalesce(split_part(bandwidth,

'/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak, count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group by timestamp, devid, slot order by total_mem desc)### t where \$filter-drilldown group by hourstamp order by hourstamp

Dataset Name	Description	Log Category
sdwan-CTAP-CPU-Usage-Per-Hour	Event usage CPU	event

```
select
   $hour_of_day(timestamp) as hourstamp,
   cast(
      sum(total_cpu) / sum(count) as decimal(6, 2)
   ) as cpu_avg_usage
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
 (itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
 (coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
 as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
 (coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
 (totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
 (coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth,
'/', 1), '0') as integer)+cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
 transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
 count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
 by timestamp, devid, slot order by total_mem desc)### t group by hourstamp order by
 hourstamp

Dataset Name	Description	Log Category
sdwan-CTAP-Memory-Usage-Per- Hour	Event usage memory	event

```
select
   $hour_of_day(timestamp) as hourstamp,
   cast(
      sum(total_mem) / sum(count) as decimal(6, 2)
   ) as mem_avg_usage
from
```

###(select \$flex_timestamp as timestamp, devid, slot, sum(coalesce(trate, 0)) as total_
trate, sum(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as total_orate, min
(itime) as first_seen, max(itime) as last_seen, sum(coalesce(mem, 0)) as total_mem, max
(coalesce(mem, 0)) as mem_peak, sum(coalesce(disk, 0)) as total_disk, max(coalesce(disk, 0))
as disk_peak, sum(coalesce(cpu, 0)) as total_cpu, max(coalesce(cpu, 0)) as cpu_peak, max
(coalesce(trate, 0)+coalesce(erate, 0)+coalesce(orate, 0)) as lograte_peak, sum(coalesce
(totalsession, 0)) as totalsession, max(coalesce(totalsession, 0)) as session_peak, sum(cast
(coalesce(split_part(bandwidth, '/', 1), '0') as integer)) as sent, sum(cast(coalesce(split_part(bandwidth, '/', 2), '0') as integer)) as
transmit_peak, sum(coalesce(setuprate, 0)) as cps, max(coalesce(setuprate, 0)) as cps_peak,
count(*) as count from \$log where \$filter and subtype='system' and action='perf-stats' group
by timestamp, devid, slot order by total_mem desc)### t group by hourstamp order by
hourstamp

Dataset Name	Description	Log Category
Top-Destination-Addresses-By- Bandwidth-Bar	Top destinations by bandwidth usage	traffic

```
select
 coalesce(
   nullifna(
     root_domain(hostname)
    ipstr(dstip)
  ) as domain,
  sum(
   coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
  ) as bandwidth,
  sum(
    coalesce(rcvdbyte, 0)
  ) as traffic in,
   coalesce(sentbyte, 0)
  ) as traffic_out
from
  $log
where
  $filter
  and (
   logflag&1>0
  and coalesce(
  nullifna(
     root domain(hostname)
   ),
   ipstr(`dstip`)
  ) is not null
group by
  domain
having
    coalesce(sentbyte, 0) + coalesce(rcvdbyte, 0)
 ) > 0
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
intf-Timeline-Sampling	Interface Utilization Timeline by Data Sampling	event

```
with base_qry as (
    select
    tm,
    rcvdbps,
    ntile(100) over (
        order by
        rcvdbps
    ) as percentile
    from
```

```
(
      select
        (timestamp / 300 * 300) as tm,
        sum(rcvdbps) as rcvdbps,
        300 as interval
      from
       intfstats billing tb1
       join (
         select
           ti.dvid,
           intfname
          from
            intfinfo ti
            left join devtable_ext td on ti.dvid = td.dvid
          where
            $dev filter
        ) tb2 on tb1.dvid = tb2.dvid
        and tb1.intfname = tb2.intfname
        $cust_time_filter(timestamp)
      group by
        tm
   ) tmp
),
ref_qry as (
 select
   cast(
     max(rcvdbps) / 1000000 as decimal(18, 2)
   ) as ref val
 from
   base_qry
 where
   percentile = 95
)
select
 from itime(timestamp) as tmstamp,
 cast(
  rcvdbps / 1000000 as decimal(18, 2)
 ) as rcvdbps,
 ref_val
from
 ref_qry,
   select
     tm as timestamp,
     rcvdbps,
     rank() over(
       partition by (tm / 3600)
       order by
     ) as r
   from
     base_qry
 ) t
where
 r = 1
```

order by tmstamp

Dataset NameDescriptionLog Categoryintf-Util-HistogramInterface Utilization Value Distributionevent

```
select
 cast(
    (
       max(max_value) over ()
     )* seq / 100
   ) as decimal(16, 0)
  ) as value,
  cnt
from
  (
    select
     generate_series(0, 100, 2) as seq
  left join (
    select
     perc,
     max value,
     count(*) as cnt
    from
        select
          WIDTH BUCKET (
            rcvdbps,
            Ο,
              max(rcvdbps) over ()
            ) + 1,
            50
          ) * 2 as perc,
          max(rcvdbps) over () as max_value
        from
            select
              (timestamp / 300 * 300) as tm,
              sum(rcvdbps) as rcvdbps,
              300 as interval
              intfstats_billing tb1
              join (
                select
                  ti.dvid,
                  intfname
                from
                  left join devtable_ext td on ti.dvid = td.dvid
                where
                  $dev filter
              ) tb2 on tb1.dvid = tb2.dvid
```

```
        Dataset Name
        Description
        Log Category

        intf-Sorted-Line
        Interface Utilization Line Sorted by bps
        event
```

```
with base_qry as (
  select
   rcvdbps,
   ntile(100) over (
     order by
       rcvdbps
   ) as percentile
  from
     select
        (timestamp / 300 * 300) as tm,
        sum(rcvdbps) as rcvdbps,
        300 as interval
        intfstats_billing tb1
        join (
          select
           ti.dvid,
            intfname
          from
            intfinfo ti
            left join devtable_ext td on ti.dvid = td.dvid
          where
            $dev_filter
        ) tb2 on tb1.dvid = tb2.dvid
        and tb1.intfname = tb2.intfname
        $cust_time_filter(timestamp)
      group by
    ) tmp
),
ref qry as (
 select
   cast(
     max(rcvdbps) / 1000000 as decimal(18, 2)
   ) as ref val
  from
```

```
base_qry
 where
   percentile = 95
select
 n_perc,
 cast(
  rcvdbps / 1000000 as decimal(18, 2)
 ) as rcvdbps,
 ref_val
from
   select
     seq as n_perc,
     rcvdbps
   from
      (
        select
         generate_series(0, 100, 1) as seq
     ) t1
     left join (
        select
         max(rcvdbps) as rcvdbps,
         percentile
       from
         base_qry
       group by
         percentile
     ) t2 on t1.seq = t2.percentile
 ) t,
 ref qry
order by
 n_perc
```

Dataset Name	Description	Log Category
intf-Data-Analysis-Table	Interface Utilization Data Analysis	event

```
with base_qry as (
 select
   rcvdbps,
   interval,
   ntile(100) over (
     order by
       rcvdbps
   ) as percentile
 from
     select
       (timestamp / 300 * 300) as tm,
        sum(rcvdbps) as rcvdbps,
       300 as interval
       intfstats_billing tb1
        join (
          select
```

```
ti.dvid,
            intfname
          from
            intfinfo ti
            left join devtable_ext td on ti.dvid = td.dvid
          where
            $dev filter
        ) tb2 on tb1.dvid = tb2.dvid
        and tb1.intfname = tb2.intfname
      where
        $cust time filter(timestamp)
      group by
        tm
    ) tmp
)
select
 min_mbps,
 low_ref_mbps,
 mean mbps,
 ref mbps,
 peak_mbps,
 actual_gb,
 total
from
    select
     cast(
       min(rcvdbps) / 1000000 as decimal(18, 2)
      ) as min mbps,
     cast(
       avg(rcvdbps) / 1000000 as decimal(18, 2)
     ) as mean_mbps,
        max(rcvdbps) / 1000000 as decimal(18, 2)
      ) as peak_mbps,
      cast(
        (
          select
           max(rcvdbps)
          from
            base_qry
          where
            percentile = 5
        )/ 1000000 as decimal(18, 2)
      ) as low_ref_mbps,
      cast(
        (
          select
            max(rcvdbps)
          from
            base_qry
          where
            percentile = 95
        )/1000000 as decimal(18, 2)
      ) as ref_mbps,
      cast(
```

```
sum(interval * rcvdbps)/ 8 /(1024 * 1024 * 1024) as decimal(18, 2)
) as actual_gb,
count(*) as total
from
   base_qry
) t
```

Dataset Name	Description	Log Category
intf-Device-Summary	Interface Utilization Device Summary	event

```
select
 devname,
 t1.intfname,
 rcvd_gb
from
    select
     devname,
     ti.dvid,
     intfname
      devtable ext td
      join intfinfo ti on ti.dvid = td.dvid
   where
     $dev_filter
  ) t1
  join (
    select
     dvid,
     intfname,
       sum(interval * rcvdbps) / 8 /(1024 * 1024 * 1024) as decimal(18, 2)
      ) as rcvd_gb
    from
      intfstats_billing
   where
      $cust_time_filter(timestamp)
   group by
     dvid,
     intfname
  ) t2 on t1.dvid = t2.dvid
  and t1.intfname = t2.intfname
order by
 devname,
 rcvd gb desc,
  t1.intfname
```

Dataset Name	Description	Log Category
daily-Summary-Traffic-Bandwidth-Line	Daily Summary - Traffic Bandwidth Line	traffic

```
select
  $fv_line_timescale(timescale) as time,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
```

```
sum(session_block) as session_block,
   sum(sessions) - sum(session_block)
 ) as session pass
from
  (
     select
       timescale,
       sum(traffic_in) as traffic_in,
        sum(traffic out) as traffic out,
       sum(session block) as session block,
        sum(sessions) as sessions
     from
       t
     group by
       timescale
   union all
     (
       select
         timescale,
          sum(traffic in) as traffic in,
          sum(traffic_out) as traffic_out,
          sum(session_block) as session_block,
          sum(sessions) as sessions
        from
          t
       group by
         timescale
 ) t
group by
 time
order by
 time
```

Dataset Name	Description	Log Category
daily-Summary-Top-User	Daily Summary - Top User by Bandwidth	traffic

```
select
  coalesce(
    nullifna(f_user),
    ipstr(srcip),
    'Unknown'
) as f_user,
  srcip,
  sum(bandwidth) as bandwidth
FROM
  t
group by
  f_user,
  srcip
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
daily-Summary-Top-Domain	Daily Summary - Top Domain by Bandwidth	traffic

```
select
  domain,
  sum(bandwidth) as bandwidth
from
  t
where
  domain is not null
group by
  domain
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
daily-Summary-Top-Appcat-Bandwidth	Daily Summary - Top Application Category by Bandwidth	traffic

```
select
 appcat,
 sum (bandwidth) as bandwidth
from
    select
     t1.*,
     t2.app_cat as appcat
    from
     t1
      left join app_mdata t2 on t1.app_group = t2.name
 ) t
where
  $filter - drilldown
  and appeat is not null
group by
 appcat
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
daily-Summary-Top-App	Daily Summary - Top Application	traffic

```
select
  app_group,
  max(appcat) as appcat,
  (
    case max(d_risk) when 1 then 'Low' when 2 then 'Elevated' when 3 then 'Medium' when 4
then 'High' when 5 then 'Critical' else NULL end
  ) as risk,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out,
  sum(session_block) as session_block,
  (
```

```
sum(sessions) - sum(session block)
 ) as session_pass,
 sum(sessions) as sessions
from
   select
     t1.*,
       case when (
         d flags&1
       ) = 1 then 'Not.Scanned' when t2.app cat is null then 'Unknown' else t2.app cat end
      ) as appcat,
       case when t2.risk is null then 0 else t2.risk : :int end
     ) as d risk
     t1
     left join app_mdata t2 on t1.app_group = t2.name
 ) t
where
 $filter - drilldown
group by
 app group
order by
 max(d_risk) desc,
 sessions desc,
 bandwidth desc
```

Dataset Name	Description	Log Category
daily-Summary-Top-Threats	Daily Summary - Top Threats	traffic

```
select
  threat_s as threat,
  threattype_s as threattype,
  sum(threatweight) as threatweight,
  sum(threat_block) as threat_block,
   sum(threatweight) - sum(threat_block)
  ) as threat pass,
  sum(incidents) as incidents,
  sum(incident_block) as incident_block,
   sum(incidents) - sum(incident block)
  ) as incident pass
from
      select
        threat s,
        threattype_s,
        sum(threatweight) as threatweight,
        sum(threat_block) as threat_block,
        sum(incidents) as incidents,
        sum(incident block) as incident block
      from
```

```
group by
        threat_s,
        threattype_s
    union all
      (
        select
         threat_s,
          threattype_s,
          sum(threatweight) as threatweight,
          sum(threat block) as threat block,
          sum(incidents) as incidents,
          sum(incident_block) as incident_block
        from
          t
        group by
          threat_s,
          threattype_s
  ) t
group by
 threat,
 threattype
order by
 threatweight desc
```

Dataset Name	Description	Log Category
daily-Summary-Top-Compromised- Hosts	Daily Summary - Top Compromised Hosts	traffic

```
select
 epid,
 devid,
 vd,
  srcip,
  devtype,
 fctuid,
 euid,
 bmp logtype as logtype,
 unauthuser,
 srcmac,
  osname,
  osversion,
  f user,
  case when epid<1024 then ipstr(srcip) else epname end
 ) as epname,
 threat_num,
 bl_count,
  cs_score,
  cs count,
  verdict,
 ip_reversed,
  rescan,
```

```
case verdict when 1 then 'Low Suspicion' when 2 then 'Medium Suspicion' when 3 then
'High Suspicion' when 4 then 'Infected' else 'N/A' end
 ) as verdict s,
 ack_time,
 ack note,
 last bl as last detected time
  (
   SELECT
     epid,
     itime,
     bl count,
     cs_score,
     cs count,
     threat num,
     bmp_logtype,
     last bl,
     verdict,
     ip_reversed,
     rescan,
     srcip,
     epname,
     srcmac,
     osname,
     osversion,
     devtype,
     fctuid,
     euid,
     unauthuser,
     f user,
     ack note,
     ack time,
     devid,
     vd,
     csf,
     devname
   FROM
      (
       SELECT
         tvdt.epid,
          itime,
          tvdt.bl_count,
          tvdt.cs_score,
          tvdt.cs_count,
          tvdt.threat num,
          tvdt.bmp_logtype,
          tvdt.last_bl,
          tvdt.verdict,
          tvdt.ip reversed,
          tvdt.rescan,
            CASE WHEN tvdt.epid>1024 THEN tep.epip ELSE tvdt.srcip END
          ) as srcip,
          tep.epname,
          tep.mac as srcmac,
```

```
tep.osname,
  tep.osversion,
  tep.epdevtype as devtype,
  teu.fctuid,
  teu.euid,
  teu.unauthuser,
   case when teu.euid <= 1024 then ipstr(tvdt.srcip) else teu.euname end
  ) as f user,
  tack.ack note,
    case when (
     tvdt.ack\_time\_max = 0
     or tvdt.ack time min = 0
   ) then NULL else tvdt.ack time max end
  ) as ack time,
  tdev.devid,
  tdev.vd,
  tdev.csf,
  tdev.devname,
  tdev.devgrps
FROM
  (
    SELECT
      epid,
      srcip,
      min(day st) as itime,
      array length(
       intarr_agg(threatid),
      ) as threat num,
      intarr agg(dvid) as dvid,
      sum(bl count) as bl count,
      max(cs score) as cs score,
      sum(cs count) as cs count,
      max(last_bl) as last_bl,
      max(ack_time) as ack_time_max,
      min(ack time) as ack time min,
      bit_or(bmp_logtype) as bmp_logtype,
      max(verdict) as verdict,
      max(ip_reversed) as ip_reversed,
      max(rescan) as rescan
    FROM
      (
          SELECT
            epid,
            srcip,
            day st,
            ack time,
            threatid,
            dvid,
            bl count,
            cs score,
            cs_count,
            last bl,
```

```
bmp_logtype,
          verdict,
           case when ioc flags&2>0 then 1 else 0 end
          ) as ip_reversed,
           case when ioc flags&1>0 then 1 else 0 end
          ) as rescan
          $ADOMTBL_PLHD_IOC_VERDICT
          /*verdict table*/
        WHERE
          day_st >= $start_time
          and day_st <= $end_time</pre>
          /*time filter*/
      UNION ALL
        (
          SELECT
            epid,
            srcip,
            day_st,
            ack time,
            threatid,
            dvid,
            bl_count,
            cs score,
            cs_count,
            last bl,
            bmp logtype,
            verdict,
              case when ioc_flags&2>0 then 1 else 0 end
            ) as ip_reversed,
              case when ioc_flags&1>0 then 1 else 0 end
            ) as rescan
          FROM
            $ADOMTBL PLHD INTERIM IOC VERDICT
            /*verdict intrim table*/
          WHERE
            day st >= $start time
            and day_st <= $end_time
            /*time filter*/
            and verdict>0
        )
    ) tvdt_int
  GROUP BY
   epid,
    srcip
) tvdt
INNER JOIN
/*end points*/
$ADOM ENDPOINT as tep ON tvdt.epid = tep.epid
LEFT JOIN
/*end user*/
```

```
select
    epid,
    euname,
   fctuid,
    euid,
    unauthuser
  from
      select
        epid,
        eu.euid,
        euname,
        fctuid,
        euname as unauthuser,
        row number() over (
          partition by epid
          order by
            (
                case when fctuid is null then 0 else 1 end
              ),
              lastactive
            ) desc
        ) nth
      from
        $ADOM ENDUSER eu
        /*end user*/
        $ADOM EPEU DEVMAP as map
        /*epeu dev map*/
      where
        eu.euid = map.euid
       and eu.euid>1024
    ) eum
  where
   nth = 1
) teu on tvdt.epid = teu.epid
LEFT JOIN
/*ack table*/
 SELECT
   epid,
   srcip,
   ack_time,
    ack note
  FROM
      SELECT
        epid,
        srcip,
        ack_time,
        ack note,
        row number() over (
          PARTITION BY epid,
          srcip
```

```
order by
                     ack_time desc
                  ) as ackrank
                FROM
                  ioc_ack
                WHERE
                 adomoid = $adom oid
              ) rankqry
           WHERE
             ackrank = 1
          ) tack ON tvdt.epid = tack.epid
          and (
             tvdt.srcip is null
             and tack.srcip is null
           or tvdt.srcip = tack.srcip
          LEFT JOIN devtable_ext tdev ON tdev.dvid = tvdt.dvid[1]
          tvdt.dvid && (
           SELECT
             array_agg(dvid)
           from
             devtable_ext
           WHERE
             $filter - drilldown
     ) tioc
 ) t
order by
 threat_num desc
```

Dataset Name	Description	Log Category
daily-Summary-Incidents-by-Severity	Incidents by Severity	

```
select
   severity,
   count(*) as incnum
from
   $incident
where
   $filter - drilldown
   and $cust_time_filter(createtime)
group by
   severity
order by
   incnum desc
```

Dataset Name	Description	Log Category
ueba-Asset-Count-by-Detecttype	Asset Count by Detection Type	

```
select
```

Dataset Name Description Log Category

ueba-Asset-Identification

Asset Count by Identification

```
with qualified ep as (
  select
    t2.epid,
   t2.euid
  from
    $ADOM ENDPOINT t1
    inner join $ADOM EPEU DEVMAP t2 on t1.epid = t2.epid
  where
   $filter - drilldown
   and lastseen >= $start time
    and firstseen<$end time
    and t2.epid>1024
),
identified_ep as (
  select
   distinct epid
    qualified_ep t1
    inner join $ADOM_ENDUSER t2 on t1.euid = t2.euid
  where
   tl.euid is not null
    and t1.euid>1024
    and euname != '(none)'
   and euname is not null
) (
  select
   'Identified' as type,
    count (distinct epid) as count
 from
    identified ep
)
union all
  (
    select
      'Unidentified' as type,
      count(distinct epid) as count
```

```
from
    qualified_ep
where
    epid not in (
        select
          *
        from
        identified_ep
)
```

```
    Dataset Name
    Description
    Log Category

    ueba-Asset-Count-by-HWOS
    Asset Count by Hardware OS
```

```
select
  osname,
  count(distinct t2.epid) as count
from
  $ADOM_ENDPOINT t1
  inner join $ADOM_EPEU_DEVMAP t2 on t1.epid = t2.epid
where
  $filter - drilldown
  and lastseen >= $start_time
  and firstseen<$end_time
  and osname is not null
  and t2.epid>1024
group by
  osname
order by
  count desc
```

Dataset Name	Description	Log Category
ueba-Asset-Count-by-Device-and- Detecttype	Asset Count by Source and Detection Type	

```
select
 devname,
   case detecttype when 'by_ip' then 'IP' when 'by_mac' then 'MAC' end
 ) as detecttype,
 count (distinct t1.epid) as count
 $ADOM ENDPOINT t1
 inner join $ADOM_EPEU_DEVMAP t2 on t1.epid = t2.epid
 inner join devtable_ext t3 on t2.devid = t3.devid
where
 t1.epid>1024
 and $filter - drilldown
 and t1.lastseen >= $start time
 and firstseen<$end time
 and devname is not null
 and detecttype in ('by ip', 'by mac')
group by
 devname,
```

```
detecttype order by count desc
```

```
Dataset NameDescriptionLog Categoryueba-User-Count-by-UsergroupUser Count by User Group
```

```
select
  coalesce(eugroup, 'Unknown') as eugroup,
  count(distinct t1.euid) as count
from
  $ADOM_ENDUSER t1
  inner join $ADOM_EPEU_DEVMAP t2 ON t1.euid = t2.euid
where
  $filter - drilldown
  and t1.euid>1024
  and t1.lastseen >= $start_time
  and firstseen<$end_time
group by
  eugroup
order by
  count desc</pre>
```

Dataset Name	Description	Log Category
ueba-Asset-User-Count-by-Device	Asset and User Count by Device	

```
select
 devname,
 cnt_for,
 sum(count) as count
from
  (
      select
       devname,
       'Endpoint' as cnt for,
       count(distinct t2.epid) as count
      from
        $ADOM ENDPOINT t1
       inner join $ADOM EPEU DEVMAP t2 on t1.epid = t2.epid
       inner join devtable ext t3 on t2.devid = t3.devid
       $filter - drilldown
       and t1.lastseen >= $start time
       and t1.firstseen<$end time
       and t2.epid>1024
     group by
       devname
     order by
       count desc
   union all
      (
        select
```

```
devname,
          'User' as cnt_for,
          count (distinct t1.euid) as count
        from
          $ADOM ENDUSER t1
          inner join $ADOM EPEU DEVMAP t2 ON t1.euid = t2.euid
          inner join devtable ext t3 on t2.devid = t3.devid
        where
          $filter - drilldown
          and t1.lastseen >= $start time
          and t1.firstseen<$end_time
          and euname != '(none)'
          and epid>1024
          and t1.euid>1024
        group by
          devname
        order by
          count desc
  ) t
group by
 devname,
 cnt for
order by
  count desc
```

```
Dataset NameDescriptionLog Categoryueba-Asset-User-Count-by-Device-<br/>Interface-and-DetectiontypeAsset and User Count by Source Device Interface and<br/>Detection Method
```

```
select
 devname,
  srcintf,
 sum(mac_cnt) as mac_cnt,
 sum(ip_cnt) as ip_cnt,
  sum (ep count) as ep count,
  sum(eu count) as eu count
from
  (
      select
        devname,
       srcintf,
         case when detecttype = 'by mac' then count else 0 end
        ) as mac cnt,
         case when detecttype = 'by ip' then count else 0 end
        ) as ip cnt,
        sum(count) as ep_count,
        0 as eu_count
      from
          select
            devname,
```

```
srcintf,
        detecttype,
        count(distinct t1.epid) as count
      from
        $ADOM ENDPOINT t1
        inner join $ADOM EPEU DEVMAP t2 on t1.epid = t2.epid
        inner join devtable ext t3 on t2.devid = t3.devid
      where
        t1.epid>1024
        and $filter - drilldown
        and t1.lastseen >= $start time
        and firstseen<$end time
        and devname is not null
        and srcintf is not null
        and detecttype in ('by ip', 'by mac')
      group by
       devname,
       srcintf,
        detecttype
      order by
        count desc
    ) t1
  group by
   devname,
   srcintf
  order by
   ep count desc
union all
  (
    SELECT
     devname,
      srcintf,
      0 as mac cnt,
      0 as ip cnt,
      0 as ep_count,
      count(DISTINCT euid) as eu_count
    from
        select
          euid,
          euname,
          t3.epid,
          eugroup,
          srcintf,
          devname,
          devid
        from
          (
            select
              t1.euid,
              euname,
              epid,
              eugroup,
              srcintf,
              devname,
```

```
t2.devid
                from
                  $ADOM ENDUSER t1
                  inner join $ADOM EPEU DEVMAP t2 ON t1.euid = t2.euid
                  inner join devtable ext t3 on t2.devid = t3.devid
                where
                  t1.lastseen >= $start time
                  and t1.firstseen<$end time
                  and srcintf is not null
              ) t3
              LEFT JOIN $ADOM ENDPOINT t4 ON t3.epid = t4.epid
          ) t5
        where
          euname != '(none)'
          and epid>1024
          and euid>1024
          and $filter - drilldown
        group by
          devname,
          srcintf
        order by
          eu_count desc
  ) t
group by
  devname,
  srcintf
order by
  devname,
  sum(eu count) + sum(ep count) desc
```

Dataset Name Description Log Category

ueba-Asset-User-Discovery-by-Time Asset and User Count by Discovery Time

```
select
 $flex timescale(firstseen) as time,
 count(distinct epid) as ep_count,
 count(distinct euid) as eu_count
from
     select
       firstseen,
       t1.epid,
       null as euid
      from
        $ADOM ENDPOINT t1
        inner join $ADOM EPEU DEVMAP t2 on t1.epid = t2.epid
     where
        $filter - drilldown
        and t1.firstseen >= $start time
        and t1.firstseen<$end_time
        and t1.epid>1024
   union all
```

```
(
        select
          firstseen,
          null as epid,
          t1.euid
        from
          $ADOM ENDUSER t1
          inner join $ADOM EPEU DEVMAP t2 ON t1.euid = t2.euid
          t1.euid>1024
          and $filter - drilldown
          and firstseen >= $start time
          and firstseen<$end time
      )
 ) t
group by
 time
order by
 time
```

Dataset Name	Description	Log Category
dns-Security-Domain-Count-by- Threat-Level	Domain Count by Threat level	dns

```
select
 threat level,
 total num
from
    select
     (
       case when tdtype in (
         'infected-domain', 'infected-ip',
          'infected-url'
        ) then 'critical' when is_botnet
        or catdesc in (
          'Malicious Websites', 'Phishing',
          'Spam URLs'
        ) then 'high' when catdesc in (
          'Newly Observed Domain', 'Newly Registered Domain',
          'Proxy Avoidance', 'Unrated'
       or catdesc LIKE '%Dynamic DNS%' then 'medium' end
      ) as threat level,
      sum(total num) as total num
    from
      ###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is botnet, min(nanosec to sec(eventtime)) as first seen, max(nanosec to sec(eventtime)) as
last_seen, count(*) as total_num from $log-dns where $filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t group by
threat level order by total num desc) t where threat level is not null order by total num
desc
```

Dataset Name	Description	Log Category
dns-Top-Queried-Domain-Bar	Top Queried Domain	dns

```
select
   qname,
   count(*) as total_num
from
   $log
where
   $filter
   and qname is not null
group by
   qname
order by
   total num desc
```

Dataset Name	Description	Log Category
dns-Security-Top-Visited-Domain- Categories	Top Visited Domain Categories	dns

```
select
  catdesc,
  sum(total_num) as total_num
from
```

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where catdesc
is not null group by catdesc order by total num desc

Dataset Name	Description	Log Category
dns-Security-Top-Visited-High-Risk- Domain-Categories	Top Visited High Risk Domain Categories	dns

```
select
  catdesc,
  sum(total_num) as total_num
```

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where
level>='warning' and catdesc is not null group by catdesc order by total_num desc

Dataset Name	Description	Log Category
dns-Security-Top-Domain-with-Botnet-CC-Detected	Top Domain with Botnet C&C Detected	dns

```
select
    qname,
    sum(total_num) as total_num
from
    ###(select coalesce(botnetdomain, ipstr(botnetip)) as domain, qname, cast('Botnet C&C' as char(32)) as malware_type, (case when action='block' then 'Blocked' when action='redirect' then 'Redirected' else 'Passed' end) as action, srcip, (CASE WHEN level IN ('critical', 'alert', 'emergency') THEN 5 WHEN level='error' THEN 4 WHEN level='warning' THEN 3 WHEN level='notice' THEN 2 ELSE 1 END) as sevid, coalesce(botnetdomain, ipstr(botnetip)) as sources_s, count(*) as total_num from $log where $filter and (botnetdomain is not null or botnetip is not null) group by domain, qname, action, srcip, sevid order by sevid desc)### t where gname is not null group by gname order by total num desc
```

Dataset Name	Description	Log Category
dns-Security-FortiGate-with-Top- Domain-Visited-by Source-IP	FortiGate with Top Domain Visited by Source IP	dns

```
select
 devname,
 srcip,
  gname,
  category,
  total num
from
    select
      devname,
      srcip,
      gname,
      category,
      total_num,
      row number() over (
       partition by devname,
       srcip,
        gname
        order by
          total num desc,
          gname
      ) as rank
    from
        select
          devname,
          srcip,
          qname,
          max(catdesc) as category,
          sum(total num) as total num
          ###(select dvid, gname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f
user, dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not
null) as is botnet, min(nanosec to sec(eventtime)) as first seen, max(nanosec to sec
(eventtime)) as last seen, count(*) as total num from $log-dns where $filter group by dvid,
\verb|qname|, f_user|, dstip|, srcip|, catdesc|, level|, tdtype|, is_botnet order by total_num desc|| ###
tl inner join devtable_ext t2 on tl.dvid=t2.dvid where qname is not null and srcip is not
```

null group by devname, srcip, qname order by total_num desc) t) t where rank=1 order by devname, srcip, qname

Dataset Name	Description	Log Category
dns-Security-Top-Domain-Lookup- Failure-by-Count	Top Domain Lookup Failures by Count	dns

```
select
  qname,
  count(*) as total_num
from
  $log - dns
where
  $filter
  and qname is not null
  and (
    action = 'block'
    or logid_to_int(logid) = 54200
)
group by
  qname
order by
  total_num desc
```

Dataset Name	Description	Log Category
dns-Security-Top-Source-IP-by- Destination-Count	Top Source IP by Destination Count	dns

```
select
  srcip,
  count(distinct dstip) as total_num
from
```

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where srcip is
not null and dstip is not null group by srcip order by total num desc

Dataset Name	Description	Log Category
dns-Security-Top-Destination-IP-by-Source-Count	Top Destination IP by Source Count	dns

```
select
  dstip,
  count(distinct srcip) as total_num
from
```

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where srcip is
not null and dstip is not null group by dstip order by total_num desc

Dataset Name	Description	Log Category
dns-Security-Severity-by-High-Risk- Source-IPs-Count	Severity by High Risk Source IPs Count	dns

```
select
   CASE sevid WHEN 5 THEN 'Critical' WHEN 4 THEN 'High' WHEN 3 THEN 'Medium' WHEN '2' THEN
'Info' ELSE 'Low' END
 ) as severity,
 count(distinct srcip) as total num
from
  (
   select
     srcip,
        CASE WHEN level IN ('critical', 'alert', 'emergency') THEN 5 WHEN level = 'error'
THEN 4 WHEN level = 'warning' THEN 3 WHEN level = 'notice' THEN 2 ELSE 1 END
     ) as sevid,
     count(*) as total_num
   from
     ###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last seen, count(*) as total num from $log-dns where $filter group by dvid, qname, f user,
dstip, srcip, catdesc, level, tdtype, is botnet order by total num desc) ### t where
level>='warning' and srcip is not null group by srcip, sevid order by total num desc) t
group by severity having sum(total num)>0 order by total num desc
```

Dataset Name	Description	Log Category
dns-Security-Top-DNS-High-Risk- Source-IP	Top DNS High Risk Source IP	dns

```
select
 srcip,
  case when sevid = 5 then total num else 0 end
 ) as num cri,
   case when sevid = 4 then total num else 0 end
 ) as num hig,
 sum(
   case when sevid = 3 then total num else 0 end
 ) as num med,
 sum(total num) as total num
from
   select
     srcip,
       CASE WHEN level IN ('critical', 'alert', 'emergency') THEN 5 WHEN level = 'error'
THEN 4 WHEN level = 'warning' THEN 3 WHEN level = 'notice' THEN 2 ELSE 1 END
     ) as sevid,
     count(*) as total_num
    from
```

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where
level>='warning' and srcip is not null group by srcip, sevid order by total_num desc) t
group by srcip having sum(total_num)>0 order by total_num desc

Dataset Name	Description	Log Category
dns-Security-Top-Infected-Domain-by-Count	Top Infected Domain by Count	dns

```
select
  qname,
  count(distinct srcip) as total_num
from
```

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where qname is
not null and tdtype='infected-domain' group by qname order by total num desc

Dataset Name	Description	Log Category
dns-Security-Top-Blocked-Domains- by-Reason	Top Blocked Domains by Reason	dns

```
select
  qname,
  msg,
  count(*) as total_num
from
  $log
where
  $filter
  and qname is not null
  and msg LIKE 'Domain was blocked%'
group by
  qname,
  msg
order by
  total num desc
```

Dataset Name	Description	Log Category
dns-Security-Top-Users-by-Infected- Domain-Visits	Top Users by Infected Domain Visits	dns

```
select
  coalesce(
   f_user,
   ipstr(`srcip`)
) as user_src,
  count(distinct qname) as total num
```

from

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where qname is
not null and tdtype='infected-domain' and (f_user is not null or srcip is not null) group by
user src order by total num desc

Dataset Name	Description	Log Category
dns-Security-Top-Users-and-Infected- Domain-by-Visit-Count	Top Users and Infected Domain by Visit Count	dns

```
select
  coalesce(
    f_user,
    ipstr(`srcip`)
) as user_src,
  qname,
  sum(total_num) as total_num
from
```

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where qname is
not null and (f_user is not null or srcip is not null) and tdtype='infected-domain' group by
user_src, qname order by total_num desc

Dataset Name	Description	Log Category
dns-Security-Top-Users-by-Visited- Domain-Category-Count	Top Users by Visited Domain Category Count	dns

```
select
  coalesce(
    f_user,
    ipstr(`srcip`)
) as user_src,
  count(distinct catdesc) as total_num
from
```

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where catdesc
is not null and (f_user is not null or srcip is not null) group by user_src order by total_
num desc

Dataset Name	Description	Log Category
dns-Security-Top-Users-and-Visited- Domain-Category-by-Count	Top Users and Visited Domain Category by Count	dns

```
select
  coalesce(
    f_user,
    ipstr(`srcip`)
) as user_src,
  catdesc,
  srcip,
  sum(total_num) as total_num
from
```

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where catdesc
is not null and (f_user is not null or srcip is not null) group by user_src, catdesc, srcip
order by total_num desc

Dataset Name	Description	Log Category
dns-Security-Top-Newly-Detected- Domain-by-Count	Top Newly Detected Domain by Count	dns

```
select
  qname,
  sum(total_num) as total_num
from
```

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where last_
seen>=\$start_time and first_seen<\$end_time and tdtype is not null and qname is not null
group by qname order by total num desc</pre>

Dataset Name	Description	Log Category
dns-Security-Top-Newly-Detected- Domain-and-Source-IP-with-First- Seen-and-Last-Seen	Top Newly Detected Domain and Source IP with First Seen and Last Seen	dns

```
select
  qname,
  srcip,
  from_itime(
    min(first_seen)
  ) as first_seen,
  from_itime(
    max(last_seen)
  ) as last_seen,
  sum(total_num) as total_num
```

###(select dvid, qname, coalesce(nullifna(`user`), nullifna(`unauthuser`)) as f_user,
dstip, srcip, catdesc, level, tdtype, (botnetdomain is not null or botnetip is not null) as
is_botnet, min(nanosec_to_sec(eventtime)) as first_seen, max(nanosec_to_sec(eventtime)) as
last_seen, count(*) as total_num from \$log-dns where \$filter group by dvid, qname, f_user,
dstip, srcip, catdesc, level, tdtype, is_botnet order by total_num desc)### t where last_

seen>=\$start_time and first_seen<\$end_time and tdtype is not null and qname is not null group by qname, srcip order by total num desc

Dataset Name	Description	Log Category
web-Usage-Top-User-Category-By-Count	Top Web User and Category by Count	traffic

```
select
 coalesce (
   firstname || ' ' || lastname, euname,
 ) as user_src,
 catdesc,
 requests,
 sum(requests) over (partition by usersrc) as total num
from
  ###(select $flex timestamp as timestamp, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as usersrc, euid, catdesc, hostname as website, ebtr_agg_
flat($browse time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic in, sum(coalesce(sentbyte, 0)) as traffic
out, count(*) as requests from $log-traffic where $filter and (logflag&1>0) and (countweb>0
or ((logver is null or logver<502000000) and (hostname is not null or utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by
timestamp, usersrc, euid, catdesc, website /*SkipSTART*/order by bandwidth
desc/*SkipEND*/)### t1 left join $ADOM ENDUSER t3 on t1.euid=t3.euid where usersrc is not
null and catdesc<>'Unknown' order by total num desc, user src
```

Dataset Name	Description	Log Category
web-Usage-Top-User-Category-by- Browsing-Time	Web Usage Top User and Category by Browsing Time	traffic

```
firstname || ' ' || lastname, euname,
   usersrc
 ) as user src,
 catdesc,
 ebtr value(
   ebtr agg flat (browsetime),
   null,
   $timespan
 ) as browsetime
  ###(select $flex timestamp as timestamp, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as usersrc, euid, catdesc, hostname as website, ebtr_agg_
flat($browse time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic in, sum(coalesce(sentbyte, 0)) as traffic
out, count(*) as requests from $log-traffic where $filter and (logflag&1>0) and (countweb>0
or ((logver is null or logver<502000000) and (hostname is not null or utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by
timestamp, usersrc, euid, catdesc, website /*SkipSTART*/order by bandwidth
desc/*SkipEND*/)### t1 left join $ADOM ENDUSER t3 on t1.euid=t3.euid where usersrc is not
null group by user src, catdesc order by browsetime desc, user src, catdesc
```

select

coalesce (

Dataset Name	Description	Log Category
web-Usage-Count-By-Allowed- Blocked	Web Usage Allowed and Blocked Count	webfilter

```
select
  unnest(type) as allow_block,
  unnest(request_cnt) as totoal_num
from
  (
   select
    array['Allowed',
    'Blocked'] as type,
    array[sum(
       case when action != 'blocked' then requests end
   ),
    sum(
       case when action = 'blocked' then requests end
   )] as request_cnt
   from
```

###(select \$flex_timestamp as timestamp, coalesce(nullifna(`user`), ipstr(`srcip`)) as
usersrc, euid, action, count(*) as requests from \$log-webfilter where \$filter and coalesce
(nullifna(`user`), ipstr(`srcip`)) is not null group by timestamp, usersrc, euid, action
/*SkipSTART*/order by requests desc, timestamp desc/*SkipEND*/)### t) t

Dataset Name	Description	Log Category
web-Usage-Top-Web-Users-By- Allowed-Requests	Web Usage Top Web Users by Allowed Requests	webfilter

```
select
  coalesce(
    firstname || ' ' || lastname, euname,
    usersrc
) as user_src,
  sum(requests) as requests
from
```

###(select \$flex_timestamp as timestamp, coalesce(nullifna(`user`), ipstr(`srcip`)) as
usersrc, euid, action, count(*) as requests from \$log-webfilter where \$filter and coalesce
(nullifna(`user`), ipstr(`srcip`)) is not null group by timestamp, usersrc, euid, action
/*SkipSTART*/order by requests desc, timestamp desc/*SkipEND*/)### t1 left join \$ADOM_
ENDUSER t3 on t1.euid=t3.euid where action!='blocked' group by user_src order by requests
desc

Dataset Name	Description	Log Category
web-Usage-Top-Web-Users-By- Blocked-Requests	Web Usage Top Web Users by Blocked Requests	webfilter

```
select
  coalesce(
    firstname || ' ' || lastname, euname,
    usersrc
) as user_src,
  sum(requests) as requests
```

from

###(select \$flex_timestamp as timestamp, coalesce(nullifna(`user`), ipstr(`srcip`)) as
usersrc, euid, action, count(*) as requests from \$log-webfilter where \$filter and coalesce
(nullifna(`user`), ipstr(`srcip`)) is not null group by timestamp, usersrc, euid, action
/*SkipSTART*/order by requests desc, timestamp desc/*SkipEND*/)### t1 left join \$ADOM_
ENDUSER t3 on t1.euid=t3.euid where action='blocked' group by user_src order by requests
desc

Dataset Name	Description	Log Category
web-Usage-Request-Summary- Timeline	Webfilter web activity summary by requests	webfilter

```
select
  $flex_timescale(timestamp) as hodex,
  sum(allowed_request) as allowed_request,
  sum(blocked_request) as blocked_request
from
```

###(select \$flex_timestamp as timestamp, sum(case when action!='blocked' then 1 else 0
end) as allowed_request, sum(case when action='blocked' then 1 else 0 end) as blocked_
request from \$log where \$filter and (eventtype is null or logver>=502000000) group by
timestamp /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t group by hodex order by
hodex

Dataset Name	Description	Log Category
web-Usage-Bandwidth-Timeline	Web Usage Bandwidth Timeline	traffic

```
select
  $flex_timescale(timestamp) as hodex,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out
from
```

###(select \$flex_timestamp as timestamp, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as usersrc, euid, catdesc, hostname as website, ebtr_agg_
flat(\$browse_time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out, count(*) as requests from \$log-traffic where \$filter and (logflag&1>0) and (countweb>0
or ((logver is null or logver<502000000) and (hostname is not null or utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by
timestamp, usersrc, euid, catdesc, website /*SkipSTART*/order by bandwidth
desc/*SkipEND*/)### t group by hodex</pre>

Dataset Name	Description	Log Category
web-Usage-Top-Web-Users-By- Requests	Web Usage Top Web Users by Requests	webfilter

```
select
  coalesce(
    firstname || ' ' || lastname, euname,
    usersrc
) as user_src,
  sum(requests) as requests
from
```

###(select \$flex timestamp as timestamp, coalesce(nullifna(`user`), ipstr(`srcip`)) as usersrc, euid, action, count(*) as requests from \$log-webfilter where \$filter and coalesce (nullifna(`user`), ipstr(`srcip`)) is not null group by timestamp, usersrc, euid, action /*SkipSTART*/order by requests desc, timestamp desc/*SkipEND*/)### t1 left join \$ADOM ENDUSER t3 on t1.euid=t3.euid where usersrc is not null group by user src order by requests desc

Dataset Name	Description	Log Category
web-Usage-Top-Web-Users-By- Requests-Timeline	Web Usage top Web Users by Requests Timeline	webfilter

```
with time users as (
  select
    $flex timescale(timestamp) as hodex,
    coalesce(
     firstname || ' ' || lastname, euname,
     usersrc
    ) as user src,
    sum(requests) as requests
  from
      select
       timestamp,
       usersrc,
       euid,
        requests
      from
```

###(select \$flex timestamp as timestamp, coalesce(nullifna(`user`), ipstr(`srcip`)) as usersrc, euid, action, count(*) as requests from \$log-webfilter where \$filter and coalesce(nullifna(`user`), ipstr(`srcip`)) is not null group by timestamp, usersrc, euid, action /*SkipSTART*/order by requests desc, timestamp desc/*SkipEND*/)### t where usersrc is not null) t1 left join \$ADOM ENDUSER t3 on t1.euid=t3.euid group by hodex, user src order by hodex), top users as (select user src, sum(requests) as requests from time users group by user src order by requests desc limit \$ddown-top) select hodex, user src, requests from time_users t where exists (select 1 from top_users where user_src=t.user_src) order by hodex

Dataset Name	Description	Log Category
web-Usage-Top-Category-Sites-By- Session	Web top user visted websites by session	webfilter

```
select
 website,
  catdesc,
 sum(sessions) as sessions
```

###(select hostname as website, catdesc, count(*) as sessions from \$log where \$filter and hostname is not null and (eventtype is null or logver>=502000000) group by hostname, catdesc order by sessions desc) ### t where catdesc is not null group by website, catdesc order by sessions desc

Dataset Name	Description	Log Category
web-Usage-Top-User-Browsing-Time	Web Usage Top User Browsing Time	traffic

```
select
 user src,
 sum (browsetime) as browsetime
from
    select
      coalesce(
       firstname | | ' ' | | lastname, euname,
       usersrc
      ) as user src,
      catdesc,
      ebtr value(
        ebtr agg flat (browsetime),
       null,
       $timespan
     ) as browsetime
    from
      ###(select $flex timestamp as timestamp, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as usersrc, euid, catdesc, hostname as website, ebtr agg
flat($browse time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out, count(*) as requests from $log-traffic where $filter and (logflag&1>0) and (countweb>0
or ((logver is null or logver<502000000) and (hostname is not null or utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by
timestamp, usersrc, euid, catdesc, website /*SkipSTART*/order by bandwidth
desc/*SkipEND*/)### t1 left join $ADOM ENDUSER t3 on t1.euid=t3.euid where usersrc is not
null group by user src, catdesc order by browsetime desc) t group by user src order by
browsetime desc, user src
```

Dataset Name	Description	Log Category
web-Usage-Top-Category-By- Website-Browsetime	Top Category By Website Browsetime	traffic

```
select
 catdesc.
 ebtr value(
   ebtr agg flat (browsetime),
   null,
   $timespan
 ) as browsetime
  ###(select $flex timestamp as timestamp, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as usersrc, euid, catdesc, hostname as website, ebtr agg
flat($browse time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic in, sum(coalesce(sentbyte, 0)) as traffic
out, count(*) as requests from $log-traffic where $filter and (logflag&1>0) and (countweb>0
or ((logver is null or logver<502000000) and (hostname is not null or utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by
timestamp, usersrc, euid, catdesc, website /*SkipSTART*/order by bandwidth
desc/*SkipEND*/)### t where catdesc!='Unrated' and browsetime is not null group by catdesc
order by browsetime desc
```

Dataset Name	Description	Log Category
web-Usage-Top-Sites-By-Browsing- Time	Web Usage Top Websites by Browsing Time	traffic

```
select
 website.
 max(catdesc) as catdesc,
 ebtr value(
   ebtr agg flat (browsetime),
   null,
   $timespan
 ) as browsetime,
  sum (bandwidth) as bandwidth,
  sum(traffic in) as traffic in,
  sum(traffic_out) as traffic_out
from
  ###(select $flex timestamp as timestamp, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as usersrc, euid, catdesc, hostname as website, ebtr_agg_
flat($browse_time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic in, sum(coalesce(sentbyte, 0)) as traffic
out, count(*) as requests from $log-traffic where $filter and (logflag&1>0) and (countweb>0
or ((logver is null or logver<502000000) and (hostname is not null or utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by
timestamp, usersrc, euid, catdesc, website /*SkipSTART*/order by bandwidth
desc/*SkipEND*/)### t where website is not null and catdesc is not null group by website
order by browsetime desc
```

Dataset Name	Description	Log Category
web-Usage-Top-User-By-Bandwidth	Web Usage Top User By Bandwidth	traffic

```
select
  coalesce(
    firstname || ' ' || lastname, euname,
    usersrc
) as user_src,
  sum(bandwidth) as bandwidth
from
  ###(select $flex_timestamp as timestamp, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as usersrc, euid, catdesc, hostname as website, ebtr_agg_
flat($browse_time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out, count(*) as requests from $log-traffic where $filter and (logflag&l>0) and (countweb>0
or ((logver is null or logver<502000000) and (hostname is not null or utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by
timestamp, usersrc, euid, catdesc, website /*SkipSTART*/order by bandwidth
desc/*SkipEND*/)### tl left join $ADOM_ENDUSER t3 on tl.euid=t3.euid where bandwidth>0 group
by user_src order by bandwidth desc
```

Dataset Name	Description	Log Category
web-Usage-Top-User-By-Bandwidth- Timeline	Web Usage Top User By Bandwidth Timeline	traffic

```
with time users as (
 select
   $flex timescale(timestamp) as hodex,
    coalesce(
     firstname || ' ' || lastname, euname,
     usersrc
   ) as user src,
    sum (bandwidth) as bandwidth
  from
     select
        timestamp,
       usersrc,
       euid,
       bandwidth
        ###(select $flex timestamp as timestamp, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as usersrc, euid, catdesc, hostname as website, ebtr agg
flat($browse time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic in, sum(coalesce(sentbyte, 0)) as traffic
out, count(*) as requests from $log-traffic where $filter and (logflag&1>0) and (countweb>0
or ((logver is null or logver<502000000) and (hostname is not null or utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by
timestamp, usersrc, euid, catdesc, website /*SkipSTART*/order by bandwidth
desc/*SkipEND*/)### t where usersrc is not null) t1 left join $ADOM_ENDUSER t3 on
tl.euid=t3.euid group by hodex, user src order by bandwidth desc), top_users as (select
user src, sum(bandwidth) as bandwidth from time users where bandwidth>0 group by user src
order by bandwidth desc limit $ddown-top) select hodex, user_src, bandwidth from time_users
t where exists (select 1 from top users where user src=t.user src) order by hodex
```

Dataset Name	Description	Log Category
web-Usage-Top-Category-Website- By-Bandwidth	Web Usage Top Web Category and Websites by Bandwidth	traffic

```
select
 catdesc,
 website,
 sum(bandwidth) over (partition by catdesc) as sub bandwidth
from
   select
     website,
     catdesc,
      sum (bandwidth) as bandwidth
      ###(select $flex timestamp as timestamp, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as usersrc, euid, catdesc, hostname as website, ebtr_agg_
flat($browse time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out, count(*) as requests from $log-traffic where $filter and (logflag&1>0) and (countweb>0
or ((logver is null or logver<502000000) and (hostname is not null or utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by
timestamp, usersrc, euid, catdesc, website /*SkipSTART*/order by bandwidth
```

desc/*SkipEND*/) ### t where website is not null and catdesc is not null group by website, catdesc order by bandwidth desc) t order by sub bandwidth desc, catdesc

Dataset Name	Description	Log Category
web-Usage-Top-Blocked-User- Category-By-Request	Web Usage Top Blocked Web User and Category by Request	webfilter

```
select
 user src,
 catdesc,
 requests,
 sum(requests) over (partition by user_src) as total_num
    select
     coalesce(
       firstname | | ' ' | | lastname, euname,
     ) as user src,
     catdesc,
      sum (requests) as requests
      ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as usersrc, euid, hostname,
catdesc, action, count(*) as requests from $log where $filter group by usersrc, euid,
hostname, catdesc, action order by requests desc)### t1 left join $ADOM ENDUSER t3 on
t1.euid=t3.euid where usersrc is not null and catdesc<>'Unknown' and action='blocked' group
by user src, catdesc order by requests desc) t order by total num desc, user src
```

Dataset NameDescriptionLog Categoryweb-Usage-Top-Web-Users-By-
Blocked-Requests-TimelineWeb Usage Top Web Users Timeline by Blocked
Requestswebfilter

```
with time_users as (
   select
   $flex_timescale(timestamp) as hodex,
   coalesce(
      firstname || ' ' || lastname, euname,
      usersrc
   ) as user_src,
   sum(requests) as requests
from
   (
      select
      timestamp,
      usersrc,
      euid,
      requests
   from
```

###(select \$flex_timestamp as timestamp, coalesce(nullifna(`user`), ipstr(`srcip`))
as usersrc, euid, action, count(*) as requests from \$log-webfilter where \$filter and
coalesce(nullifna(`user`), ipstr(`srcip`)) is not null group by timestamp, usersrc, euid,
action /*SkipSTART*/order by requests desc, timestamp desc/*SkipEND*/)### t where usersrc is
not null and action='blocked') t1 left join \$ADOM_ENDUSER t3 on t1.euid=t3.euid group by
hodex, user_src order by hodex), top_users as (select user_src, sum(requests) as requests

from time_users group by user_src order by requests desc limit \$ddown-top) select hodex, user_src, requests from time_users t where exists (select 1 from top_users where user_src=t.user_src) order by hodex

Dataset Name	Description	Log Category
web-Usage-Top-Blocked-Web- Categories-by-Request	Web Usage Top Blocked Web Categories by Request	webfilter

```
select
  catdesc,
  hostname,
  sum(requests) as requests
from
  ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as usersrc, euid, hostname, catdesc,
action, count(*) as requests from $log where $filter group by usersrc, euid, hostname,
catdesc, action order by requests desc)### t1 where catdesc is not null and hostname is not
```

null and action='blocked' group by catdesc, hostname order by requests desc

Dataset Name	Description	Log Category
web-Usage-Browsing-Time-Summary- Timeline	Traffic browsing time summary	traffic

```
select
  $flex_timescale(timestamp) as hodex,
  cast(
    ebtr_value(
    ebtr_agg_flat(browsetime),
    null,
    $timespan
    )/ 60.0 as decimal(18, 2)
  ) as browsetime
from
```

###(select \$flex_timestamp as timestamp, ebtr_agg_flat(\$browse_time) as browsetime from \$log where \$filter and (logflag&1>0) and \$browse_time is not null group by timestamp /*SkipSTART*/order by timestamp desc/*SkipEND*/)### t group by hodex order by hodex

Dataset Name	Description	Log Category
360-security-Rating-Asset-Endpoint- HWOS-Count	Asset Endpoint Count by OS	

```
select
  osname,
  count(distinct t2.epid) as count
from
  $ADOM_ENDPOINT t1
  inner join $ADOM_EPEU_DEVMAP t2 on t1.epid = t2.epid
where
  exists (
    select
     1
    from
     devtable_ext t3
    where
```

```
$dev_filter
and t3.devid = t2.devid
)
and lastseen >= $start_time
and firstseen<$end_time
and osname is not null
and t2.epid>1024
group by
osname
order by
count desc
```

Dataset Name	Description	Log Category
360-security-daily-Summary-Traffic- Session-Line	Daily Summary - Traffic Bandwidth Line	traffic

```
select
  $fv line timescale(timescale) as time,
  sum(traffic in) as traffic in,
  sum(traffic_out) as traffic_out,
  sum(session block) as session block,
   sum(sessions) - sum(session_block)
  ) as session_pass
from
  (
      select
        timescale,
        sum(traffic_in) as traffic_in,
        sum(traffic_out) as traffic_out,
        sum(session_block) as session_block,
        sum(sessions) as sessions
      from
      group by
       timescale
    union all
      (
        select
          timescale,
          sum(traffic_in) as traffic_in,
          sum(traffic out) as traffic out,
          sum(session block) as session block,
          sum(sessions) as sessions
        from
          t
        group by
          timescale
 ) t
group by
  time
```

```
order by time
```

Dataset Name	Description	Log Category
360-security-wifi-WiFi-Client-Number- Timeline	WiFi client Number Timeline	event

```
select
   $flex_timescale(timestamp) as hodex,
   count(
        distinct (
            case when radioband = '5G' then stamac else NULL end
      )
   ) as g5,
   count(
        distinct (
            case when radioband = '2G' then stamac else NULL end
      )
   ) as g2
from
```

###(select \$flex_timestamp as timestamp, stamac, radioband from \$log where \$filter and
subtype='wireless' group by timestamp, stamac, radioband /*SkipSTART*/order by timestamp
desc/*SkipEND*/)### t group by hodex order by hodex

Dataset Name	Description	Log Category
360-security-ueba-Asset-Count-by- HWOS-Donut	Asset Count by Hardware OS	

```
select
  osname,
  count(distinct t2.epid) as count
from
  $ADOM_ENDPOINT t1
  inner join $ADOM_EPEU_DEVMAP t2 on t1.epid = t2.epid
where
  $filter - drilldown
  and lastseen >= $start_time
  and firstseen<$end_time
  and osname is not null
  and t2.epid>1024
group by
  osname
order by
  count desc
```

Dataset Name	Description	Log Category
360-security-Rating-Posture-Stats- Status-Count	Posture Security Rating Statistic Status Count	

```
select
  unnest(name) as stats,
  unnest(val) as value
from
```

```
(
  select
    array[ 'Passed',
    'Failed',
    'Exempt',
    'Unmet' ] as name,
    array[(
     sum(passedchkcnt : :int)/ count(*)
    ),
    sum(
      (failedchkcnt - unmetchkcnt): :int
    ) / count(*),
    sum(
        data -> 'statistics' -> 'numExemptChecks'
    ) / count(*),
    sum(unmetchkcnt : :int)/ count(*) ] as val
  from
    $ADOMTBL PLHD AUDIT HST t
    inner join devtable_ext td on td.dvid = t.dvid
  where
    $filter - drilldown
    and $cust time filter(itime)
    and reporttype = 'PostureReport'
) t
```

Dataset Name Description Log Category

360-security-Rating-Coverage-Stats-Status-Count

Fabric Coverage Security Rating Statistic Status Count

```
select
 unnest(name) as stats,
 unnest(val) as value
from
   select
     array[ 'Passed',
     'Failed',
     'Exempt' ] as name,
       sum(passedchkcnt : :int) / count(*)
     ),
      sum(failedchkcnt : :int)/ count(*),
      sum(
       (
         data -> 'statistics' -> 'numExemptChecks'
       ): :int
     )/ count(*) ] as val
    from
      $ADOMTBL PLHD AUDIT HST t
      inner join devtable ext td on td.dvid = t.dvid
   where
     $filter - drilldown
     and $cust_time_filter(itime)
```

```
and reporttype = 'CoverageReport'
) t
```

```
Dataset NameDescriptionLog Category360-security-Rating-Optimize-Stats-<br/>Status-CountOptimization Security Rating Statistic Status Count
```

```
select
 unnest(name) as stats,
 unnest(val) as value
   select
     array[ 'Passed',
     'Failed',
     'Exempt' ] as name,
     array[(
       sum(passedchkcnt : :int)/ count(*)
     sum(failedchkcnt : :int)/ count(*),
     sum(
         data -> 'statistics' -> 'numExemptChecks'
       ): :int
     )/ count(*) ] as val
     $ADOMTBL_PLHD_AUDIT_HST t
     inner join devtable_ext td on td.dvid = t.dvid
   where
     $filter - drilldown
     and $cust_time_filter(itime)
     and reporttype = 'OptimizationReport'
 ) t
```

Dataset Name Description Log Category

360-security-Rating-Asset-Count-by- Asset Count by Hardware Vendor HWVendor

```
select
  (
    case when hwvendor = 'Fortinet' then hwvendor else 'Other identified device' end
) as vendor,
  sum(total_num) as total_num
from
  (
    select
    osname,
    hwvendor,
    srcintf,
    count(distinct t1.epid) as total_num
  from
    $ADOM_ENDPOINT t1
    inner join $ADOM_EPEU_DEVMAP t2 on t1.epid = t2.epid
  where
```

```
exists (
        select
          1
        from
          devtable_ext t3
        where
          $dev filter
          and t3.devid = t2.devid
      and lastseen >= $start_time
      and firstseen<$end time
      and hwvendor is not null
      and osname is not null
     and t2.srcintf is not null
     and t2.epid>1024
    group by
     osname,
     hwvendor,
     srcintf
    order by
     total_num desc
  ) t
group by
 vendor
order by
  vendor
```

Dataset NameDescriptionLog Category360-security-Rating-Asset-Count-by-
HWOS-ListAsset Count by Hardware OS List

```
select
 sum(total_num) as total_num
   select
     osname,
     hwvendor,
     srcintf,
     count(distinct t1.epid) as total num
   from
     $ADOM ENDPOINT t1
     inner join $ADOM EPEU DEVMAP t2 on t1.epid = t2.epid
     exists (
        select
         1
          devtable_ext t3
       where
          $dev filter
          and t3.devid = t2.devid
      and lastseen >= $start_time
```

```
and firstseen<$end time
      and hwvendor is not null
      and osname is not null
      and t2.srcintf is not null
     and t2.epid>1024
    group by
     osname,
     hwvendor,
     srcintf
    order by
     total num desc
  ) t
group by
 osname
order by
  total num desc
```

Dataset Name Description Log Category

360-security-Rating-Asset-Count-byInterface

```
select
 srcintf,
 sum(total_num) as count
from
    select
      osname,
     hwvendor,
     srcintf,
      count(distinct t1.epid) as total_num
    from
      $ADOM ENDPOINT t1
      inner join $ADOM_EPEU_DEVMAP t2 on t1.epid = t2.epid
    where
      exists (
       select
        from
         devtable ext t3
          $dev filter
          and t3.devid = t2.devid
      )
      and lastseen >= $start time
      and firstseen<$end time
      and hwvendor is not null
     and osname is not null
     and t2.srcintf is not null
     and t2.epid>1024
    group by
      osname,
      hwvendor,
      srcintf
    order by
```

```
total_num desc
) t
group by
   srcintf
order by
   count desc
```

Dataset Name	Description	Log Category
360-security-Rating-Asset-List-From- Fortinet	Asset List from Fortinet	traffic

```
select
 epname,
  epip : :text || ' ' || mac : :text as addr,
 osname,
 hwfamily,
 hwversion,
 coalesce(
   osname,
   max(epdevtype)
 ) as devtype,
 sum(sessions) as sessions
from
 $ADOM ENDPOINT t1
 inner join $ADOM EPEU DEVMAP t2 on t1.epid = t2.epid
 inner join (
   select
      epid,
      sum(sessions) as sessions
```

###(select \$flex_timestamp as timestamp, epid, policyname, policyid, sum(coalesce
(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce
(rcvddelta, rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_
out, sum((CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END)) AS session_block, sum(CASE WHEN
(logflag&1>0) THEN 1 ELSE 0 END) AS sessions from \$log-traffic where \$filter and (logflag&
(1|32)>0) group by timestamp, epid, policyname, policyid order by bandwidth desc)### t group
by epid) t3 on t1.epid=t3.epid where exists (select 1 from devtable_ext t4 where \$dev_
filter and t4.devid=t2.devid) and hwvendor='Fortinet' and lastseen>=\$start_time and
firstseen<\$end_time and epname is not null and t2.epid>1024 group by epname, addr, osname,
hwfamily, hwversion order by sessions desc

Dataset Name	Description	Log Category
360-security-Rating-Asset-List-From- Other-Identified-Device	Asset List from Other Identified Device	traffic

```
select
  epname,
  epip : :text || ' ' || mac : :text as addr,
  osname,
  hwfamily,
  hwversion,
  coalesce(
    osname,
    max(epdevtype)
```

```
) as devtype,
  sum(sessions) as sessions

from
  $ADOM_ENDPOINT t1
  inner join $ADOM_EPEU_DEVMAP t2 on t1.epid = t2.epid
  inner join (
    select
    epid,
    sum(sessions) as sessions
    from
```

###(select \$flex_timestamp as timestamp, epid, policyname, policyid, sum(coalesce
(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce
(rcvddelta, rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_
out, sum((CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END)) AS session_block, sum(CASE WHEN
(logflag&1>0) THEN 1 ELSE 0 END) AS sessions from \$log-traffic where \$filter and (logflag&
(1|32)>0) group by timestamp, epid, policyname, policyid order by bandwidth desc)### t group
by epid) t3 on t1.epid=t3.epid where exists (select 1 from devtable_ext t4 where \$dev_
filter and t4.devid=t2.devid) and hwvendor<>'Fortinet' and lastseen>=\$start_time and
firstseen<\$end_time and epname is not null and t2.epid>1024 group by epname, addr, osname,
hwfamily, hwversion order by sessions desc

Dataset Name	Description	Log Category
360-security-wifi-AP-WaitingAuth- Online-Offline-Count	WiFi AP count by Waiting Auth Online and Offline Status	event

```
select
  *
from
  (
    select
    unnest(status) as ap_status,
    unnest(num) as totalnum
    from
     (
        select
        array['Online',
        'Offline'] as status,
        array[sum(
            case when onwire != 'no'
            or onwire is null then 1 end
        ),
        sum(case when onwire = 'no' then 1 end)] as num
    from
```

###(select apstatus, bssid, ssid, onwire, count(*) as subtotal from \$log where
\$filter and apstatus is not null and apstatus!=0 and bssid is not null and logid_to_int
(logid) in (43527, 43521, 43525, 43563, 43564, 43565, 43566, 43569, 43570, 43571, 43582,
43583, 43584, 43585) group by apstatus, bssid, ssid, onwire order by subtotal desc)### t)t
union all (select ap_status, totalnum from ###(select (case when not (action like '%join%'))
then 'Waiting for Authentication' end) as ap_status, count(*) as totalnum from \$log where
\$filter and logid_to_int(logid) in (43522, 43551) group by ap_status order by totalnum
desc)### t)) t where ap status is not null and totalnum>0

Dataset Name	Description	Log Category
360-security-wifi-Top-AP-By-Client	WiFi Top Access Point by Client	event

```
select
  ap,
  count(distinct lmac) as totalnum
from
  ###(select ap, stamac as lmac, ssid, action, max(dtime) as last from $log-event where
$filter and ssid is not null group by ap, lmac, ssid, action order by last desc)### t group
by ap order by totalnum desc
```

Dataset Name	Description	Log Category
360-security-wifi-Signal-By-Client	WiFi Signal by Client	event

```
select
    sig_status,
    count(distinct lmac) as totalnum
from
```

###(select ap, stamac as lmac, ssid, action, (case when signal>=-65 then 'Good (>=-65dBm)' when signal<-75 then 'Poor (<-75dBm)' end) as sig_status, max(dtime) as last from \$log-event where \$filter and ssid is not null group by ap, lmac, ssid, action, sig_status order by last desc)### t where sig_status is not null group by sig_status order by totalnum desc

Dataset Name	Description	Log Category
360-security-wifi-Auth-Failure-Event	WiFi Authentication Failure Event	event

```
select
   ssid,
   from_dtime(last) as last
from
```

Dataset Name	Description	Log Category
360-security-Top-Policy-Bandwidth- Timeline	Top Policy Bandwidth Timeline	traffic

```
select
 timestamp,
 policy,
 bandwidth,
  sum(bandwidth) over (partition by policy) as total_bandwidth
from
  (
   select
     timestamp,
     t1.policy,
     t1.bandwidth
   from
        select
          $fv line timescale(timestamp) as timestamp,
          coalesce(policyname, policyid : :text) as policy,
          sum(bandwidth) as bandwidth
        FROM
```

###(select \$flex timestamp as timestamp, epid, policyname, policyid, sum(coalesce (sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce (rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, sum((CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END)) AS session block, sum(CASE WHEN (logflag&1>0) THEN 1 ELSE 0 END) AS sessions from \$log-traffic where \$filter and (logflag& (1|32)>0) group by timestamp, epid, policyname, policyid order by bandwidth desc)### t group by timestamp, policy order by timestamp) t1 inner join (select coalesce (policyname, policyid::text) as policy, sum(bandwidth) as bandwidth FROM ###(select \$flex timestamp as timestamp, epid, policyname, policyid, sum(coalesce(sentdelta, sentbyte, 0)+coalesce (rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvddelta, rcvdbyte, 0)) as traffic in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic out, sum((CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END)) AS session block, sum(CASE WHEN (logflag&1>0) THEN 1 ELSE 0 END) AS sessions from $\log-\text{traffic}$ where filter and $(\log \log (1|32)>0)$ group by timestamp, epid, policyname, policyid order by bandwidth desc) ### t where coalesce(policyname, policyid::text) is not null and bandwidth>0 group by policy order by bandwidth desc limit \$ddown-top) t2 on t1.policy=t2.policy order by timestamp) t order by timestamp, total bandwidth desc

Dataset Name	Description	Log Category
360-security-Policy-by-Bandwidth	Top Policy by Bandwidth	traffic

select
 policy,
 sum(bandwidth) as bandwidth
FROM

###(select coalesce(policyname, policyid::text) as policy, max(policytype) as policytype,
srcintf, dstintf, max(devname) as devname, max(vd) as vd, sum(coalesce(sentdelta, sentbyte,
0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(CASE WHEN (logflag&1>0) THEN 1 ELSE 0
END) AS sessions, from_dtime(max(dtime)) as time_stamp from \$log-traffic where \$filter and
(logflag&(1|32)>0) and coalesce(policyname, policyid::text) is not null group by policy,
srcintf, dstintf order by bandwidth desc)### t where bandwidth>0 group by policy order by
bandwidth desc

Dataset Name	Description	Log Category
360-security-Policy-by-Session	Top Policy by Session	traffic

select

coalesce(policyname, policyid : :text) as policy, $\operatorname{sum}\left(\operatorname{sessions}\right)$ as sessions

FROM

###(select \$flex_timestamp as timestamp, epid, policyname, policyid, sum(coalesce
(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce
(rcvddelta, rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_
out, sum((CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END)) AS session_block, sum(CASE WHEN
(logflag&1>0) THEN 1 ELSE 0 END) AS sessions from \$log-traffic where \$filter and (logflag&
(1|32)>0) group by timestamp, epid, policyname, policyid order by bandwidth desc)### t where
policyid is not null group by policy order by sessions desc

Dataset Name	Description	Log Category
360-security-Policy-Details	Top Policy with Details by Bandwidth	traffic

select
 policy,
 max(policytype) as policytype,

```
string_agg(distinct srcintf, ',') as srcintf,
string_agg(distinct dstintf, ',') as dstintf,
max(devname) as devname,
max(vd) as vd,
sum(bandwidth) as bandwidth,
sum(sessions) as sessions,
max(time_stamp) as time_stamp
rom
```

###(select coalesce(policyname, policyid::text) as policy, max(policytype) as policytype,
srcintf, dstintf, max(devname) as devname, max(vd) as vd, sum(coalesce(sentdelta, sentbyte,
0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(CASE WHEN (logflag&1>0) THEN 1 ELSE 0
END) AS sessions, from_dtime(max(dtime)) as time_stamp from \$log-traffic where \$filter and
(logflag&(1|32)>0) and coalesce(policyname, policyid::text) is not null group by policy,
srcintf, dstintf order by bandwidth desc)### t where bandwidth>0 group by policy order by
bandwidth desc

Dataset Name	Description	Log Category
360-security-Top-Source-Session- Timeline	Top Source Session Timeline	traffic

```
select
  $fv_line_timescale(timestamp) as timestamp,
  sum(session_block) as session_block,
  (
    sum(sessions) - sum(session_block)
  ) as session_pass
FROM
```

###(select \$flex_timestamp as timestamp, epid, policyname, policyid, sum(coalesce
(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce
(rcvddelta, rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_
out, sum((CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END)) AS session_block, sum(CASE WHEN
(logflag&1>0) THEN 1 ELSE 0 END) AS sessions from \$log-traffic where \$filter and (logflag&
(1|32)>0) group by timestamp, epid, policyname, policyid order by bandwidth desc)### t group
by timestamp order by timestamp

Dataset Name	Description	Log Category
360-security-Top-Source-Details	Top Source with Details by Bandwidth	traffic

```
select
  f_user,
  string_agg(distinct srcintf, ',') as srcintf,
  string_agg(distinct dev_src, ',') as dev_src,
  sum(threatwgt) as threatweight,
  sum(threat_block) as threat_block,
  (
    sum(threatwgt) - sum(threat_block)
  ) as threat_pass,
  sum(bandwidth) as bandwidth,
  sum(sessions) as sessions
from
```

###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as f_user,
srcintf, max(coalesce(srcname, srcmac)) AS dev_src, sum(threatwgt) as threatwgt, sum(CASE
WHEN (logflag&2>0) THEN threatwgt ELSE 0 END) AS threat_block, sum(coalesce(sentdelta,
sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(CASE WHEN (logflag&1>0)

THEN 1 ELSE 0 END) AS sessions from (select `user`, unauthuser, srcip, srcintf, srcname, srcmac, threatweight_sum(threatwgts, threatcnts) as threatwgt, sentdelta, sentbyte, rcvddelta, rcvdbyte, logflag from \$log-traffic where \$filter and (logflag&(1|32)>0)) t group by f_user, srcintf order by bandwidth desc)### t where f_user is not null group by f_user order by bandwidth desc

Dataset Name	Description	Log Category
360-security-Top-Destination- Bandwidth-Timeline	Top Destination Bandwidth Timeline	traffic

```
select
  $fv_line_timescale(timestamp) as timestamp,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out
from
```

###(select \$flex_timestamp as timestamp, epid, policyname, policyid, sum(coalesce
(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(coalesce
(rcvddelta, rcvdbyte, 0)) as traffic_in, sum(coalesce(sentdelta, sentbyte, 0)) as traffic_
out, sum((CASE WHEN (logflag&2>0) THEN 1 ELSE 0 END)) AS session_block, sum(CASE WHEN
(logflag&1>0) THEN 1 ELSE 0 END) AS sessions from \$log-traffic where \$filter and (logflag&
(1|32)>0) group by timestamp, epid, policyname, policyid order by bandwidth desc)### t group
by timestamp order by timestamp

Dataset Name	Description	Log Category
360-security-Top-Destination-Details	Top Destination with Details by Bandwidth	traffic

```
select
  dstip,
  count(distinct app_group) as app_num,
  sum(sessions) as sessions,
  sum(bandwidth) as bandwidth
from
```

###(select dstip, app_group_name(app) as app_group, sum(coalesce(sentdelta, sentbyte,
0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, sum(CASE WHEN (logflag&1>0) THEN 1 ELSE 0
END) AS sessions from \$log-traffic where \$filter and (logflag&(1|32)>0) group by dstip, app_
group order by bandwidth desc)### t1 where dstip is not null group by dstip order by
bandwidth desc

Dataset Name	Description	Log Category
360-security-High-Risk-Application-By-Category	High risk application by category	traffic

```
select
  app_cat,
  count(distinct app) as total_num
from
  ###(select app_cat, app from $log t1 inner join app_mdata t2 on t1.appid=t2.id where
$filter and risk>='4' and (logflag&1>0) group by app_cat, app)### t group by app_cat order
by total num desc
```

Dataset Name	Description	Log Category
360-security-Apprisk-Ctrl-High-Risk- Application-Behavioral	Application Behavioral Characteristics	traffic

```
select
 behavior,
 round(
   sum(total_num)* 100 / sum(
     sum(total num)
   ) over (),
 ) as percentage
from
    ###(select (case when lower(appcat)='botnet' then 'malicious' when lower
(appcat) = 'remote.access' then 'tunneling' when lower(appcat) in ('storage.backup',
'video/audio') then 'bandwidth-consuming' when lower(appcat)='p2p' then 'peer-to-peer' when
lower(appcat)='proxy' then 'proxy' end) as behavior, sum(sessions) as total_num from ###base
(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip, epid, euid, coalesce(nullifna(`user`),
nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app, appcat, apprisk, sum
(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as bandwidth, count(*)
as sessions from $log-traffic where $filter and (logflag&(1|32)>0) and nullifna(app) is not
null group by dvid, srcip, dstip, epid, euid, user_src, appid, app, appcat, apprisk order by
sessions desc)base### t where lower(appcat) in ('botnet', 'remote.access', 'storage.backup',
'video/audio', 'p2p', 'proxy') and apprisk in ('critical', 'high') group by appcat order by
total num desc) ### union all ###(select 'malicious' as behavior, count(*) as total_num from
$log-attack where $filter and (logflag&16>0) and severity in ('critical', 'high') group by
behavior order by total num desc) ###) t where $filter-drilldown group by behavior order by
percentage desc
```

Dataset Name	Description	Log Category
360-security-Top10-App-Category- Group-By-Bandwidth	Category breakdown of all applications, sorted by bandwidth	traffic

```
select
  appcat,
  count(distinct app) as app_num,
  count(distinct user_src) as user_num,
  sum(bandwidth) as bandwidth,
  sum(sessions) as num_session
from
```

###(select app, appcat, user_src, sum(bandwidth) as bandwidth, sum(sessions) as sessions
from ###base(/*tag:rpt_base_t_top_app*/select dvid, srcip, dstip, epid, euid, coalesce
(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src, appid, app, appcat,
apprisk, sum(coalesce(sentdelta, sentbyte, 0)+coalesce(rcvddelta, rcvdbyte, 0)) as
bandwidth, count(*) as sessions from \$log-traffic where \$filter and (logflag&(1|32)>0) and
nullifna(app) is not null group by dvid, srcip, dstip, epid, euid, user_src, appid, app,
appcat, apprisk order by sessions desc)base### t where nullifna(appcat) is not null and
appcat not in ('Not.Scanned', 'unscanned', 'unknown') group by app, appcat, user_src order
by bandwidth desc)### t where \$filter-drilldown group by appcat order by bandwidth desc

Dataset Name	Description	Log Category
360-security-Applications-By- Bandwidth	Top Web Applications by Bandwidtih	traffic

```
select
  risk as d_risk,
  t2.name,
  t2.app_cat,
  t2.technology,
  count(distinct f_user) as users,
  sum(bandwidth) as bandwidth,
  sum(num_session) as sessions
from
```

###(select appid, coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as f_
user, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as num_session
from \$log where \$filter and (logflag&1>0) and nullifna(app) is not null and service in
('80/tcp', '443/tcp', 'HTTP', 'HTTPS', 'http', 'https') group by appid, f_user order by
bandwidth desc)### t1 inner join app_mdata t2 on t1.appid=t2.id group by d_risk, t2.name,
t2.app_cat, t2.technology order by d_risk desc, bandwidth desc

Dataset Name	Description	Log Category
360-security-Top-Web-Categories- Visited	Top Web Category and User by Count	traffic

```
select
 catdesc,
 coalesce(
   firstname || ' ' || lastname, euname,
   usersrc
 ) as user src,
 requests,
 sum(requests) over (partition by catdesc) as total num
from
  ###(select $flex timestamp as timestamp, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as usersrc, euid, catdesc, hostname as website, ebtr agg
flat($browse time) as browsetime, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as
bandwidth, sum(coalesce(rcvdbyte, 0)) as traffic in, sum(coalesce(sentbyte, 0)) as traffic
out, count(*) as requests from $log-traffic where $filter and (logflag&1>0) and (countweb>0
or ((logver is null or logver<502000000) and (hostname is not null or utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block', 'script-filter')))) group by
timestamp, usersrc, euid, catdesc, website /*SkipSTART*/order by bandwidth
desc/*SkipEND*/)### t1 left join $ADOM ENDUSER t3 on t1.euid=t3.euid where usersrc is not
null and catdesc<>'Unknown' order by total_num desc, catdesc
```

Dataset Name	Description	Log Category
360-security-Top5-Malware-Virus- Botnet-Spyware	Top Virus Botnet Spyware Adware and Phishing Websites	traffic

```
select
  malware_type,
  virus_s,
  total num,
```

```
sum(total num) over (partition by malware_type) as type_total_num
from
      select
       (
         case when lower(appcat) = 'botnet' then 'Botnet C&C' else (
           case when virus s like 'Riskware%' then 'Spyware' when virus s like 'Adware%'
then 'Adware' else 'Virus' end
         ) end
        ) as malware_type,
        virus s,
        sum(total num) as total num
      from
          ###(select app as virus s, appcat, hostname, count(*) as total num from $log-
traffic where $filter and (logflag&1>0) and lower(appcat)='botnet' group by virus s, appcat,
hostname order by total num desc) ### union all ###(select unnest(string to array(virus,
',')) as virus s, appeat, hostname, count(*) as total num from $log-traffic where $filter
and (logflag&1>0) and virus is not null group by virus_s, appcat, hostname order by total_
num desc) ### union all ###(select attack as virus_s, 'botnet' as appcat, hostname, count(*)
as total num from $log-attack where $filter and (logflag&16>0) group by virus s, appeat,
hostname order by total num desc)###) t where virus s is not null group by malware type,
virus_s) union all (select 'Phishing' as malware_type, hostname as virus_s, count(*) as
total_num from $log-webfilter where $filter and hostname is not null and catdesc='Phishing'
group by malware type, virus s)) t order by type total num desc, virus s
```

Dataset Name	Description	Log Category
360-security-Top5-Victims-of-Malware	Victims of Malware	virus

```
select
  coalesce(
   nullifna(`user`),
   nullifna(`unauthuser`),
   ipstr(`srcip`)
 ) as user src,
 virus as malware,
  count(*) as total num
  $log
where
 $filter
 and virus is not null
group by
 user src,
 malware
order by
  total num desc
```

Dataset Name	Description	Log Category
360-security-Top5-Victims-of- Phishing-Site	Victims of Phishing Site	webfilter

```
select
 coalesce(
  nullifna(`user`),
   nullifna(`unauthuser`),
   ipstr(`srcip`)
 ) as user src,
 url as phishing site,
 count(*) as total num
from
 $log
where
 $filter
 and cat in (26, 61)
group by
 user src,
 phishing site
order by
 total num desc
```

Dataset Name	Description	Log Category
360-security-Top5-Malicious-Phishing- Sites	Victims of Phishing Site by Count	webfilter

```
select
 phishing site,
 user src,
 total num,
 sum(total_num) over (partition by phishing_site) as user_total_num
  ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src,
hostname as phishing_site, count(*) as total_num from $log where $filter and lower(service)
in ('http', 'https') and hostname is not null and cat in (26, 61) group by user_src,
phishing_site order by total_num desc) ### t order by user_total_num desc, user_src
```

Dataset Name	Description	Log Category
360-security-Application-Vulnerability	Application vulnerabilities discovered	attack

```
select
 attack,
 attackid,
 vuln type,
 cve,
 severity_number,
  count (
   distinct (
     CASE WHEN direction = 'incoming' THEN srcip ELSE dstip END
  ) as victims,
  count (
     CASE WHEN direction = 'incoming' THEN dstip ELSE srcip END
   )
  ) as sources,
  sum(totalnum) as totalnum
```

from

###(select attack, attackid, (case when severity='critical' then 5 when severity='high' then 4 when severity='medium' then 3 when severity='low' then 2 when severity='info' then 1 else 0 end) as severity number, direction, dstip, srcip, count(*) as totalnum from \$log where \$filter and nullifna(attack) is not null and severity is not null group by attack, attackid, severity, direction, dstip, srcip order by totalnum desc) ### t1 left join (select name, cve, vuln type from ips mdata) t2 on t1.attack=t2.name group by attack, attackid, vuln type, severity number, cve order by severity number desc, totalnum desc

Dataset Name	Description	Log Category
360-security-Files-Analyzed-By-FortiCloud-Sandbox	Files analyzed by FortiCloud Sandbox	virus

```
select
  $day of week as dow,
  count(*) as total_num
from
  $10g
where
 $filter
  and nullifna(filename) is not null
  and logid to int(logid) = 9233
group by
  dow
order by
  dow
```

Dataset Name	Description	Log Category
360-security-Apprisk-Ctrl-Malicious- Files-Detected-By-FortiCloud-Sandbox	Files detected by FortiCloud Sandbox	virus

```
select
 filename,
 analyticscksum,
 count (distinct victim) as victims,
 count(distinct source) as source
from
```

###(select filename, analyticscksum, (CASE WHEN direction='incoming' THEN dstip ELSE srcip END) as source, (CASE WHEN direction='incoming' THEN srcip ELSE dstip END) as victim, count (*) as totalnum from \$log where \$filter and filename is not null and logid to int (logid)=9233 and analyticscksum is not null group by filename, analyticscksum, source, victim order by totalnum desc) ### t group by filename, analyticscksum order by victims desc, source desc

Dataset Name	Description	Log Category
360-security-Data-Loss-Incidents-By- Severity	Data loss incidents summary by severity	dlp

```
select
 initcap(severity : :text) as s_severity,
 count(*) as total_num
 ###(select itime, hostname, `from` as sender, `to` as receiver, profile, action, service,
```

subtype, srcip, dstip, severity, filename, direction, filesize, (case when severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna (`user`), ipstr(`srcip`)) is not null then 'User Associated Data Loss' else NULL end) end) as data_loss from \$log where \$filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where \$filter-drilldown and severity is not null group by s_severity order by total_num desc

Dataset Name	Description	Log Category
360-security-Data-Loss-Files-By- Service	Data Lass Files By Service	dlp

```
select
  filename,
  (
    case direction when 'incoming' then 'Download' when 'outgoing' then 'Upload' end
) as action,
  max(filesize) as filesize,
  service
from
  ###(select itime, hostname, `from` as sender, `to` as receiver, profile, action, service,
  subtype, srcip, dstip, severity, filename, direction, filesize, (case when
  severity='critical' then 'Critical Data Exfiltration' else (case when coalesce(nullifna
  (`user`), ipstr(`srcip`)) is not null then 'User Associated Data Loss' else NULL end) end)
  as data_loss from $log where $filter /*SkipSTART*/order by itime desc/*SkipEND*/)### t where
$filter-drilldown and filesize is not null group by filename, direction, service order by
filesize desc
```

Dataset Name	Description	Log Category
360-security-Endpoint-Security- Events-Summary	Endpoint Security Events summary	fct-traffic

```
select
  (
    case utmevent when 'antivirus' then 'Malware incidents' when 'webfilter' then
'Malicious/phishing websites' when 'appfirewall' then 'Risk applications' when 'dlp' then
'Data loss incidents' when 'netscan' then 'Vulnerability detected' else 'Others' end
  ) as events,
  count(*) as total_num
from
  $log
where
  $filter
  and utmevent is not null
group by
  events
order by
  total num desc
```

Dataset Name	Description	Log Category
360-security-Top-Endpoing-Running- High-Risk-Application	Endpoints Running High Risk Application	fct-traffic

```
select coalesce(
```

```
nullifna(`user`),
    ipstr(`srcip`),
   'Unknown'
  ) as f_user,
 coalesce(
  nullifna(hostname),
   'Unknown'
 ) as host name,
 threat as app,
 t2.app_cat as appcat,
 risk as d risk
from
 $log t1
 inner join app_mdata t2 on t1.threat = t2.name
where
 and utmevent = 'appfirewall'
 and risk >= '4'
group by
 f_user,
 host_name,
 t1.threat,
 t2.app_cat,
 t2.risk
order by
 risk desc
```

Macro Reference List

The following table lists the available predefined macros that can be used in a report layout to display the log data as text (XML format) dynamically.

Macro Name	Description	Dataset Used	Log Category
Application Category with Highest Session Count	Application category with the highest session count	App-Sessions-By- Category	Traffic
Application with Highest Bandwidth	Application with the highest bandwidth usage	Top-App-By-Bandwidth	Traffic
Application with Highest Session Count	Applications with the highest session count	Top-App-By-Sessions	Traffic
Attack with Highest Session Count	Attack with highest session count	Utm-Top-Attack-Source	Attack
Botnet with Highest Session Count	Botnet with the highest session count	Detected-Botnet	Traffic
Destination with Highest Bandwidth	Destination with the highest bandwidth usage	Top-Destinations-By- Bandwidth	Traffic
Destination with Highest Session Count	Destination with the highest session count	Top-Destinations-By- Sessions	Traffic
Highest Bandwidth Consumed (Application) Category	Highest bandwidth consumed by application category	App-Risk-App-Usage- By-Category	Traffic
Highest Bandwidth Consumed (Application)	Highest bandwidth consumed by application	Top-App-By-Bandwidth	Traffic
Highest Bandwidth Consumed (Destination)	Highest bandwidth consumed by destination	Top-Destinations-By- Bandwidth	Traffic
Highest Bandwidth Consumed (P2P Application)	Highest bandwidth consumed by P2P application	Top-P2P-App-By- Bandwidth	Traffic
Highest Bandwidth Consumed (Source)	Highest bandwidth consumed by source	Top-Users-By- Bandwidth	Traffic
Highest Bandwidth Consumed ()Web Category)	Highest bandwidth consumed by website category	Top-Web-Category-by- Bandwidth	Web Filter
Highest Bandwidth Consumed (Website)	Highest bandwidth consumed by website	Top-Web-Sites-by- Bandwidth	Web Filter
Highest Risk Application with Highest Bandwidth	Highest risk application with the highest bandwidth usage	High-Risk-Application- By-Bandwidth	Traffic
Highest Risk Application with Highest Session Count	Highest risk application with the highest session count	High-Risk-Application- By-Sessions	Traffic

Macro Name	Description	Dataset Used	Log Category
Highest Session Count by Application Category	Highest session count by application category	App-Sessions-By- Category	Traffic
Highest Session Count by Application	Highest session count by application	Top-App-By-Sessions	Traffic
Highest Session Count by Attack	Highest session count by attack	Utm-Top-Attack-Source	Attack
Highest Session Count by Botnet	Highest session count by botnet	Detected-Botnet	Traffic
Highest Session Count by Destination	Highest session count by destination	Top-Destinations-By- Sessions	Traffic
Highest Session Count by Highest Severity Attack	Highest session count by highest severity attack	Threat-Attacks-By- Severity	Attack
Highest Session Count by P2P Application	Highest session count by P2P application	Top-P2P-App-By- Sessions	Traffic
Highest Session Count by Source	Highest session count by source	Top-User-Source-By- Sessions	Traffic
Highest Session Count by Virus	Highest session count by virus	Utm-Top-Virus	Traffic
Highest Session Count by Web Category	Highest session count by website category	Top-Web-Category-by- Sessions	Web Filter
Highest Session Count by Website	Highest session count by website	Top-Web-Sites-by- Sessions	Web Filter
Highest Severity Attack with Highest Session Count	Highest severity attack with the highest session count	Threat-Attacks-By- Severity	Attack
P2P Application with Highest Bandwidth	P2P applications with the highest bandwidth usage	Top-P2P-App-By- Bandwidth	Traffic
P2P Application with Highest Session Count	P2P applications with the highest session count	Top-P2P-App-By- Sessions	Traffic
Source with Highest Bandwidth	Source with the highest bandwidth usage	Top-Users-By- Bandwidth	Traffic
Source with Highest Session Count	Source with the highest session count	Top-User-Source-By- Sessions	Traffic
Total Number of Attacks	Total number of attacks detected	Total-Attack-Source	Attack
Total Number of Botnet Events	Total number of botnet events	Total-Number-of-Botnet- Events	Traffic
Total Number of Viruses	Total number of viruses detected	Total-Number-of-Viruses	Traffic
User Details	User details of traffic	Traffic-User-Detail	Traffic
Virus with Highest Session Count	Virus with the highest session count	Utm-Top-Virus	Traffic

Macro Name	Description	Dataset Used	Log Category
Web Category with Highest Bandwidth	Web filtering category with the highest bandwidth usage	Top-Web-Category-by- Bandwidth	Web Filter
Web Category with Highest Session Count	Web filtering category with the highest session count	Top-Web-Category-by- Sessions	Web Filter
Website with Highest Bandwidth	Website with the highest bandwidth usage	Top-Web-Sites-by- Bandwidth	Web Filter
Website with Highest Session Count	Website with the highest session count	Top-Web-Sites-by- Sessions	Web Filter

Change Log

Date	Change Description
2022-04-12	Initial release.



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