FortiAnalyzer - Dataset Reference

Version 5.6.10

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Change Log

Date	Change Description
2019-08-15	Initial release.

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 available predefined data sets reported by FortiAnalyzer. For documentation and technical support reference purposes, thess tables contain the dataset names, SQL query syntax for each dataset, and the log category of the 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 $flex_timestamp as timestamp, sum(coalesce(sentbyte,
0)) as traffic_out, sum(coalesce(rcvdbyte, 0)) as traffic_in from
$log where $filter and logid_to_int(logid) not in (4, 7, 14, 20)
group by timestamp having sum(coalesce(sentbyte, 0)+coalesce(rcvd-
byte, 0))>0 order by timestamp desc)### t group by hodex 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
from
  ###(select $flex_timestamp as timestamp, count(*) as sessions
from $log where $filter and logid_to_int(logid) not in (4, 7, 14,
20) group by timestamp order by timestamp desc)### t 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(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 logid_to_int(logid) not in (4, 7, 14, 20)
group by
  user_src
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 0
order by
  bandwidth desc
```

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

```
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 logid_to_int(logid) not in (4, 7, 14, 20)
    and nullifna(app) is not null
group by
    app_group
having
    sum(
        coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
    )& gt; 0
order by
    bandwidth desc
```

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

```
select
    coalesce(
        nullifna(`user`),
        nullifna(`unauthuser`),
        ipstr(`srcip`)
    ) as user_src,
    count(*) as sessions
from
    $log
where
    $filter
    and logid_to_int(logid) not in (4, 7, 14, 20)
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_name(app) as app_group,
    count(*) as sessions
from
    $log
```

```
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and nullifna(app) is not null
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 logid_to_int(logid) not in (4, 7, 14, 20)
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 logid_to_int(logid) not in (4, 7, 14, 20)
    and coalesce(
      nullifna(
        root_domain(hostname)
      ),
      ipstr(`dstip`)
    ) is not null
group by
    domain
having
    sum(
      coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
    )& gt; 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 concat(interface, '.', devid) as intf, mac from
$log where $last3day_period $filter  and logid_to_int(logid) =
26001 and dhcp_msg = 'Ack' group by interface, devid, mac)###; cre-
ate temporary table rpt_tmptbl_2 as ###(select concat(interface,
```

```
'.', devid) as intf, mac from $log where $filter and logid_to_int
(logid) = 26001 and dhcp_msg = 'Ack' group by interface, devid,
mac)###; create temporary table rpt_tmptbl_3 as select distinct on
(1) intf, cast(used*100.0/total as decimal(18,2)) as percent_of_
allocated_ip from ###(select distinct on (1) concat(interface,
'.', devid) as intf, used, total, itime from $log where $filter
and logid_to_int(logid)=26003 and total>0 order by intf, itime
desc)### t order by intf, itime desc; select t1.intf as interface,
percent_of_allocated_ip, new_cli_count from rpt_tmptbl_3 t1 inner
join (select intf, 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 intf) t2 on t1.intf=t2.intf 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
  coalesce(
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  srcssid,
  devtype,
  coalesce(
    nullifna(`srcname`),
    `srcmac`
  ) as hostname_mac,
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and (
    srcssid is not null
    or dstssid is not null
  )
group by
```

```
  user_src,
  srcssid,
  devtype,
  hostname_mac
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 0
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 $flex_timestamp as timestamp, coalesce(nullifna
(`user`), nullifna(`unauthuser`), ipstr(`srcip`)) as user_src from
$log where $filter and logid_to_int(logid) not in (4, 7, 14, 20)
group by timestamp, user_src order by timestamp desc)### t 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
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and utmevent in (
    'webfilter', 'banned-word', 'web-content',
    'command-block', 'script-filter'
  )
```

```
    and hostname is not null
    and (
      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 logid_to_int(logid) not in (4, 7, 14, 20) and utmac-
tion!='blocked' and (countweb>0 or ((logver is null or logver<52)
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, 0)+coalesce(rcvd-
byte, 0))>0 order by bandwidth desc)### 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 logid_to_int(logid) not in (4, 7, 14, 20)
   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
   coalesce(
      nullifna(`user`),
      nullifna(`unauthuser`),
      ipstr(`srcip`)
   ) as user_src,
   devtype,
   srcname,
   count(*) as requests
from
   $log
where
   $filter
   and logid_to_int(logid) not in (4, 7, 14, 20)
   and utmevent in (
      'webfilter', 'banned-word', 'web-content',
      'command-block', 'script-filter'
   )
group by
   user_src,
   devtype,
   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,
  sum(
    coalesce(rcvdbyte, 0)
  ) as traffic_in,
  sum(
    coalesce(sentbyte, 0)
  ) as traffic_out
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and utmevent in (
    'webfilter', 'banned-word', 'web-content',
    'command-block', 'script-filter'
  )
  and hostname is not null
group by
  appid,
  hostname,
  catdesc
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 0
order by
  bandwidth desc
```

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

```
select
  coalesce(
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  devtype,
  srcname,
  count(*) as requests
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and utmevent in (
    'webfilter', 'banned-word', 'web-content',
    'command-block', 'script-filter'
  )
  and (
    utmaction in ('block', 'blocked')
    or action = 'deny'
  )
group by
  user_src,
  devtype,
  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
  user_src,
  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, 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 logid_to_int(logid) not in (4, 7, 14,
20) and (countweb>0 or ((logver is null or logver<52) and (host-
name is not null or utmevent in ('webfilter', 'banned-word', 'web-
content', 'command-block', 'script-filter')))) group by user_src
having sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0))>0 order by
bandwidth desc)### t group by user_src order by bandwidth desc
```

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

```
select
  coalesce(
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  devtype,
  srcname,
  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 logid_to_int(logid) not in (4, 7, 14, 20)
  and utmevent in (
    'webfilter', 'banned-word', 'web-content',
    'command-block', 'script-filter'
  )
group by
  user_src,
  devtype,
  srcname
having
  sum(
```

```
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 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,
  sum(
    coalesce(sentbyte, 0)
  ) as traffic_out
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and catdesc in ('Streaming Media and Download')
group by
  appid,
  hostname
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 0
order by
  bandwidth desc
```

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

```
select
  coalesce(
```

```
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  count(*) as requests
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and 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
  coalesce(
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  count(*) as requests
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and 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 logid_to_int(logid) not in (4, 7, 14, 20)
  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)
  )& gt; 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 logid_to_int(logid) not in (4, 7, 14, 20)
  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)
  )& gt; 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, '' as virusid_s, count(*) as totalnum from
$log-traffic where $filter and logid_to_int(logid) not in (4, 7,
14, 20) and utmevent is not null and virus is not null group by
virus, virusid_s order by totalnum desc)### union all ###(select
virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*)
as totalnum from $log-virus where $filter and (eventtype is null
or logver>=52) and nullifna(virus) is not null group by virus,
```

```
virusid_s order by totalnum desc)###) 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, '' as virusid_s, count(*) as totalnum from
$log-traffic where $filter and logid_to_int(logid) not in (4, 7,
14, 20) and utmevent is not null and virus is not null group by
virus, virusid_s order by totalnum desc)### union all ###(select
virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*)
as totalnum from $log-virus where $filter and (eventtype is null
or logver>=52) and nullifna(virus) is not null group by virus, vir-
usid_s order by totalnum desc)###) t group by virus, malware_type
order by totalnum desc
```

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

```
select
  user_src,
  sum(totalnum) as totalnum
from
  (
    ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, count(*) as totalnum from $log-
traffic where $filter and logid_to_int(logid) not in (4, 7, 14,
20) and utmevent is not null and virus is not null group by user_
src order by totalnum desc)### union all ###(select coalesce(nul-
lifna(`user`), ipstr(`srcip`)) as user_src, count(*) as totalnum
from $log-virus where $filter and (eventtype is null or logver>-
```

```
=52) and nullifna(virus) is not null group by user_src order by
totalnum desc)###) t group by user_src order by totalnum desc
```

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

```
select
  coalesce(
    nullifna(`user`),
    ipstr(`srcip`)
  ) as user_src,
  count(*) as totalnum
from
  $log
where
  $filter
group by
  user_src
order by
  totalnum desc
```

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

```
select
  dstip,
  count(*) as totalnum
from
  $log
where
  $filter
  and dstip is not null
group by
  dstip
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) end
      ) as bandwidth
    from
      ###(select devid, vd, remip, vpn_trim(vpntunnel) as vpn_
name, tunnelid, 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%' and (tunnelip is null or tunnelip='0.0.0.0') and
action in ('tunnel-stats', 'tunnel-down') and tunnelid is not null
group by devid, vd, remip, vpn_name, tunnelid)### t 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
    from
      ###(select devid, vd, remip, coalesce(nullifna(`user`),
ipstr(`remip`)) as user_src, tunnelid, 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 from $log where $filter and sub-
type='vpn' and tunneltype='ssl-tunnel' 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)### t group by devid, vd,
user_src, remip, tunnelid) tt group by user_src, remote_ip having
sum(bandwidth)>0 order by bandwidth desc
```

Dataset Name	Description	Log Category
Top-Dial-Up-IPSEC-Tunnels-By-Bandwidth	Top dial up 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,
      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) end
      ) as bandwidth
    from
      ###(select devid, vd, remip, vpn_trim(vpntunnel) as vpn_
name, tunnelid, 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 nullifna(vpntunnel) is not null
```

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

Dataset Name	Description	Log Category
Top-Dial-Up-IPSEC-Users-By-Bandwidth	Top dial up IPsec users by bandwidth usage	event

```
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,
      vd,
      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, nullifna(`xauthuser`) as xauthuser_
agg, nullifna(`user`) as user_agg, remip, tunnelid, 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 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 group
by devid, vd, xauthuser_agg, user_agg, remip, tunnelid)### t group
by devid, vd, remip, tunnelid) tt group by user_src, remip having
sum(bandwidth)>0 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,
      remip,
```

```
      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 xau-
thuser_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(sent-
byte, 0)) as max_traffic_out, max(coalesce(rcvdbyte, 0)) as max_
traffic_in from $log where $filter and subtype='vpn' and tun-
neltype like 'ipsec%' and not (tunnelip is null or tun-
nelip='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 tun-
nelid)### t group by devid, vd, remip, tunnelid) tt group by user_
src having sum(bandwidth)>0 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
from
  (
    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
    from
      ###(select devid, vd, coalesce(nullifna(`user`), ipstr
(`remip`)) as user_src, remip, tunnelid, min(coalesce(dtime, 0))
as s_time, max(coalesce(dtime, 0)) as e_time, min(coalesce(sent-
byte, 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 from $log where $filter
and subtype='vpn' and tunneltype='ssl-web' 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)### t group by devid, vd,
user_src, remip, tunnelid) tt group by user_src, remote_ip having
sum(bandwidth)>0 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,
  (
    max(e_time)- min(s_time)
  ) as duration
from
  (
    select
      devid,
      vd,
      user_src,
      remip,
      tunnelid,
      min(s_time) as s_time,
      max(e_time) as e_time
    from
      ###(select devid, vd, coalesce(nullifna(`user`), ipstr
(`remip`)) as user_src, remip, tunnelid, min(coalesce(dtime, 0))
as s_time, max(coalesce(dtime, 0)) as e_time from $log where $fil-
ter and subtype='vpn' and tunneltype='ssl-web' and action in ('tun-
nel-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)### t 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) end
      ) 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, 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 'ssl%' and action in ('tunnel-up', 'tunnel-stats', 'tunnel-
down') and coalesce(nullifna(`user`), ipstr(`remip`)) is not null
and tunnelid is not null and tunnelid!=0 group by devid, vd,
remip, user_src, tunnelid, tunneltype)### t group by devid, vd,
remip, user_src, tunnelid, tunneltype) tt group by user_src, tun-
neltype having sum(traffic_out+traffic_in)>0 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,
      remip,
      string_agg(distinct xauthuser_agg, ' ') as xauthuser_agg,
      string_agg(distinct user_agg, ' ') as user_agg,
      t_type,
      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 xau-
thuser_agg, nullifna(`user`) as user_agg, (case when tunneltype
like 'ipsec%' then 'ipsec' else tunneltype end) as t_type, tun-
nelid, 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 from $log where $filter and subtype='vpn'
and (tunneltype like 'ssl%' or (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, t_
type, tunnelid)### t group by devid, vd, remip, t_type, tunnelid)
tt group by user_src, tunneltype having sum(bandwidth)>0 order by
duration desc
```

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

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

```
        devid,
        vd,
        remip,
        tunnelid,
        sum(tunnelup) as total_num,
        max(traffic_in) as traffic_in,
        max(traffic_out) as traffic_out
    from
        ###(select $flex_timestamp as timestamp, devid, vd, remip,
tunnelid, (case when action='tunnel-up' then 1 else 0 end) as tun-
nelup, max(coalesce(sentbyte, 0)) as traffic_out, max(coalesce
(rcvdbyte, 0)) as traffic_in from $log where $filter and sub-
type='vpn' and (tunneltype like 'ipsec%' or tunneltype like
'ssl%') and action in ('tunnel-up', 'tunnel-stats', 'tunnel-down')
and tunnelid is not null group by timestamp, action, devid, vd,
remip, tunnelid order by timestamp desc)### 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
from
  ###(select coalesce(nullifna(`xauthuser`), `user`) as f_user,
tunneltype, count(*) as total_num from $log where $filter and sub-
type='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) 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,
        sum(tunnelup) as total_num
      from
        ###(select nullifna(`xauthuser`) as xauthuser_agg, nullifna
```

```
(`user`) as user_agg, devid, vd, remip, (case when tunneltype like
'ipsec%' then 'ipsec' else tunneltype end) as t_type, tunnelid,
sum((case when action='tunnel-up' then 1 else 0 end)) as tunnelup,
min(coalesce(dtime, 0)) as s_time, max(coalesce(dtime, 0)) as e_
time, max(coalesce(duration,0)) as max_duration, min(coalesce(dur-
ation,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 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 tun-
nelid is not null and tunnelid!=0 group by xauthuser_agg, user_
agg, devid, vd, remip, t_type, tunnelid)### t group by t_type,
devid, vd, remip, tunnelid having max(tunnelup) > 0) tt group by
f_user, tunneltype having sum(bandwidth) > 0 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) end
        ) else 0 end
    ) as ipsec_traffic_bandwidth,
    min(s_time) as s_time,
    max(e_time) as e_time
  from
    ###(select $flex_timestamp as timestamp, devid, vd, remip,
tunnelid, (case when tunneltype like 'ipsec%' then 'ipsec' else
tunneltype end) as t_type, 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 sub-
type='vpn' and (tunneltype like 'ipsec%' or tunneltype like
'ssl%') and action in ('tunnel-stats', 'tunnel-down') and tunnelid
is not null and tunnelid!=0 group by timestamp, devid, vd, remip,
t_type, tunnelid order by timestamp desc)### 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,
      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, 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 dur-
ation_beg, max(coalesce(duration, 0)) as duration_end from $log
where $filter and subtype='vpn' and action='tunnel-stats' and tun-
neltype like 'ipsec%' and (tunnelip is null or tunnelip='0.0.0.0')
and nullifna(`user`) is null and tunnelid is not null and tun-
nelid!=0 group by tunnelid, tunneltype, vpntunnel, devid, vd order
by tunnelid)### t group by vpntunnel, tunneltype, tunnelid, devid,
vd order by bandwidth desc) t group by vpntunnel, tunneltype order
by bandwidth desc
```

Dataset Name	Description	Log Category
Top-Dialup-IPSEC-By-Bandwidth-and-Availability	Top dialup IPsec users by bandwidth usage and avail	event

```
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,
      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, coalesce(nullifna(`xauthuser`), nul-
lifna(`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 dur-
ation_beg, max(coalesce(duration, 0)) as duration_end from $log
where $filter and subtype='vpn' and action='tunnel-stats' and tun-
neltype like 'ipsec%' and not (tunnelip is null or tun-
nelip='0.0.0.0') and tunnelid is not null and tunnelid!=0 group by
tunnelid, user_src, remip, devid, vd order by tunnelid)### t group
by user_src, remip, tunnelid, devid, vd order by bandwidth desc) t
group by user_src, remip order by bandwidth desc
```

Dataset Name	Description	Log Category
Top-SSL-Tunnel-Mode-By-Bandwidth-and-Availability	Top 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, 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 sub-
type='vpn' and action='tunnel-stats' and tunneltype in ('ssl-tun-
nel', 'ssl') and coalesce(nullifna(`user`), ipstr(`remip`)) is not
null and tunnelid is not null group by tunnelid, user_src, remip,
devid, vd order by tunnelid)### t group by user_src, remote_ip,
tunnelid, devid, vd order by bandwidth desc) t 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,
      sum(
        sent_end - sent_beg + rcvd_end - rcvd_beg
      ) as bandwidth,
      sum(duration_end - duration_beg) as uptime
    from
      ###(select tunnelid, 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 sub-
type='vpn' and action='tunnel-stats' and tunneltype='ssl-web' and
coalesce(nullifna(`user`), ipstr(`remip`)) is not null and tun-
nelid is not null group by tunnelid, user_src, remip, devid, vd
order by tunnelid)### t group by user_src, remote_ip, tunnelid,
devid, vd having sum(sent_end-sent_beg+rcvd_end-rcvd_beg)>0 order
by bandwidth desc) t group by user_src, remote_ip order by band-
width 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,
  ui
having
  sum(login)+ sum(config_change)& gt; 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
from
  ###(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 order by timestamp desc)### 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(total_num) as total_num
from
  ###(select (case when level in ('critical', 'alert', 'emer-
gency') 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 total_num from $log where
$filter and subtype='system' group by severity_tmp order by total_
num desc)### 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 order by
timestamp desc)### 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
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 order by
timestamp desc)### 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
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 order by count desc)### t where
severity_tmp='Critical' group by msg, 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 order by count desc)### 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 order by count desc)### 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
from
  ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, srcip, srcname, sum(coalesce(sent-
byte, 0)+coalesce(rcvdbyte, 0)) as bandwidth from $log where $fil-
ter and logid_to_int(logid) not in (4, 7, 14, 20) 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 ses-
sions, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as band-
width from $log where $filter and logid_to_int(logid) not in (4,
7, 14, 20) 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-Summary	UTM drilldown email senders summary	traffic

```
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 logid_to_int(logid) not in (4, 7, 14, 20)
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
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 logid_to_int(logid) not in (4, 7, 14, 20)
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 $filter-drilldown
```

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 logid_to_int(logid) not in (4, 7, 14, 20)
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 $filter-drilldown and recipient is not null group by recip-
ient 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 logid_to_int(logid) not in (4, 7, 14, 20)
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
from
   ###(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 logid_to_int(logid) not in (4, 7,
14, 20) and (countweb>0 or ((logver is null or logver<52) 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
```

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

```
select
  appid,
  hostname,
  sum(requests) as requests
from
  (
    ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, appid, hostname, (case when utmac-
tion='blocked' then 1 else 0 end) as blocked, count(*) as requests
from $log-traffic where $filter and logid_to_int(logid) not in (4,
7, 14, 20) and utmevent in ('webfilter', 'banned-word', 'web-con-
tent', 'command-block', 'script-filter') and hostname is not null
group by user_src, appid, hostname, blocked order by requests
desc)### union all ###(select coalesce(nullifna(`user`), ipstr(`sr-
cip`)) as user_src, 0 as appid, hostname, (case when action-
='blocked' then 1 else 0 end) as blocked, count(*) as requests
from $log-webfilter where $filter and (eventtype is null or
logver>=52) 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	traffic

```
select
  virus,
  sum(totalnum) as totalnum
from
  (
    ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, virus, count(*) as totalnum from
$log-traffic where $filter and logid_to_int(logid) not in (4, 7,
14, 20) and utmevent is not null and virus is not null group by
user_src, virus order by totalnum desc)### union all ###(select
coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, virus,
count(*) as totalnum from $log-virus where $filter and (eventtype
is null or logver>=52) and nullifna(virus) is not null group by
user_src, virus order by totalnum desc)###) t where $filter-drill-
down 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 coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, appid, app, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as sessions from
$log where $filter and logid_to_int(logid) not in (4, 7, 14, 20)
and nullifna(app) is not null group by user_src, appid, app order
by sessions desc)### 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 coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, appid, app, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as sessions from
$log where $filter and logid_to_int(logid) not in (4, 7, 14, 20)
and nullifna(app) is not null group by user_src, appid, app order
by sessions desc)### 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,
```

```
sum(
  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 logid_to_int(logid) not in (4, 7, 14, 20)
group by
  dldn_user
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 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_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 logid_to_int(logid) not in (4, 7, 14, 20)
    and nullifna(app) is not null
group by
    app_group
having
    sum(
        coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
    )& gt; 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(
        coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
    ) as bandwidth
from
    $log
where
    $filter
    and logid_to_int(logid) not in (4, 7, 14, 20)
    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,
```

```
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 logid_to_int(logid) not in (4, 7, 14, 20)
group by
  user_src
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 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 logid_to_int(logid) not in (4, 7, 14, 20)
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,
  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 logid_to_int(logid) not in (4, 7, 14, 20)
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(
    cast(poluuid as text),
    cast(policyid as text)
  ) as polid,
  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 logid_to_int(logid) not in (4, 7, 14, 20)
group by
  polid
order by
  bandwidth desc
```

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

```
drop
  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(
    cast(
      sum(bandwidth)/ $days_num as decimal(18, 0)
    )
  ) as ave_bandwidth
from
  ###(select count(*) as sessions, sum(coalesce(sentbyte, 0)+-
  coalesce(rcvdbyte, 0)) as bandwidth from $log where $filter and
  logid_to_int(logid) not in (4, 7, 14, 20))### 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 ses-
  sions from $log where $filter and logid_to_int(logid) not in (4,
  7, 14, 20) 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 logid_to_
  int(logid) not in (4, 7, 14, 20) 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 logid_to_int(logid) not
  in (4, 7, 14, 20) 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(dis-
  tinct(dstip))) as totalnum from ###(select dstip, count(*) as
  count from $log where $filter and logid_to_int(logid) not in (4,
  7, 14, 20) and dstip is not null group by dstip order by count
  desc)### t ) as t4; select 'Total Sessions' as summary, total_ses-
  sions 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, act-
  ive_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_
bandwidth as stats from rpt_tmptbl_1
```

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 from $log where $filter and logid_to_int(logid) not in (4,
7, 14, 20) 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-Devices	Reputation number of incidents for all users devices	traffic

```
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 logid_to_
int(logid) not in (4, 7, 14, 20) 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 logid_to_int(logid) not in (4, 7, 14, 20)
    and crscore is not null
group by
    user_src
having
    sum(crscore % 65536)& gt; 0
order by
    scores desc
```

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

```
select
    devtype,
    coalesce(
        nullifna(`srcname`),
        nullifna(`srcmac`),
        ipstr(`srcip`)
    ) as dev_src,
    sum(crscore % 65536) as scores
from
    $log
where
    $filter
    and logid_to_int(logid) not in (4, 7, 14, 20)
    and crscore is not null
group by
    devtype,
    dev_src
having
    sum(crscore % 65536)& gt; 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 coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as f_user, sum(crscore%65536) as sum_rp_score from
$log where $pre_period $filter and logid_to_int(logid) not in (4,
7, 14, 20) and crscore is not null group by f_user having sum
(crscore%65536)>0 order by sum_rp_score desc)###; create temporary
table rpt_tmptbl_2 as ###(select coalesce(nullifna(`user`), nul-
lifna(`unauthuser`), ipstr(`srcip`)) as f_user, sum(crscore%65536)
as sum_rp_score from $log where $filter and logid_to_int(logid)
not in (4, 7, 14, 20) and crscore is not null group by f_user hav-
ing sum(crscore%65536)>0 order by sum_rp_score desc)###; 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;
drop
  table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_
1 as ###(select coalesce(nullifna(`srcname`),nullifna(`srcmac`),
ipstr(`srcip`)) as f_device, devtype, sum(crscore%65536) as sum_
rp_score from $log where $pre_period $filter and logid_to_int
(logid) not in (4, 7, 14, 20) and crscore is not null group by f_
device, devtype having sum(crscore%65536)>0 order by sum_rp_score
desc)###; create temporary table rpt_tmptbl_2 as ###(select
coalesce(nullifna(`srcname`),nullifna(`srcmac`), ipstr(`srcip`))
as f_device, devtype, sum(crscore%65536) as sum_rp_score from $log
where $filter and logid_to_int(logid) not in (4, 7, 14, 20) and
crscore is not null group by f_device, devtype having sum
(crscore%65536)>0 order by sum_rp_score desc)###; select t1.f_
device, t1.devtype , 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.dev-
type=t2.devtype where t2.sum_rp_score > t1.sum_rp_score group by
t1.f_device, t1.devtype order by delta desc
```

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

```
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
from
  ###(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 order
by severity_level, attack_count desc)### t group by attack,
attackid, severity, severity_level, cve order by severity_level,
attack_count desc
```

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

```
select
  attack,
  count(*) as attack_count
from
  $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	traffic

```
select
  srcip,
  hostname,
  sum(totalnum) as totalnum
from
  (
    ###(select srcip, hostname, count(*) as totalnum from $log-
traffic where $filter and logid_to_int(logid) not in (4, 7, 14,
20) and utmevent is not null and virus is not null group by srcip,
hostname order by totalnum desc)### union all ###(select srcip ,
ipstr(`dstip`) as hostname, count(*) as totalnum from $log-virus
where $filter and (eventtype is null or logver>=52) and nullifna
(virus) is not null group by srcip, hostname order by totalnum
desc)###) t group by srcip, 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
from
  ###(select $flex_timestamp as timestamp, count(*) as totalnum
from $log where $filter group by timestamp order by timestamp
desc)### 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 $log-traffic where $filter and logid_to_int(logid) not in (4,
7, 14, 20) and utmevent is not null and virus is not null group by
timestamp order by timestamp desc)### union all ###(select $flex_
timestamp as timestamp, count(*) as totalnum from $log-virus where
$filter and (eventtype is null or logver>=52) and nullifna(virus)
is not null group by timestamp order by timestamp desc)###) t
group by hodex order by hodex
```

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 order by totalnum desc)### 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 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 user_src, virus,
virusid_s order by totalnum desc)### 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,
  count(*) as totalnum
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and 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, count(*) as totalnum
from $log where $filter and virus like 'Riskware%' group by
timestamp order by timestamp desc)### t 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 order by totalnum desc)### 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 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 user_src, virus,
virusid_s order by totalnum desc)### 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,
  count(*) as totalnum
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and 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, count(*) as totalnum
from $log where $filter and virus like 'Adware%' group by
```

```
timestamp order by timestamp desc)### t 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
from
  ###(select $flex_timestamp as timestamp, sum(case when severity
= 'critical' then 1 else 0 end) as critical, sum(case when sever-
ity = 'high' then 1 else 0 end) as high, sum(case when severity =
'medium' then 1 else 0 end) as medium, sum(case when severity =
'notice' 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 order by timestamp desc)### 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
from
  ###(select $flex_timestamp as timestamp, sum(case when severity
= 'critical' then 1 else 0 end) as critical, sum(case when sever-
ity = 'high' then 1 else 0 end) as high, sum(case when severity =
'medium' then 1 else 0 end) as medium, sum(case when severity =
'notice' 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 order by timestamp desc)### 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 t1.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
from
  $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 dstip 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 vic-
tim 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 srcip 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 t1.severity = 'critical' then 'Critical' when t1.-
severity = 'high' then 'High' when t1.severity = 'medium' then
'Medium' when t1.severity = 'low' then 'Low' when t1.severity =
'info' then 'Info' end
  ) as severity_name,
  count(*) as totalnum,
  vuln_type,
  (
    case when t1.severity = 'critical' then 0 when t1.severity =
```

```
'high' then 1 when t1.severity = 'medium' then 2 when t1.severity
= 'low' then 3 when t1.severity = 'info' then 4 else 5 end
  ) as severity_number
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
  and action not in ('detected', 'pass_session')
group by
  attack,
  attackid,
  t1.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 t1.severity = 'critical' then 'Critical' when t1.-
severity = 'high' then 'High' when t1.severity = 'medium' then
'Medium' when t1.severity = 'low' then 'Low' when t1.severity =
'info' then 'Info' end
  ) as severity_name,
  count(*) as totalnum,
  vuln_type,
  (
    case when t1.severity = 'critical' then 0 when t1.severity =
```

```
'high' then 1 when t1.severity = 'medium' then 2 when t1.severity
= 'low' then 3 when t1.severity = 'info' then 4 else 5 end
  ) as severity_number
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
  and action in ('detected', 'pass_session')
group by
  attack,
  attackid,
  t1.severity,
  vuln_type
order by
  severity_number,
  totalnum desc
```

Dataset Name	Description	Log Category
Attacks-Over-HTTP-HTTPs	Threat attacks over HTTP HTTPs	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,
  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, count(*) as subtotal from
$log where $filter and apstatus is not null and apstatus!=0 and
bssid is not null and onwire='no' 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
order by subtotal desc)### t 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, count(*) as subtotal from
$log where $filter and apstatus is not null and apstatus!=0 and
bssid is not null and onwire='no' 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
order by subtotal desc)### t 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, count(*) as subtotal from
$log where $filter and apstatus is not null and apstatus!=0 and
bssid is not null and onwire='yes' 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
order by subtotal desc)### t 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
    from
      ###(select apstatus, bssid, ssid, count(*) as subtotal from
$log where $filter and apstatus is not null and apstatus!=0 and
bssid is not null and onwire='yes' 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
order by subtotal desc)### t 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(dtime)
) as first_seen,
from_dtime(
    max(dtime)
) as last_seen,
detectionmethod,
itime,
onwire as on_wire
from
  $log
where
  $filter
  and apstatus is not null
  and bssid is not null
  and onwire = 'no'
  and logid_to_int(logid) in (
    43521, 43563, 43564, 43565, 43566, 43569,
    43570, 43571
  )
group by
  ap_full_status,
  devid,
  vd,
  ssid,
  bssid,
  manuf,
  rssi,
  channel,
  radioband,
  detectionmethod,
  itime,
  onwire,
  apstatus
```

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(dtime)
  ) as first_seen,
  from_dtime(
    max(dtime)
  ) as last_seen,
  detectionmethod,
  itime,
  onwire as on_wire
from
  $log
where
  $filter
  and apstatus is not null
  and bssid is not null
  and onwire = 'yes'
  and logid_to_int(logid) in (
    43521, 43563, 43564, 43565, 43566, 43569,
    43570, 43571
  )
group by
  ap_full_status,
  devid,
  vd,
  ssid,
  bssid,
  manuf,
  rssi,
  channel,
  radioband,
  detectionmethod,
  itime,
```

```
onwire,
apstatus
```

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,
  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;
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(`un-
authuser`), ipstr(`srcip`)) as user_src, srcip, sum(coalesce(sent-
byte, 0)+coalesce(rcvdbyte, 0)) as volume from $log-traffic where
$filter-time and logid_to_int(logid) not in (4, 7, 14) 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, detec-
tionmethod, 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
from
  ###(select devid, vd, ssid, bssid, manuf, channel, radioband,
detectionmethod, snclosest, onwire, 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, apstatus order by
last_seen desc)### t where apstatus=2 and onwire='yes' group by
devid, vd, ssid, bssid, manuf, channel, radioband, detec-
tionmethod, snclosest order by last_seen desc
```

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

```
select
  '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
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=1 and onwire='no'
group by devid, vd, ssid, bssid, manuf, channel, radioband, detec-
tionmethod, snclosest order by last_seen desc
```

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

```
select
  '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
from
  ###(select devid, vd, ssid, bssid, manuf, channel, radioband,
detectionmethod, snclosest, onwire, 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, apstatus order by
last_seen desc)### t where apstatus=1 and onwire='yes' group by
devid, vd, ssid, bssid, manuf, channel, radioband, detec-
tionmethod, 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
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=3 and onwire='no'
```

```
group by devid, vd, ssid, bssid, manuf, channel, radioband, detec-
tionmethod, snclosest order by last_seen desc
```

Dataset Name	Description	Log Category
event-Wireless-Suppressed-Onwire	Event wireless suppressed on-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,
  'yes' as on_wire
from
  ###(select devid, vd, ssid, bssid, manuf, channel, radioband,
detectionmethod, snclosest, onwire, 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, apstatus order by
last_seen desc)### t where apstatus=3 and onwire='yes' group by
devid, vd, ssid, bssid, manuf, channel, radioband, detec-
tionmethod, 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, detec-
tionmethod, snclosest order by last_seen desc
```

Dataset Name	Description	Log Category
event-Wireless-Unclassified-Onwire	Event wireless unclassified on-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,
  'yes' as on_wire
from
  ###(select devid, vd, ssid, bssid, manuf, channel, radioband,
detectionmethod, snclosest, onwire, 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, apstatus order by
last_seen desc)### t where apstatus=0 and onwire='yes' group by
devid, vd, ssid, bssid, manuf, channel, radioband, detec-
tionmethod, snclosest order by last_seen desc
```

Dataset Name	Description	Log Category
default-Top-IPSEC-Vpn-Dial-Up-User-By-Bandwidth	Default top IPsec VPN dial up user by bandwidth usage	event

```
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,
      vd,
      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, nullifna(`xauthuser`) as xauthuser_
agg, nullifna(`user`) as user_agg, remip, tunnelid, 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 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, xauthuser_agg, user_agg, remip,
tunnelid order by tunnelid)### t group by devid, vd, remip, tun-
nelid) tt group by user_src having sum(bandwidth)>0 order by band-
width 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
from
  (
    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) end
      ) as bandwidth
    from
      ###(select devid, vd, remip, tunnelid, max(coalesce(sent-
byte, 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 $fil-
ter and subtype='vpn' and tunneltype like 'ssl%' and action in
('tunnel-stats', 'tunnel-down') and remip is not null and tunnelid
is not null group by devid, vd, remip, tunnelid order by tun-
nelid)### t 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 utmac-
tion!='blocked' then 1 else 0 end) as allowed_request, sum(case
when utmaction='blocked' then 1 else 0 end) as blocked_request
from $log-traffic where $filter and logid_to_int(logid) not in (4,
7, 14, 20) and utmevent in ('webfilter', 'banned-word', 'web-con-
tent', 'command-block', 'script-filter') group by timestamp order
by timestamp desc)### union all ###(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-webfilter where $filter and (event-
type is null or logver>=52) group by timestamp order by timestamp
desc)###) 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 logid_to_int
(logid) not in (4, 7, 14, 20) and $browse_time is not null group
by timestamp order by timestamp desc)### t group by hodex order by
hodex
```

Dataset Name	Description	Log Category
traffic-Browsing-Time-Summary-Enhanced	Traffic browsing time summary enhanced	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 logid_to_int
(logid) not in (4, 7, 14, 20) and $browse_time is not null group
by timestamp order by timestamp desc)### 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
  user_src,
```

```
     sum(requests) as requests
from
   (
      ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src,  count(*) as requests from $log-
traffic where $filter and logid_to_int(logid) not in (4, 7, 14,
20) and utmevent in ('webfilter', 'banned-word', 'web-content',
'command-block', 'script-filter') and coalesce(nullifna(`user`),
nullifna(`unauthuser`), ipstr(`srcip`)) is not null and utmac-
tion='blocked' group by user_src order by requests desc)### union
all ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_
src, count(*) as requests from $log-webfilter where $filter and
(eventtype is null or logver>=52) and coalesce(nullifna(`user`),
ipstr(`srcip`)) is not null and action='blocked' group by user_src
order by requests desc)###) t group by user_src order by requests
desc
```

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

```
select
  user_src,
  sum(requests) as requests
from
   (
      ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, count(*) as requests from $log-
traffic where $filter and logid_to_int(logid) not in (4, 7, 14,
20) and utmevent in ('webfilter', 'banned-word', 'web-content',
'command-block', 'script-filter') and coalesce(nullifna(`user`),
nullifna(`unauthuser`), ipstr(`srcip`)) is not null and utmac-
tion!='blocked' group by user_src order by requests desc)### union
all ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_
src, count(*) as requests from $log-webfilter where $filter and
(eventtype is null or logver>=52) and coalesce(nullifna(`user`),
ipstr(`srcip`)) is not null and action!='blocked' group by user_
src order by requests desc)###) t group by user_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 order by
ebtr_value(ebtr_agg_flat(browsetime), null, null) desc)### 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
from
  (
    ###(select hostname as domain, catdesc, count(*) as requests
from $log-traffic where $filter and logid_to_int(logid) not in (4,
7, 14, 20) and utmevent in ('webfilter', 'banned-word', 'web-con-
tent', 'command-block', 'script-filter') and hostname is not null
and utmaction='blocked' group by domain, catdesc order by requests
desc)### union all ###(select hostname as domain, catdesc, count
(*) as requests from $log-webfilter where $filter and (eventtype
is null or logver>=52) and hostname is not null and catdesc is not
null and action='blocked' group by domain, catdesc order by
```

```
requests desc)###) t 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
  domain,
  string_agg(distinct catdesc, ', ') as agg_catdesc,
  sum(requests) as requests
from
  (
    ###(select hostname as domain, catdesc, count(*) as requests
from $log-traffic where $filter and logid_to_int(logid) not in (4,
7, 14, 20) and utmevent in ('webfilter', 'banned-word', 'web-con-
tent', 'command-block', 'script-filter') and hostname is not null
and utmaction!='blocked' group by domain, catdesc order by
requests desc)### union all ###(select hostname as domain, cat-
desc, count(*) as requests from $log-webfilter where $filter and
(eventtype is null or logver>=52) and hostname is not null and cat-
desc is not null and action!='blocked' group by domain, catdesc
order by requests desc)###) t 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
from
  ###(select coalesce(nullifna(root_domain(hostname)), 'other') as
domain, sum(coalesce(sentbyte, 0)+coalesce(rcvdbyte, 0)) as band-
width, sum(coalesce(rcvdbyte, 0)) as traffic_in, sum(coalesce(sent-
byte, 0)) as traffic_out from $log-traffic where $filter and
logid_to_int(logid) not in (4, 7, 14, 20) and (countweb>0 or
((logver is null or logver<52) 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 order by bandwidth desc)### 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
from
  (
    ###(select catdesc, count(*) as requests from $log-traffic
where $filter and logid_to_int(logid) not in (4, 7, 14, 20) and
utmevent in ('webfilter', 'banned-word', 'web-content', 'command-
block', 'script-filter') and catdesc is not null and utmac-
tion='blocked' group by catdesc order by requests desc)### union
all ###(select catdesc, count(*) as requests from $log-webfilter
where $filter and (eventtype is null or logver>=52) and catdesc is
not null and action='blocked' group by catdesc order by requests
desc)###) t 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, count(*) as requests from $log-traffic
where $filter and logid_to_int(logid) not in (4, 7, 14, 20) and
utmevent in ('webfilter', 'banned-word', 'web-content', 'command-
block', 'script-filter') and catdesc is not null and utmac-
tion!='blocked' group by catdesc order by requests desc)### union
all ###(select catdesc, count(*) as requests from $log-webfilter
where $filter and (eventtype is null or logver>=52) and catdesc is
not null and action!='blocked' group by catdesc order by requests
desc)###) t 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,
    $timespan
  ) as browsetime,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out
from
  ###(select hostname, catdesc, ebtr_agg_flat(browsetime) as brow-
setime, sum(bandwidth) as bandwidth, sum(traffic_in) as traffic_
in, sum(traffic_out) as traffic_out from (select hostname, cat-
desc, ebtr_agg_flat($browse_time) as browsetime, sum(coalesce(sent-
byte, 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 logid_to_int(logid) not in
(4, 7, 14, 20) and hostname is not null and $browse_time is not
null group by hostname, catdesc) t group by hostname, catdesc
order by ebtr_value(ebtr_agg_flat(browsetime), null, null)
desc)### t group by hostname order by browsetime desc
```

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

```
from
  ###(select hostname, catdesc, ebtr_agg_flat(browsetime) as brow-
setime, sum(bandwidth) as bandwidth, sum(traffic_in) as traffic_
in, sum(traffic_out) as traffic_out from (select hostname, cat-
desc, ebtr_agg_flat($browse_time) as browsetime, sum(coalesce(sent-
byte, 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 logid_to_int(logid) not in
(4, 7, 14, 20) and hostname is not null and $browse_time is not
null group by hostname, catdesc) t group by hostname, catdesc
order by ebtr_value(ebtr_agg_flat(browsetime), null, null)
desc)### 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 logid_to_
int(logid) not in (4, 7, 14, 20) and catdesc is not null and
$browse_time is not null group by catdesc) t group by catdesc
order by ebtr_value(ebtr_agg_flat(browsetime), null, null)
desc)### t group by catdesc order by browsetime desc
```

Dataset Name	Description	Log Category
traffic-Top-10-Categories-By-Browsing-Time-Enhanced	Traffic top category by browsing time enhanced	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 logid_to_
int(logid) not in (4, 7, 14, 20) and catdesc is not null and
$browse_time is not null group by catdesc) t group by catdesc
order by ebtr_value(ebtr_agg_flat(browsetime), null, null)
desc)### 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,
    $timespan
  ) as browsetime,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out
from
  ###(select dstcountry, ebtr_agg_flat(browsetime) as browsetime,
sum(bandwidth) as bandwidth, sum(traffic_in) as traffic_in, sum
(traffic_out) as traffic_out from (select dstcountry, ebtr_agg_
flat($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 logid_to_int(logid) not in (4, 7, 14, 20) and
$browse_time is not null group by dstcountry) t group by dst-
country order by ebtr_value(ebtr_agg_flat(browsetime), null, null)
desc)### t group by dstcountry order by browsetime desc
```

Dataset Name	Description	Log Category
traffic-Top-Destination-Countries-By-Browsing-Time-Enhanced	Traffic top destination countries by browsing time enhanced	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 logid_to_int(logid) not in (4, 7, 14, 20) and
$browse_time is not null group by dstcountry) t group by dst-
country order by ebtr_value(ebtr_agg_flat(browsetime), null, null)
desc)### 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
from
  $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
  user_src,
  ebtr_value(
    ebtr_agg_flat(browsetime),
    null,
    $timespan
  ) as browsetime
from
  ###(select user_src, ebtr_agg_flat(browsetime) as browsetime
from (select coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, ebtr_agg_flat($browse_time) as brow-
setime from $log where $filter and logid_to_int(logid) not in (4,
7, 14, 20) and $browse_time is not null group by user_src) t group
by user_src order by ebtr_value(ebtr_agg_flat(browsetime), null,
null) desc)### t group by user_src order by browsetime desc
```

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

```
select
  user_src,
  ebtr_value(
    ebtr_agg_flat(browsetime),
    null,
    $timespan
  ) as browsetime
from
  ###(select user_src, ebtr_agg_flat(browsetime) as browsetime
from (select coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, ebtr_agg_flat($browse_time) as brow-
setime from $log where $filter and logid_to_int(logid) not in (4,
7, 14, 20) and $browse_time is not null group by user_src) t group
by user_src order by ebtr_value(ebtr_agg_flat(browsetime), null,
null) desc)### t group by user_src order by browsetime desc
```

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

```
select
  user_src,
  ebtr_value(
    ebtr_agg_flat(browsetime),
    null,
    $timespan
  ) as browsetime
from
  ###(select user_src, ebtr_agg_flat(browsetime) as browsetime
from (select coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, ebtr_agg_flat($browse_time) as brow-
setime from $log where $filter and logid_to_int(logid) not in (4,
7, 14, 20) and $browse_time is not null group by user_src) t group
by user_src order by ebtr_value(ebtr_agg_flat(browsetime), null,
null) desc)### t group by user_src order by browsetime desc
```

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

```
select
  user_src,
  ebtr_value(
    ebtr_agg_flat(browsetime),
    null,
    $timespan
  ) as browsetime
from
  ###(select user_src, ebtr_agg_flat(browsetime) as browsetime
from (select coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, ebtr_agg_flat($browse_time) as brow-
setime from $log where $filter and logid_to_int(logid) not in (4,
7, 14, 20) and $browse_time is not null group by user_src) t group
by user_src order by ebtr_value(ebtr_agg_flat(browsetime), null,
null) desc)### t group by user_src order by browsetime desc
```

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

```
select
  coalesce(ap, srcintf) as ap_srcintf,
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
```

```
) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and (
    srcssid is not null
    or dstssid is not null
  )
group by
  ap_srcintf
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 0
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, srcssid, osname,
osversion, devtype, srcmac, count(*) as subtotal from $log where
$filter and logid_to_int(logid) not in (4, 7, 14, 20) and (srcssid
is not null or dstssid is not null) and srcmac is not null group
by ap_srcintf, srcssid, osname, osversion, devtype, srcmac order
by subtotal desc)### 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(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
```

```
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and srcssid is not null
group by
  srcssid
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 0
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 srcintf, srcssid, osname, osversion, devtype, srcmac,
count(*) as subtotal from $log where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) and (srcssid is not null or dstssid
is not null) and srcmac is not null group by srcintf, srcssid,
osname, osversion, devtype, srcmac order by subtotal desc)### 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,
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
```

```
and (
    srcssid is not null
    or dstssid is not null
  )
  and nullifna(app) is not null
group by
  appid,
  app
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 0
order by
  bandwidth desc
```

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

```
select
  (
    coalesce(srcname, srcmac, 'unknown') || ' (' || coalesce(dev-
type, 'unknown') || ', ' || coalesce(osname, '') || (
      case when osversion is null then '' else ' ' || osversion
end
    ) || ')'
  ) as client,
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and (
    srcssid is not null
    or dstssid is not null
  )
group by
  client
having
  sum(
```

```
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 0
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(osversion, '')
  ) as os,
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and (
    srcssid is not null
    or dstssid is not null
  )
group by
  os
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 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 srcintf, srcssid, osname, osversion, devtype, srcmac,
count(*) as subtotal from $log where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) and (srcssid is not null or dstssid
is not null) and srcmac is not null group by srcintf, srcssid,
osname, osversion, devtype, srcmac order by subtotal desc)### t
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
  devtype,
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and (
    srcssid is not null
    or dstssid is not null
  )
  and devtype is not null
group by
  devtype
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 0
order by
  bandwidth desc
```

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

```
select
  devtype,
  count(distinct srcmac) as totalnum
from
  ###(select srcintf, srcssid, osname, osversion, devtype, srcmac,
```

```
count(*) as subtotal from $log where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) and (srcssid is not null or dstssid
is not null) and srcmac is not null group by srcintf, srcssid,
osname, osversion, devtype, srcmac order by subtotal desc)### t
where devtype is not null group by devtype order by totalnum desc
```

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

```
select
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and (
    srcssid is not null
    or dstssid is not null
  )
```

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

```
select
  count(distinct srcmac) as totalnum
from
  ###(select srcintf, srcssid, osname, osversion, devtype, srcmac,
count(*) as subtotal from $log where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) and (srcssid is not null or dstssid
is not null) and srcmac is not null group by srcintf, srcssid,
osname, osversion, devtype, srcmac order by subtotal desc)### 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 logid_to_int(logid) not in (4, 7, 14, 20)
group by
  subnet
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 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 logid_to_int(logid) not in (4, 7, 14, 20)
  and nullifna(app) is not null
group by
  subnet,
  app_group
```

```
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 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 logid_to_int(logid) not in (4, 7, 14, 20)
  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 logid_to_
int(logid) not in (4, 7, 14, 20) and (countweb>0 or ((logver is
null or logver<52) and (hostname is not null or utmevent in ('web-
filter', 'banned-word', 'web-content', 'command-block', 'script-
```

```
filter')))) group by subnet, website order by bandwidth desc)### t
group by subnet, website order by bandwidth desc
```

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

```
select
  subnet,
  website,
  sum(hits) as hits
from
  (
    ###(select ip_subnet(`srcip`) as subnet, hostname as website,
count(*) as hits from $log-traffic where $filter and hostname is
not null and logid_to_int(logid) not in (4, 7, 14, 20) and
utmevent in ('webfilter', 'banned-word', 'web-content', 'command-
block', 'script-filter') group by subnet, website order by hits
desc)### union all ###(select ip_subnet(`srcip`) as subnet, host-
name as website, count(*) as hits from $log-webfilter where $fil-
ter and hostname is not null and (eventtype is null or logver>=52)
group by subnet, website order by hits desc)###) t group by sub-
net, 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 logid_to_int(logid) not in (4, 7, 14, 20)
```

```
  and srcip is not null
group by
  subnet,
  user_src
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 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 logid_to_int(logid) not in (4, 7, 14, 20)
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 logid_to_int(logid) not in (4, 7, 14, 20)
group by
  appcat,
  app
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 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 logid_to_int(logid) not in (4, 7, 14, 20)
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,
  sum(
    coalesce(`sentbyte`, 0)+ coalesce(`rcvdbyte`, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and action in ('accept', 'close', 'timeout')
group by
  timestamp,
  user_src,
  appcat,
  app,
  destination
order by
  bandwidth desc
```

Dataset Name	Description	Log Category
app-Top-500-Blocked-Applications-by-Session	Top blocked applications by session	traffic

```
select
  coalesce(
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  appcat,
  app,
  count(*) as sessions
```

```
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  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 band-
width from $log-traffic where $filter and hostname is not null and
logid_to_int(logid) not in (4, 7, 14, 20) and (countweb>0 or
((logver is null or logver<52) 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, web-
site, status order by dtime desc
```

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

```
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-traffic where $filter and hostname is not null and logid_to_
int(logid) not in (4, 7, 14, 20) and utmevent in ('webfilter',
'banned-word', 'web-content', 'command-block', 'script-filter')
group by hod, website order by hod, hits desc)### union all ###
(select $hour_of_day as hod, (hostname || ' (' || coalesce(`cat-
desc`, 'Unknown') || ')') as website , count(*) as hits from $log-
webfilter where $filter and hostname is not null and (eventtype is
null or logver>=52) 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 logid_to_int(logid) not in
(4, 7, 14, 20) and (countweb>0 or ((logver is null or logver<52)
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 web-
site, catdesc order by bandwidth desc
```

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

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

```
(
    ###(select hostname as website, catdesc, count(*) as sessions
from $log-traffic where $filter and hostname is not null and
logid_to_int(logid) not in (4, 7, 14, 20) and utmevent in ('web-
filter', 'banned-word', 'web-content', 'command-block', 'script-
filter') group by website, catdesc order by sessions desc)###
union all ###(select hostname as website, catdesc, count(*) as ses-
sions from $log-webfilter where $filter and hostname is not null
and (eventtype is null or logver>=52) 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
from
  ###(select dtime, coalesce(nullifna(`user`), nullifna(`un-
authuser`), ipstr(`srcip`)) as user_src, hostname as website, cat-
desc, 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 logid_to_int(logid) not in (4, 7, 14, 20)
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 logid_to_int(logid) not in
(4, 7, 14, 20) and (countweb>0 or ((logver is null or logver<52)
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	traffic

```
select
    website,
    catdesc,
    sum(sessions) as sessions
from
    (
      ###(select hostname as website, catdesc, count(*) as sessions
from $log-traffic where $filter and hostname is not null and
logid_to_int(logid) not in (4, 7, 14, 20) and utmevent in ('web-
filter', 'banned-word', 'web-content', 'command-block', 'script-
filter') group by hostname, catdesc order by sessions desc)###
union all ###(select hostname as website, catdesc, count(*) as ses-
sions from $log-webfilter where $filter and hostname is not null
and (eventtype is null or logver>=52) group by hostname, catdesc
order by sessions desc)###) t group by website, catdesc order by
sessions desc
```

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

```
select
    clientfeature,
    count(*) as totalnum
from
    $log
```

```
where
  $filter
  and clientfeature is not null
group by
  clientfeature
order by
  totalnum desc
```

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

```
select
  os,
  count(distinct hostname) as totalnum
from
  ###(select hostname, os, fctver from $log where $filter group by
hostname, os, fctver)### t where os 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 hostname) as totalnum
from
  ###(select hostname, os, fctver from $log where $filter group by
hostname, os, fctver)### 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 hostname) as totalnum
from
  ###(select hostname, coalesce(nullifna(usingpolicy), 'No Pro-
file') as profile from $log where $filter group by hostname, pro-
file)### t group by profile order by totalnum desc
```

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

```
select
  hostname,
  deviceip,
  os,
  profile,
  hostuser,
  fctver
from
  ###(select hostname, deviceip, os, nullifna(usingpolicy) as pro-
file, nullifna(`user`) as hostuser, fctver from $log where $filter
and os is not null group by hostname, deviceip, os, profile, hos-
tuser, fctver)### t group by hostname, deviceip, os, profile, hos-
tuser, fctver
```

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, 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)### union all
###(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 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, 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 total-
num desc)### union all ###(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 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
  (
    ###(select threat, hostname, coalesce(nullifna(`user`),
'Unknown') as hostuser, utmaction from $log-fct-traffic where $fil-
ter and lower(utmevent) in ('antivirus', 'antimalware') group by
threat, hostname, hostuser, utmaction order by threat)### union
all ###(select virus as threat, hostname, coalesce(nullifna
(`user`), 'Unknown') as hostuser, action as utmaction from $log-
fct-event where $filter and virus is not null group by threat,
hostname, hostuser, utmaction order by threat)###) 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
  remotename,
  hostname,
  coalesce(
    nullifna(`user`),
    'Unknown'
  ) as hostuser,
  utmaction,
  count(*) as totalnum
from
  $log
where
  $filter
  and lower(utmevent)= 'webfilter'
  and utmaction = 'blocked'
group by
  remotename,
  hostname,
  hostuser,
  utmaction
order by
  totalnum desc
```

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

```
select
  threat,
  hostname,
  hostuser,
  utmaction
from
  ###(select threat, hostname, coalesce(nullifna(`user`),
'Unknown') as hostuser, utmaction from $log where $filter and
lower(utmevent)='appfirewall' and utmaction='blocked' group by
threat, hostname, hostuser, utmaction)### 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,
  coalesce(
    nullifna(`user`),
    'Unknown'
  ) as hostuser
from
  $log
where
  $filter
  and level in ('error', 'alert')
group by
  msg,
  hostname,
  hostuser
```

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,
  count(distinct vulnname) as totalnum
from
  ###(select vulnseverity, vulnname from $log where $filter and
nullifna(vulnseverity) is not null and nullifna(vulnname) is not
null group by vulnseverity, vulnname)### t group by vulnseverity
order by totalnum 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 nul-
lifna(vulncat) is not null and nullifna(vulnname) is not null
group by vulncat, vulnname)### t group by vulncat order by total-
num 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, vul-
nname)### 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 vulnsever-
ity = '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 and nullifna(devid) is not null group by vulnseverity,
vulnname, devid)### t 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 vulnsever-
ity = '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 and nullifna(devid) is not null group by vulnseverity,
vulnname, devid)### t 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.vul-
nid=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 style=word-break:normal>' || 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, ',') || '>Re-
mediation 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, vul-
nid)### 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 style=word-break:normal>' || 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, vul-
nname, 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/><br/>' || 'Description<br/><div
style=word-break:normal>' || description || '</div><br/><br/>' ||
'Affected Products<br/>' || products || '<br/><br/>' ||
'Impact<br/>' || impact || '<br/><br/>' || 'Recommended Action-
s<br/>' || vendor_link || '<br/><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.vul-
nid=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
os-Detect-OS-Count	Detected operation system count	traffic

```
select
  (
    coalesce(osname, 'Unknown')
  ) as os,
  count(*) as totalnum
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
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
from
  ###(select appid, app, coalesce(nullifna(`user`), nullifna(`un-
authuser`), 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 logid_to_int(logid) not in (4, 7, 14, 20) 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,
  app,
  sum(sessions) as sessions
from
  ###(select appid, app, coalesce(nullifna(`user`), nullifna(`un-
authuser`), 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 logid_to_int(logid) not in (4, 7, 14, 20) 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(`un-
authuser`), 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 logid_to_int(logid) not in (4, 7, 14, 20) 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(`un-
authuser`), 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 logid_to_int(logid) not in (4, 7, 14, 20) 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(`un-
authuser`), 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 logid_to_int(logid) not in (4, 7, 14, 20) 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(`un-
authuser`), 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 logid_to_int(logid) not in (4, 7, 14, 20) 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(`un-
authuser`), 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 logid_to_int(logid) not in (4, 7, 14, 20) 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(`un-
authuser`), 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 logid_to_int(logid) not in (4, 7, 14, 20) 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(`un-
authuser`), 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 logid_to_int(logid) not in (4, 7, 14, 20) 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(`un-
authuser`), 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 logid_to_int(logid) not in (4, 7, 14, 20) 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 logid_to_int(logid) not
in (4, 7, 14, 20) 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>=52) and host-
name 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 logid_to_int(logid) not
in (4, 7, 14, 20) 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>=52) and host-
name 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-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 logid_to_int(logid) not
in (4, 7, 14, 20) 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>=52) and host-
name 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 logid_to_int(logid) not
in (4, 7, 14, 20) 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>=52) 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 logid_to_int(logid) not
in (4, 7, 14, 20) 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(band-
width)>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 logid_to_int(logid) not
in (4, 7, 14, 20) 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 logid_to_int(logid) not
in (4, 7, 14, 20) 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 logid_to_int(logid) not
in (4, 7, 14, 20) 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 logid_to_int(logid) not in (4,
7, 14, 20) 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 band-
width 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 hav-
ing 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 logid_to_int(logid) not in (4,
7, 14, 20) 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 band-
width 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 logid_to_int(logid) not in (4,
7, 14, 20) 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 band-
width 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
  sender,
  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 logid_to_int(logid) not in (4,
7, 14, 20) 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 band-
width 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
  dstip,
  sum(totalnum) as totalnum
from
  ###(select srcip, dstip, count(*) as totalnum from $log where
$filter-exclude-var group by srcip, dstip order by totalnum
desc)### t where $filter-drilldown and dstip is not null group by
dstip order by totalnum desc
```

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

```
select
  srcip,
  sum(totalnum) as totalnum
from
  ###(select srcip, dstip, count(*) as totalnum from $log where
$filter-exclude-var group by srcip, dstip order by totalnum
desc)### t where $filter-drilldown and srcip is not null group by
srcip 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,
  srcip,
  dstip
from
  ###(select itime, attack, srcip, dstip 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, '' as virusid_s, count(*) as totalnum from
$log-traffic where $filter and logid_to_int(logid) not in (4, 7,
14, 20) and utmevent is not null and virus is not null group by
virus, virusid_s order by totalnum desc)### union all ###(select
```

```
virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*)
as totalnum from $log-virus where $filter and (eventtype is null
or logver>=52) and nullifna(virus) is not null group by virus, vir-
usid_s order by totalnum desc)###) t group by virus, malware_type
order by totalnum desc
```

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

```
select
  from_itime(itime) as timestamp,
  virus,
  user_src,
  dstip,
  hostname,
  recipient
from
  (
    ###(select itime, virus, coalesce(nullifna(`user`), nullifna
(`unauthuser`), ipstr(`srcip`)) as user_src, dstip, hostname,
recipient from $log-traffic where $filter and logid_to_int(logid)
not in (4, 7, 14, 20) and utmevent is not null and virus is not
null order by itime desc)### union all ###(select itime, virus,
coalesce(nullifna(`user`), ipstr(`srcip`)) as user_src, dstip,
cast(' ' as char) as hostname, cast(' ' as char) as recipient from
$log-virus where $filter and (eventtype is null or logver>=52) and
nullifna(virus) is not null order by itime desc)###) t where $fil-
ter-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 user_
src, hostname, action, count(*) as requests from $log where $fil-
ter and hostname is not null group by user_src, hostname, action
order by requests desc)### t where $filter-drilldown and action-
='blocked' 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,
  sum(requests) as requests
from
  ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_
src, hostname, action, count(*) as requests from $log where $fil-
ter and hostname is not null group by user_src, hostname, action
order by requests desc)### t where $filter-drilldown and action!-
='blocked' 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 $fil-
ter-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 $fil-
ter-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 total-
num 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
  ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_
src, `to` as receiver, count(*) as totalnum from $log where $fil-
ter 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
  hourstamp,
  sum(totalnum) as totalnum
from
  ###(select coalesce(nullifna(`user`), ipstr(`srcip`)) as user_
src, $hour_of_day as hourstamp, count(*) as totalnum from $log
where $filter and `to` is not null and action in ('detected',
'blocked') group by user_src, hourstamp order by hourstamp)### t
where $filter-drilldown 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 coalesce(nullifna(`user`), ipstr(`srcip`)) as user_
src, `from` as mf_sender, count(*) as totalnum from $log where
$filter and `from` is not null and action in ('detected',
'blocked') group by user_src, mf_sender order by totalnum desc)###
t where $filter-drilldown group by mf_sender order by totalnum
desc
```

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

```
select
  hourstamp,
  cast(
    sum(cpu_usage)/ sum(num) as decimal(6, 2)
  ) as cpu_avg_usage
from
  ###(select $hour_of_day as hourstamp, sum(cpu) as cpu_usage,
count(*) as num from $log where $filter and subtype='system' and
action='perf-stats' group by hourstamp)### t group by hourstamp
order by hourstamp
```

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

```
select
  hourstamp,
  cast(
    sum(mem_usage)/ sum(num) as decimal(6, 2)
  ) as mem_avg_usage
from
  ###(select $hour_of_day as hourstamp, sum(mem) as mem_usage,
count(*) as num from $log where $filter and subtype='system' and
action='perf-stats' group by hourstamp)### t group by hourstamp
order by hourstamp
```

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

```
select
  hourstamp,
  cast(
    sum(sess_usage)/ sum(num) as decimal(10, 2)
```

```
  ) as sess_avg_usage
from
  ###(select $hour_of_day as hourstamp, sum(totalsession) as sess_
usage, count(*) as num from $log where $filter and sub-
type='system' and action='perf-stats' group by hourstamp)### t
group by hourstamp order by hourstamp
```

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

```
select
  hourstamp,
  cast(
    sum(sess_usage)/ sum(num) as decimal(10, 2)
  ) as sess_avg_usage,
  cast(
    sum(cpu_usage)/ sum(num) as decimal(6, 2)
  ) as cpu_avg_usage
from
  ###(select $hour_of_day as hourstamp, sum(cpu) as cpu_usage, sum
(totalsession) as sess_usage, count(*) as num from $log where $fil-
ter and subtype='system' and action='perf-stats' group by
hourstamp)### 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,
  sum(
    coalesce(rcvdbyte, 0)
  ) as traffic_in,
  sum(
    coalesce(sentbyte, 0)
```

```
  ) as traffic_out
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and srcip is not null
group by
  user_src,
  srcip
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 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 logid_to_int(logid) not in (4, 7, 14, 20)
  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 logid_to_int(logid) not in (4, 7, 14, 20)
  and crscore is not null
group by
  user_src
having
  sum(crscore % 65536)&gt; 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
  devtype,
  coalesce(
    nullifna(`srcname`),
    nullifna(`srcmac`),
    ipstr(`srcip`)
  ) as dev_src,
  sum(crscore % 65536) as scores
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and crscore is not null
```

```
group by
  devtype,
  dev_src
having
  sum(crscore % 65536)& gt; 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(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  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(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  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 logid_to_int
(logid) not in (4, 7, 14, 20) and (countweb>0 or ((logver is null
or logver<52) and (hostname is not null or utmevent in ('web-
filter', 'banned-word', 'web-content', 'command-block', 'script-
filter')))) and catdesc is not null group by catdesc order by band-
width desc)### t group by catdesc order by bandwidth desc
```

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

```
select
  app_group_name(app) as app_group,
  appcat,
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth,
  count(*) as num_session
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and nullifna(app) is not null
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_name(app) as app_group,
  service,
  count(*) as sessions,
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and nullifna(app) is not null
  and service in (
    '80/tcp', '443/tcp', 'HTTP', 'HTTPS',
    'http', 'https'
  )
group by
  app_group,
  service
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 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 logid_to_int(logid) not in (4, 7, 14, 20) and (coun-
tweb>0 or ((logver is null or logver<52) and (hostname is not null
or utmevent in ('webfilter', 'banned-word', 'web-content', 'com-
mand-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
```

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 logid_to_int(logid) not in (4, 7, 14, 20) and (coun-
tweb>0 or ((logver is null or logver<52) and (hostname is not null
or utmevent in ('webfilter', 'banned-word', 'web-content', 'com-
mand-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
```

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

```
select
  domain,
  catdesc,
  sum(visits) as visits
from
  (
    ###(select coalesce(nullifna(hostname), ipstr(`dstip`)) as
domain, catdesc, count(*) as visits from $log-traffic where $fil-
ter and logid_to_int(logid) not in (4, 7, 14, 20) and utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block',
'script-filter') and catdesc is not null group by domain, catdesc
order by visits desc)### union all ###(select coalesce(nullifna
(hostname), ipstr(`dstip`)) as domain, catdesc, count(*) as visits
```

```
from $log-webfilter where $filter and (eventtype is null or
logver>=52) 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 logid_to_int(logid) not in (4, 7, 14, 20) and
$browse_time is not null group by dstcountry) t group by dst-
country order by ebtr_value(ebtr_agg_flat(browsetime), null, null)
desc)### t group by dstcountry order by browsetime desc
```

Dataset Name	Description	Log Category
Top-Destination-Countries-By-Browsing-Time-Enhanced	Traffic top destination countries by browsing time enhanced	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 logid_to_int(logid) not in (4, 7, 14, 20) and
$browse_time is not null group by dstcountry) t group by dst-
country order by ebtr_value(ebtr_agg_flat(browsetime), null, null)
desc)### 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 logid_to_int(logid) not in (4, 7, 14, 20) and
hostname is not null and $browse_time is not null group by host-
name) t group by hostname order by ebtr_value(ebtr_agg_flat(brow-
setime), null, null) desc)### t group by hostname order by
browsetime desc
```

Dataset Name	Description	Log Category
App-Risk-Traffic-Top-Hostnames-By-Browsing-Time-Enhanced	Traffic top domains by browsing time enhanced	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 logid_to_int(logid) not in (4, 7, 14, 20) and
hostname is not null and $browse_time is not null group by host-
name) t group by hostname order by ebtr_value(ebtr_agg_flat(brow-
setime), null, null) desc)### 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,
  count(*) as totalnum
from
  $log
where
  $filter
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,
  count(*) as totalnum
from
  $log
where
  $filter
  and severity = 'critical'
  and nullifna(attack) is not null
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,
  count(*) as totalnum
from
  $log
where
  $filter
  and severity = 'high'
  and nullifna(attack) is not null
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,
  count(*) as totalnum
from
  $log
where
  $filter
  and severity = 'medium'
  and nullifna(attack) is not null
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,
  count(*) as totalnum
from
  $log
where
  $filter
  and severity = 'low'
  and nullifna(attack) is not null
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,
  count(*) as totalnum
from
  $log
where
  $filter
  and severity = 'info'
  and nullifna(attack) is not null
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, '' as virusid_s, count(*) as totalnum from
$log-traffic where $filter and logid_to_int(logid) not in (4, 7,
```

```
14, 20) and utmevent is not null and virus is not null group by
virus, virusid_s order by totalnum desc)### union all ###(select
virus, virusid_to_str(virusid, eventtype) as virusid_s, count(*)
as totalnum from $log-virus where $filter and (eventtype is null
or logver>=52) and nullifna(virus) is not null group by virus, vir-
usid_s order by totalnum desc)###) t group by virus, malware_type
order by totalnum desc
```

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

```
select
  user_src,
  sum(totalnum) as totalnum
from
  (
    ###(select coalesce(nullifna(`user`), nullifna(`unauthuser`),
ipstr(`srcip`)) as user_src, count(*) as totalnum from $log-
traffic where $filter and logid_to_int(logid) not in (4, 7, 14,
20) and utmevent is not null and virus is not null group by user_
src order by totalnum desc)### union all ###(select coalesce(nul-
lifna(`user`), ipstr(`srcip`)) as user_src, count(*) as totalnum
from $log-virus where $filter and (eventtype is null or logver>-
>=52) and nullifna(virus) is not null group by user_src order by
totalnum desc)###) t 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	traffic

```
select
  utmsubtype,
  sum(number) as number
from
  (
    ###(select utmsubtype, count(*) as number from $log-traffic
where $filter and logid_to_int(logid) not in (4, 7, 14, 20) and
utmevent='dlp' and utmsubtype is not null group by utmsubtype
order by number desc)### union all ###(select subtype::text as utm-
subtype, count(*) as number from $log-dlp where $filter and sub-
type is not null group by subtype order by number desc)###) t
group by utmsubtype 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
  $log
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	traffic

```
select
  dom,
  sum(totalnum) as totalnum
from
  (
    ###(select $DAY_OF_MONTH as dom, count(*) as totalnum from
$log-traffic where $filter and logid_to_int(logid) not in (4, 7,
14, 20) and utmevent is not null and virus is not null group by
dom order by totalnum desc)### union all ###(select $DAY_OF_MONTH
as dom, count(*) as totalnum from $log-virus where $filter and nul-
lifna(virus) is not null and (eventtype is null or logver>=52)
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 logid_to_int(logid) not in (4, 7, 14, 20)
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 logid_to_int(logid) not in (4, 7, 14, 20)
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
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  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 appcat, app from $log where $filter and app is not
null and appcat is not null and logid_to_int(logid) not in (4, 7,
14, 20) and apprisk in ('critical', 'high') group by appcat,
app)### t 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 from $log-app-ctrl where $filter and lower
(appcat)='botnet' group by app)### union all ###(select cast('Mal-
ware & Botnet C&C' as char(32)) as threat_name, virus as threats
from $log-virus where $filter and nullifna(virus) is not null
group by virus)### union all ###(select cast('Malicious & Phishing
Sites' as char(32)) as threat_name, hostname as threats from $log-
webfilter where $filter and cat in (26, 61) group by hostname)###
union all ###(select cast('Critical & High Intrusion Attacks' as
char(32)) as threat_name, attack as total_num from $log-attack
where $filter and severity in ('critical', 'high') group by
attack)###) 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 dstip) as victims,
  count(distinct srcip) as sources,
  sum(totalnum) as totalnum
from
  ###(select attack, attackid, vuln_type, t2.cve, (case when t1.-
severity='critical' then 5 when t1.severity='high' then 4 when t1.-
severity='medium' then 3 when t1.severity='low' then 2 when
t1.severity='info' then 1 else 0 end) as severity_number, dstip,
srcip, count(*) as totalnum from $log t1 left join (select name,
cve, vuln_type from ips_mdata) t2 on t1.attack=t2.name where $fil-
ter and nullifna(attack) is not null and t1.severity is not null
group by attack, attackid, vuln_type, t2.cve, t1.severity, dstip,
srcip )### t group by attack, attackid, vuln_type, severity_num-
ber, 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 appcat, app from $log where $filter and app is not
null and appcat is not null and logid_to_int(logid) not in (4, 7,
14, 20) and apprisk in ('critical', 'high') group by appcat,
app)### t 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`), nul-
lifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce
(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as ses-
sions from $log where $filter and logid_to_int(logid) not in (4,
7, 14, 20) 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,
```

```
round(
  sum(total_num)* 100 / sum(
    sum(total_num)
  ) over (),
  2
) 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-con-
suming' when lower(appcat)='p2p' then 'peer-to-peer' when lower
(appcat)='proxy' then 'proxy' end) as behavior, count(*) as total_
num from $log where $filter and lower(appcat) in ('botnet',
'remote.access', 'storage.backup', 'video/audio', 'p2p', 'proxy')
and logid_to_int(logid) not in (4, 7, 14, 20) and apprisk in
('critical', 'high') group by appcat)### t 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(`un-
authuser`), ipstr(`srcip`)) as user_src, sum(coalesce(sentbyte,
0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as sessions from
$log where $filter and logid_to_int(logid) not in (4, 7, 14, 20)
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, tech-
nology, 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(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  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 f_user) as user_num,
  sum(bandwidth) as bandwidth,
  sum(num_session) as num_session
from
  ###(select appcat, app, coalesce(nullifna(`user`), nullifna(`un-
authuser`), ipstr(`srcip`)) as f_user, sum(coalesce(sentbyte, 0)+-
coalesce(rcvdbyte, 0)) as bandwidth, count(*) as num_session from
$log where $filter and logid_to_int(logid) not in (4, 7, 14, 20)
and nullifna(appcat) is not null group by appcat, app, f_user)###
t 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
  d_risk,
  id,
  name,
```

```
technology,
  count(distinct f_user) as user_num,
  sum(bandwidth) as bandwidth,
  sum(num_session) as num_session
from
  ###(select risk as d_risk, t2.id, t2.name, t2.technology,
coalesce(nullifna(t1.`user`), nullifna(t1.`unauthuser`), ipstr
(t1.`srcip`)) as f_user, sum(coalesce(sentbyte, 0)+coalesce(rcvd-
byte, 0)) as bandwidth, count(*) as num_session from $log t1 inner
join app_mdata t2 on t1.appid=t2.id where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) and nullifna(app) is not null and
service in ('80/tcp', '443/tcp', 'HTTP', 'HTTPS', 'http', 'https')
group by risk, t2.id, t2.name, t2.technology, f_user)### t 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(`un-
authuser`), 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 logid_to_
int(logid) not in (4, 7, 14, 20) and (countweb>0 or ((logver is
null or logver<52) and (hostname is not null or utmevent in ('web-
filter', '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
```

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 logid_
to_int(logid) not in (4, 7, 14, 20) 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 logid_to_int(logid)
not in (4, 7, 14, 20) and virus is not null 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 logid_to_int(logid) not in (4, 7, 14, 20) and virus
like '%PossibleThreat.SB%' group by virus_s, dstip, srcip, appid,
app )### 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 dstip) as victims,
  count(distinct srcip) as source
from
  ###(select filename, analyticscksum, dstip, srcip from $log
where $filter and filename is not null and logid_to_int(logid)-
)=9233 and analyticscksum is not null group by filename, ana-
lyticscksum, srcip, dstip)### 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
from
  $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
  srcname as caller,
  count(*) as totalnum
from
  $log
where
  $filter
  and lower(appcat)= 'voip'
  and app = 'sccp'
  and action = 'block'
  and srcname is not null
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
  srcname as caller,
  count(*) as totalnum
```

```
from
  $log
where
  $filter
  and srcname is not null
  and lower(appcat)= 'voip'
  and app = 'sip'
  and action = 'block'
group by
  caller
order by
  totalnum 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`), nul-
lifna(t1.`unauthuser`), ipstr(t1.`srcip`)) as f_user, t2.name,
t2.app_cat, t2.technology, sum(coalesce(sentbyte, 0)+coalesce(rcvd-
byte, 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 logid_to_int(logid) not in (4, 7, 14, 20) 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 logid_to_int(logid)
not in (4, 7, 14, 20) 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(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  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 f_user) as user_num,
  sum(bandwidth) as bandwidth,
  sum(num_session) as num_session
from
  ###(select appcat, app, coalesce(nullifna(`user`), nullifna(`un-
authuser`), ipstr(`srcip`)) as f_user, sum(coalesce(sentbyte, 0)+-
coalesce(rcvdbyte, 0)) as bandwidth, count(*) as num_session from
$log where $filter and logid_to_int(logid) not in (4, 7, 14, 20)
```

```
and nullifna(appcat) is not null group by appcat, app, f_user)###
t 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
  d_risk,
  name,
  app_cat,
  technology,
  count(distinct f_user) as users,
  sum(bandwidth) as bandwidth,
  sum(num_session) as sessions
from
  ###(select risk as d_risk, t2.app_cat, t2.name, t2.technology,
coalesce(nullifna(t1.`user`), nullifna(t1.`unauthuser`), ipstr
(t1.`srcip`)) as f_user, sum(coalesce(sentbyte, 0)+coalesce(rcvd-
byte, 0)) as bandwidth, count(*) as num_session from $log t1 inner
join app_mdata t2 on t1.appid=t2.id where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) and nullifna(app) is not null and
service in ('80/tcp', '443/tcp', 'HTTP', 'HTTPS', 'http', 'https')
group by risk, t2.app_cat, t2.name, t2.technology, f_user)### t
group by d_risk, name, app_cat, technology order by 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(`un-
authuser`), 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 logid_to_
int(logid) not in (4, 7, 14, 20) and (countweb>0 or ((logver is
null or logver<52) 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
```

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 logid_to_int(logid)
not in (4, 7, 14, 20) 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 $fil-
ter and logid_to_int(logid) not in (4, 7, 14, 20) and virus is not
null group by virus_s, appcat, dstip, srcip order by total_num
desc)###) t group by virus, malware_type order by total_num desc
```

Dataset Name	Description	Log Category
security-Top10-Malware-Virus-Spyware	Malware: viruses, Spyware/Adware	virus

```
select
  virus,
  max(virusid_s) as virusid,
  malware_type,
  count(distinct dstip) as victims,
  count(distinct srcip) as source,
  sum(total_num) as total_num
```

```
from
  ###(select virus, virusid_to_str(virusid, eventtype) as virusid_
s, srcip, dstip, (case when virus like 'Riskware%' then 'Spyware'
when virus like 'Adware%' then 'Adware' else 'Virus' end)  as mal-
ware_type, count(*) as total_num from $log where $filter and nul-
lifna(virus) is not null group by virus, virusid_s, srcip, dstip
order by total_num desc)### t group by virus, malware_type order
by total_num desc
```

Dataset Name	Description	Log Category
security-Top10-Malware-Botnet	Malware: Botnet	appctrl

```
select
  app,
  appid,
  malware_type,
  count(distinct dstip) as victims,
  count(distinct srcip) as source,
  sum(total_num) as total_num
from
  ###(select app, appid, cast('Botnet C&C' as char(32)) as mal-
ware_type, srcip, dstip, count(*) as total_num from $log where
$filter and lower(appcat)='botnet' and nullifna(app) is not null
group by app, appid, malware_type, srcip, dstip order by total_num
desc)### t group by app, appid, malware_type order by total_num
desc
```

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
from
  $log
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,
    (
        lower(service) || '://' || hostname || url
    ) 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
```

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
from
   ###(select (lower(service) || '://' || hostname || url) as phish-
ing_site, dstip, srcip, count(*) as total from $log where $filter
and lower(service) in ('http', 'https') and hostname is not null
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 dstip) as victims,
   count(distinct srcip) as sources,
   sum(totalnum) as totalnum
from
   ###(select attack, attackid, vuln_type, t2.cve, (case when t1.-
severity='critical' then 5 when t1.severity='high' then 4 when t1.-
severity='medium' then 3 when t1.severity='low' then 2 when
t1.severity='info' then 1 else 0 end) as severity_number, dstip,
srcip, count(*) as totalnum from $log t1 left join (select name,
cve, vuln_type from ips_mdata) t2 on t1.attack=t2.name where $fil-
ter and nullifna(attack) is not null and t1.severity is not null
group by attack, attackid, vuln_type, t2.cve, t1.severity, dstip,
srcip )### t group by attack, attackid, vuln_type, severity_num-
ber, 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
logid_to_int(logid) not in (4, 7, 14, 20) and virus like '%Poss-
ibleThreat.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
   $log
where
   $filter
   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,
  service
from
  $log
where
  $filter
  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 & gt;= '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 clientfeature = '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
clientfeature='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
  $hour_of_day as hourstamp,
  count(*) as totalnum
from
  $log
where
  $filter
  and 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
  $hour_of_day as hourstamp,
  sum(duration) as sccp_usage
from
  $log
where
  $filter
```

```
and 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(*) as totalnum
from
  $log
where
  $filter
  and 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
  $hour_of_day as hourstamp,
  count(*) as totalnum
from
  $log
where
  $filter
  and 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(*) as totalnum
from
  $log
where
  $filter
  and 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 & lt; 60 then 'LESS_ONE_MIN' when duration
& lt; 600 then 'LESS_TEN_MIN' when duration & lt; 3600 then 'LESS_
ONE_HOUR' when duration & gt;= 3600 then 'MORE_ONE_HOUR' else
'unknown' end
  ) 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,
  coalesce(
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  count(*) as events
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and appcat = 'Botnet'
  and nullifna(app) is not null
group by
  app,
  user_src
order by
  events desc
```

Dataset Name	Description	Log Category
Botnet-Infected-Hosts	Botnet infected hosts	traffic

```
select
  coalesce(
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  devtype,
  coalesce(srcname, srcmac) as host_mac,
  count(*) as events
from
  $log
where
```

```
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and appcat = 'Botnet'
group by
  user_src,
  devtype,
  host_mac
order by
  events desc
```

Dataset Name	Description	Log Category
Detected-Botnet	Detected botnet	traffic

```
select
  app,
  count(*) as events
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and appcat = 'Botnet'
  and nullifna(app) is not null
group by
  app
order by
  events desc
```

Dataset Name	Description	Log Category
Botnet-Sources	Botnet sources	traffic

```
select
  dstip,
  root_domain(hostname) as domain,
  count(*) as events
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and appcat = 'Botnet'
  and dstip is not null
```

```
group by
  dstip,
  domain
order by
  events desc
```

Dataset Name	Description	Log Category
Botnet-Victims	Botnet victims	traffic

```
select
  coalesce(
    nullifna(`user`),
    nullifna(`unauthuser`),
    ipstr(`srcip`)
  ) as user_src,
  count(*) as events
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and appcat = 'Botnet'
  and srcip is not null
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 where $filter and logid_to_int(logid) not in (4, 7, 14,
20) 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)###) 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 logid_to_int(logid) not in (4, 7, 14,
20) 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 logid_to_int(logid) not in (4, 7, 14, 20)
  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 & gt; 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 sub-
type='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
      from
        ###(select ftnt_pci_id, t2.severity, (case when res-
ult='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)### 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(sever-
ity) 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
      from
        ###(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 $fil-
ter and subtype='compliance-check' group by ftnt_pci_id, t2.-
severity, result, reason)### 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 sub-
type='compliance-check' and result in ('fail','pass') group by res-
ult, 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
    from
    ###(select status, reason from $log where $filter and sub-
type='compliance-check' and result='fail' group by status,
reason)### t 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 from $log where $filter and sub-
type='compliance-check' and result='pass' group by status,
reason)### t 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)& gt; 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 sub-
type='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,
  msg,
  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,
  `from` as sender,
  `to` as receiver,
  regexp_replace(filename, '.*/', '') as filename,
  filesize,
  profile,
  action,
  direction
from
  $log
where
  $filter
  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'
    )
  )
order by
  timestamp desc
```

Dataset Name	Description	Log Category
Email-DLP-Chart	Email DLP Activity Summary	dlp

```
select
  profile,
  count(*) as total_num
from
  $log
where
  $filter
  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'
   )
  )
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
  $log
where
  $filter
  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
from
  $log
where
  $filter
```

```
  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
  $log
where
  $filter
  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
  $log
where
  $filter
  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,
    $timespan
  ) as browsetime
from
  ###(select user_src, domain, ebtr_agg_flat(browsetime) as brow-
setime from (select coalesce(nullifna(`user`), ipstr(`srcip`)) as
user_src, coalesce(nullifna(hostname), ipstr(`dstip`)) as domain,
ebtr_agg_flat($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 brow-
setime 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 logid_to_int(logid) not in (4, 7, 14, 20)
  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 logid_to_int(logid) not in (4, 7, 14, 20)
  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 from $log where $filter and logid_to_int(logid) not
in (4, 7, 14, 20) 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.s-
rcintf=t2.dstintf group by dom, devid, vd, intf) t where $filter-
drilldown group by dom order by dom
```

Dataset Name	Description	Log Category
ctap-SB-Files-Needing-Inspection-vs-Others	Files Needing Inspection vs Others	virus

```
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
from
  $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
  srcip,
  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
  srcip
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`), nul-
lifna(`unauthuser`), ipstr(`srcip`)) as user_src, sum(coalesce
(sentbyte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, count(*) as ses-
sions from $log where $filter and logid_to_int(logid) not in (4,
7, 14, 20) 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(distinct dstip) as victims,
  count(distinct srcip) as sources,
  sum(totalnum) as totalnum
from
  ###(select attack, attackid, vuln_type, t2.cve, (case when t1.-
severity='critical' then 5 when t1.severity='high' then 4 when t1.-
severity='medium' then 3 when t1.severity='low' then 2 when
t1.severity='info' then 1 else 0 end) as severity_number, dstip,
srcip, count(*) as totalnum from $log t1 left join (select name,
cve, vuln_type from ips_mdata) t2 on t1.attack=t2.name where $fil-
ter and nullifna(attack) is not null and t1.severity is not null
group by attack, attackid, vuln_type, t2.cve, t1.severity, dstip,
srcip )### t group by attack, attackid, vuln_type, severity_num-
ber, 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 mal-
ware 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 malware, appcat, appid, app, dstip, srcip,
count(*) as total_num from $log-app-ctrl where $filter and lower
(appcat)='botnet' group by malware, appcat, appid, app, dstip,
srcip, app order by total_num desc)### union all ###(select virus
as malware, 'null' as appcat, 0 as appid, service as app, dstip,
srcip, count(*) as total_num from $log-virus where $filter and
virus is not null group by malware, appcat, app, appid, dstip,
srcip 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 logid_to_int(logid) not in (4, 7, 14, 20)
  and crscore is not null
group by
  dev_src
having
  sum(crscore % 65536)& gt; 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,
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  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)
  )& gt; 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 logid_to_int(logid) not in (4, 7, 14, 20)
  and nullifna(srccountry) is not null
  and srccountry & lt;& gt; 'Reserved'
group by
  srccountry
having
```

```
sum(
  coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
)& gt; 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(sent-
byte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvd-
byte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out, count(*) as sessions from $log where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) 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-IaaS-Apps	CTAP IaaS Apps	traffic

```
select
  app_group,
  sum(bandwidth) as bandwidth
from
  ###(select app_group_name(app) as app_group, sum(coalesce(sent-
byte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvd-
byte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out, count(*) as sessions from $log where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) 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 lower(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
logid_to_int(logid) not in (4, 7, 14, 20) 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 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 lower(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
logid_to_int(logid) not in (4, 7, 14, 20) 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 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(sent-
byte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvd-
byte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out, count(*) as sessions from $log where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) 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
from
  ###(select app_group_name(app) as app_group, sum(coalesce(sent-
byte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvd-
byte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out, count(*) as sessions from $log where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) 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(sent-
byte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvd-
byte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out, count(*) as sessions from $log where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) 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(sent-
byte, 0)+coalesce(rcvdbyte, 0)) as bandwidth, sum(coalesce(rcvd-
byte, 0)) as traffic_in, sum(coalesce(sentbyte, 0)) as traffic_
out, count(*) as sessions from $log where $filter and logid_to_int
(logid) not in (4, 7, 14, 20) 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(`un-
authuser`), 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 logid_to_
int(logid) not in (4, 7, 14, 20) and (countweb>0 or ((logver is
null or logver<52) and (hostname is not null or utmevent in ('web-
filter', '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
```

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

```
select
  app_group_name(app) as app_group,
  service,
  count(*) as sessions,
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log
where
  $filter
  and logid_to_int(logid) not in (4, 7, 14, 20)
  and nullifna(app) is not null
  and service in (
    '80/tcp', '443/tcp', 'HTTP', 'HTTPS',
    'http', 'https'
  )
group by
  app_group,
  service
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  )& gt; 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	traffic

```
select
  domain,
  catdesc,
  sum(visits) as visits
from
  (
    ###(select coalesce(nullifna(hostname), ipstr(`dstip`)) as
domain, catdesc, count(*) as visits from $log-traffic where $fil-
ter and logid_to_int(logid) not in (4, 7, 14, 20) and utmevent in
('webfilter', 'banned-word', 'web-content', 'command-block',
'script-filter') and catdesc is not null group by domain, catdesc
order by visits desc)### union all ###(select coalesce(nullifna
(hostname), ipstr(`dstip`)) as domain, catdesc, count(*) as visits
from $log-webfilter where $filter and (eventtype is null or
logver>=52) 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
  hostname,
  string_agg(distinct catdesc, ', ') as agg_catdesc,
  ebtr_value(
    ebtr_agg_flat(browsetime),
    null,
    $timespan
  ) as browsetime,
  sum(bandwidth) as bandwidth,
  sum(traffic_in) as traffic_in,
  sum(traffic_out) as traffic_out
from
  ###(select hostname, catdesc, ebtr_agg_flat(browsetime) as brow-
setime, sum(bandwidth) as bandwidth, sum(traffic_in) as traffic_
in, sum(traffic_out) as traffic_out from (select hostname, cat-
desc, ebtr_agg_flat($browse_time) as browsetime, sum(coalesce(sent-
byte, 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 logid_to_int(logid) not in
(4, 7, 14, 20) and hostname is not null and $browse_time is not
null group by hostname, catdesc) t group by hostname, catdesc
order by ebtr_value(ebtr_agg_flat(browsetime), null, null)
desc)### 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 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,
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) as bandwidth
from
  $log - traffic
where
  $filter
  and hostname is not null
  and logid_to_int(logid) not in (4, 7, 14, 20)
group by
  hostname
having
  sum(
    coalesce(sentbyte, 0)+ coalesce(rcvdbyte, 0)
  ) & gt; 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)### 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 sent-
byte, 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 sent-
byte, 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 sent-
byte, 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 'Unsanc-
tioned' 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(`un-
authuser`), srcname, ipstr(`srcip`)) as saasuser, unnest(apps) as
app_s, unnest(saasinfo) as saas_s, coalesce(sentbyte, 0) as sent-
byte, coalesce(rcvdbyte, 0) as rcvdbyte, (CASE WHEN (action IN
('deny', 'ip-conn', 'dns') OR (utmaction IN ('block', 'blocked',
'reset', 'dropped'))) 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 $fil-
ter 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(nul-
lifna(`user`), nullifna(`clouduser`), nullifna(`unauthuser`), src-
name, ipstr(`srcip`)) as saasuser from $log where $filter and apps
is not null) t where saas_s>=10 group by app_s, saas_cat, saas-
user)### 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

```
select
  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(nul-
lifna(`user`), nullifna(`clouduser`), nullifna(`unauthuser`), src-
name, ipstr(`srcip`)) as saasuser from $log where $filter and apps
is not null) t where saas_s>=10 group by app_s, saas_cat, saas-
user)### 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,
  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(rcvd-
byte) as traffic_in, sum(sentbyte) as traffic_out, count(*) as ses-
sions, 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 (action IN
('deny', 'ip-conn', 'dns') OR (utmaction IN ('block', 'blocked',
```

```
'reset', 'dropped'))) 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
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 = 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
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(`un-
authuser`), srcname, ipstr(`srcip`)) as saasuser, unnest(apps) as
app_s, unnest(saasinfo) as saas_s, coalesce(sentbyte, 0) as sent-
byte, coalesce(rcvdbyte, 0) as rcvdbyte, (CASE WHEN (action IN
('deny', 'ip-conn', 'dns') OR (utmaction IN ('block', 'blocked',
'reset', 'dropped'))) 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 $filter-drill-
down 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
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(`un-
authuser`), srcname, ipstr(`srcip`)) as saasuser, unnest(apps) as
app_s, unnest(saasinfo) as saas_s, coalesce(sentbyte, 0) as sent-
byte, coalesce(rcvdbyte, 0) as rcvdbyte, (CASE WHEN (action IN
('deny', 'ip-conn', 'dns') OR (utmaction IN ('block', 'blocked',
'reset', 'dropped'))) 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
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 rcvd-
byte, (CASE WHEN (action IN ('deny', 'ip-conn', 'dns') OR (utmac-
tion IN ('block', 'blocked', 'reset', 'dropped'))) 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 ses-
sions 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 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 rcvd-
byte, (CASE WHEN (action IN ('deny', 'ip-conn', 'dns') OR (utmac-
tion IN ('block', 'blocked', 'reset', 'dropped'))) 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 rcvd-
byte, (CASE WHEN (action IN ('deny', 'ip-conn', 'dns') OR (utmac-
tion IN ('block', 'blocked', 'reset', 'dropped'))) 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
  srccountry,
  count(distinct devid) as device_count
from
```

```
    ###(select srccountry, devid from $log where $filter and logid_
to_int(logid) not in (4, 7, 14, 20) and nullifna(srccountry) is
not null group by srccountry, devid)### t group by srccountry
order by device_count desc
```

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, host-
name)### 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
  split_part(srcname, '.', 1) as srcname1,
  count(*) as total_num
from
  $log
where
  $filter
  and nullifna(srcname) is not null
  and lower(os) like '%windows%'
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
  srcname,
  count(*) as total_num
from
```

```
   $log
where
   $filter
   and nullifna(srcname) is not null
   and lower(os) like '%mac os%'
group by
   srcname
order by
   total_num desc
```

Dataset Name	Description	Log Category
aware-Summary-Of-Changes	Summary of Changes	event

```
select
   regexp_replace(msg, '[^ ]*$', '') as msg_trim,
   count(*) as total_num
from
   $log
where
   $filter
   and logid_to_int(logid)= 44547
group by
   msg_trim
order by
   total_num desc
```

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
```

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 times-
cale
```

Dataset Name	Description	Log Category
aware-Top-Critical-Vulnerabilities	Top Critical Vulnerabilities	fct-netscan

```
select
  hostname,
  vulnname,
  vulnseverity,
  vulncat,
  count (*) as total_num
from
  $log
```

```
where
  $filter
  and nullifna(hostname) is not null
  and nullifna(vulnname) is not null
  and lower(vulnseverity) = 'critical'
group by
  hostname,
  vulnname,
  vulnseverity,
  vulncat
order by
  total_num desc
```

Dataset Name	Description	Log Category
aware-Top-Device-Attack-Targets	Top Device Attack Targets	fct-netscan

```
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,
  os1 as os,
  count(distinct vulnname) as vuln_num,
  vulnseverity,
  (
    case when lower(vulnseverity) = 'critical' then 5 when lower
(vulnseverity) = 'high' then 4 when lower(vulnseverity) = 'medium'
then 3 when lower(vulnseverity) = 'low' then 2 else 0 end
```

```
) as severity_num,
  string_agg(distinct cve_id, ',') as cve_agg
from
  ###(select hostname, split_part(os, ',', 1) as os1, vulnname,
vulnseverity, vulnid from $log where $filter and nullifna(vul-
nname) 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, os,
vulnseverity order by severity_num desc, vuln_num desc
```

Dataset Name	Description	Log Category
aware-Threats-By-Severity	Threats by Severity	attack

```
select
  severity,
  sum(total_num) as total_num
from
  (
    ###(select crlevel::text as severity, count(*) as total_num
from $log-virus where $filter and nullifna(virus) is not null  and
crlevel is not null group by severity)### union all ###(select
severity::text as severity, count(*) as total_num from $log-attack
where $filter and nullifna(attack) is not null and severity is not
null group by severity)### union all ###(select apprisk::text as
severity, count(*) as total_num from $log-app-ctrl where $filter
and lower(appcat)='botnet' and apprisk is not null group by sever-
ity)###) 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 'Malware' 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 = 'crit-
ical' 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

```
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 day-
stamp, 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 day-
stamp)###) t group by daystamp order by daystamp
```

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 day-
stamp, 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 day-
stamp)###) 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 dstip) as victim,
  count(distinct srcip) as source,
  sum(total_num) as total_num
from
  (
    ###(select app as virus, 'Botnet C&C' as malware_type,
apprisk::text as risk_level, dstip, srcip, count(*) as total_num
from $log-app-ctrl where $filter and lower(appcat)='botnet' and
nullifna(apprisk::text) is not null group by app, malware_type,
apprisk, dstip, srcip order by total_num desc)### union all ###
```

```
(select virus, 'Virus' as malware_type, crlevel::text as risk_
level, dstip, srcip, 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, dstip, srcip 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-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 logid_to_int(logid) not in (4, 7, 14, 20)
  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 sub-
type='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-Ioc-Blacklist-Summary	IOC Blacklist Summary	app-ctrl

```
select
  coalesce(
    nullifna(epname),
    nullifna(
      ipstr(`srcip`)
    ),
    'Unknown'
  ) as epname,
  total_bl,
  threats
from
  (
    select
      t1.epname,
      t1.srcip,
      t2.total_bl,
```

```
        t2.total_cs,
        t2.max_verdict,
        t2.max_cs,
        t2.threats
    from
      $ADOMTBL_PLHD_PBD_EP t1
      inner join (
        select
          t1.epid,
          total_bl,
          total_cs,
          max_verdict,
          max_cs,
          threats
        from
          (
            select
              epid,
              sum(bl_count) as total_bl,
              sum(cs_count) as total_cs,
              max(verdict) as max_verdict,
              max(cs_score) as max_cs
            from
              (
                select
                  day_st as itime,
                  epid,
                  bl_count,
                  cs_count,
                  verdict,
                  cs_score
                from
                  $ADOMTBL_PLHD_PBD_STSUM
              ) t
            where
              $filter
              and $filter - drilldown
            group by
              epid
          ) t1
          inner join (
```

```
            select
              epid,
              string_agg(name, ',') as threats
            from
              (
                select
                  epid,
                  thid
                from
                  (
                    select
                      day_st as itime,
                      epid,
                      unnest(threatid) as thid
                    from
                      $ADOMTBL_PLHD_PBD_STSUM
                  ) t
                where
                  $filter
                  and $filter - drilldown
                group by
                  epid,
                  thid
              ) t1
              inner join td_threat_name_mdata t2 on t1.thid =
t2.id
            group by
              epid
          ) t2 on t1.epid = t2.epid
      ) t2 on t1.epid = t2.epid
  ) t
where
  total_bl & gt; 0
order by
  total_bl desc
```

Dataset Name	Description	Log Category
aware-Ioc-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
        from
          $ADOMTBL_PLHD_PBD_STSUM
        where
          cs_count & gt; 0
      ) t
    where
      $filter
      and $filter - drilldown
    group by
      day_st
  ) tt
order by
  itime
```

Dataset Name	Description	Log Category
aware-Ioc-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
        from
          $ADOMTBL_PLHD_PBD_STSUM
        where
          cs_count & gt; 0
      ) t
    where
      $filter
      and $filter - drilldown
    group by
      day_st
  ) tt
order by
  itime
```

Dataset Name	Description	Log Category
aware-Ioc-Suspicion-Summary	IOC Suspicion Summary	app-ctrl

```
select
  coalesce(
    nullifna(epname),
    nullifna(
      ipstr(`srcip`)
    ),
    'Unknown'
  ) as epname,
  total_cs,
  max_cs,
  max_verdict,
  threats
from
  (
    select
      t1.epname,
      t1.srcip,
      t2.total_bl,
      t2.total_cs,
      t2.max_verdict,
```

```
      t2.max_cs,
      t2.threats
   from
      $ADOMTBL_PLHD_PBD_EP t1
      inner join (
        select
          t1.epid,
          total_bl,
          total_cs,
          max_verdict,
          max_cs,
          threats
        from
          (
            select
              epid,
              sum(bl_count) as total_bl,
              sum(cs_count) as total_cs,
              max(verdict) as max_verdict,
              max(cs_score) as max_cs
            from
              (
                select
                  day_st as itime,
                  epid,
                  bl_count,
                  cs_count,
                  verdict,
                  cs_score
                from
                  $ADOMTBL_PLHD_PBD_STSUM
              ) t
            where
              $filter
              and $filter - drilldown
            group by
              epid
          ) t1
          inner join (
            select
              epid,
```

```
            string_agg(name, ',') as threats
          from
            (
              select
                epid,
                thid
              from
                (
                  select
                    day_st as itime,
                    epid,
                    unnest(threatid) as thid
                  from
                    $ADOMTBL_PLHD_PBD_STSUM
                ) t
              where
                $filter
                and $filter - drilldown
              group by
                epid,
                thid
            ) t1
            inner join td_threat_name_mdata t2 on t1.thid =
t2.id
          group by
            epid
        ) t2 on t1.epid = t2.epid
    ) t2 on t1.epid = t2.epid
  ) t
where
  total_bl = 0
  and total_cs & gt; 0
order by
  max_verdict desc,
  max_cs desc,
  total_cs 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 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)###; create temporary
table rpt_tmptbl_2 as ###(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)###; 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 $log where $pre_
period $filter and hostname is not null group by hostname, os,
srcip, fctver order by hostname)###; create temporary table rpt_
tmptbl_2 as ###(select hostname, os, srcip, fctver from $log where
$filter and hostname is not null group by hostname, os, srcip,
fctver order by hostname)###; select hostname, max(fctos_to_dev-
type(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.host-
name=rpt_tmptbl_1.hostname) group by hostname order by hostname
```

Dataset Name	Description	Log Category
newthing-New-Software-Installed	New software installed	fct-traffic

```
drop
  table if exists rpt_tmptbl_1;
drop
  table if exists rpt_tmptbl_2; create temporary table rpt_tmptbl_
1 as ###(select srcproduct, hostname from $log where $pre_period
$filter and nullifna(srcproduct) is not null group by srcproduct,
hostname order by srcproduct)###; create temporary table rpt_
```

```
tmptbl_2 as ###(select srcproduct, hostname from $log where $fil-
ter and nullifna(srcproduct) is not null group by srcproduct, host-
name order by srcproduct)###; 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.s-
rcproduct=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
  *
from
  (
    ###(select app as threat_name, 1 as cat_id, srcip from $log-
app-ctrl where $pre_period $filter and nullifna(app) is not null
and lower(appcat)='botnet' group by threat_name, cat_id, srcip)###
union all ###(select virus as threat_name, 2 as cat_id, srcip from
$log-virus where $pre_period $filter and nullifna(virus) is not
null group by threat_name, cat_id, srcip)### union all ###(select
attack as threat_name, 3 as cat_id, srcip from $log-attack where
$pre_period $filter and nullifna(attack) is not null group by
threat_name, cat_id, srcip)###) t; create temporary table rpt_
tmptbl_2 as select * from (###(select $DAY_OF_MONTH as daystamp,
app as threat_name, 1 as cat_id, srcip from $log-app-ctrl where
$filter and nullifna(app) is not null and lower(appcat)='botnet'
group by daystamp, threat_name, cat_id, srcip order by day-
stamp)### union all ###(select $DAY_OF_MONTH as daystamp, virus as
threat_name, 2 as cat_id, srcip from $log-virus where $filter and
nullifna(virus) is not null group by daystamp, threat_name, cat_
id, srcip order by daystamp)### union all ###(select $DAY_OF_MONTH
as daystamp, attack as threat_name, 3 as cat_id, srcip from $log-
attack where $filter and nullifna(attack) is not null group by day-
stamp, threat_name, cat_id, srcip order by daystamp)###) t; select
threat_name, (case cat_id when 1 then 'Botnet' when 2 then 'Mal-
ware' when 3 then 'Attack' end) as threat_cat, count(distinct
```

```
srcip) 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-
e=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 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, srcip, (CASE WHEN level IN ('crit-
ical', '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 (bot-
netdomain is not null or botnetip is not null) group by domain,
action, srcip, sevid order by sevid desc)###; create temporary
table rpt_tmptbl_2 as ###(select coalesce(botnetdomain, ipstr(bot-
netip)) 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, 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(bot-
netip)) as sources_s, count(*) as total_num from $log where $fil-
ter and (botnetdomain is not null or botnetip is not null) group
by domain, action, srcip, sevid order by sevid desc)###; 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.do-
main=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
  *
from
  (
    ###(select app as threat_name, 1 as cat_id, srcip from $log-
app-ctrl where $pre_period $filter and nullifna(app) is not null
and lower(appcat)='botnet' group by threat_name, cat_id, srcip)###
union all ###(select virus as threat_name, 2 as cat_id, srcip from
$log-virus where $pre_period $filter and nullifna(virus) is not
null group by threat_name, cat_id, srcip)### union all ###(select
attack as threat_name, 3 as cat_id, srcip from $log-attack where
$pre_period $filter and nullifna(attack) is not null group by
threat_name, cat_id, srcip)###) t; create temporary table rpt_
tmptbl_2 as select * from (###(select $flex_timestamp as
timestamp, app as threat_name, 1 as cat_id, srcip from $log-app-
ctrl where $filter and nullifna(app) is not null and lower(appcat)-
='botnet' group by timestamp, threat_name, cat_id, srcip order by
timestamp)### union all ###(select $flex_timestamp as timestamp,
virus as threat_name, 2 as cat_id, srcip from $log-virus where
$filter and nullifna(virus) is not null group by timestamp,
threat_name, cat_id, srcip order by timestamp)### union all ###
(select $flex_timestamp as timestamp, attack as threat_name, 3 as
cat_id, srcip from $log-attack where $filter and nullifna(attack)
is not null group by timestamp, threat_name, cat_id, srcip order
by timestamp)###) t; select $flex_datetime(timestamp) as times-
cale, count(distinct srcip) 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
from $log where $pre_period $filter and nullifna(vulnname) is not
null group by vulnid, vulnname, vulnseverity, vulncat, host-
name)###; create temporary table rpt_tmptbl_2 as ###(select vul-
nid, vulnname, vulnseverity, vulncat, hostname from $log where
$filter and nullifna(vulnname) is not null group by vulnid, vul-
nname, 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 $log where $pre_period $filter and nullifna(vulnname) is not
null group by vulnid, vulnname, vulnseverity, vulncat, host-
name)###; create temporary table rpt_tmptbl_2 as ###(select vul-
nid, vulnname, vulnseverity, vulncat, hostname from $log where
$filter and nullifna(vulnname) is not null group by vulnid, vul-
nname, 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 pri = '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 & gt; 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 distinct on (1, 2) fgtserial, hostname, deviceip,
os, dtime from $log where $pre_period $filter and hostname is not
null order by fgtserial, hostname, dtime desc)###; create tem-
porary table rpt_tmptbl_2 as ###(select distinct on (1, 2) fgt-
serial, hostname, deviceip, os, dtime from $log where $filter and
hostname is not null order by fgtserial, hostname, dtime desc)###;
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.d-
time) 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
  sum(
    coalesce(`u-bytes`, 0)
  )& gt; 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)
  ) & gt; 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)
  )& gt; 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,
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 ('crit-
ical', '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, 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,
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 ('crit-
ical', '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, 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,
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 ('crit-
ical', '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, 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,
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 ('crit-
ical', '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, 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 times-
cale 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 qname is not null
```

```
and (
    action = 'block'
    or logid_to_int(logid)= 54001
  )
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
from
  $log
where
  $filter
  and qname is not null
  and (
    action = 'block'
    or logid_to_int(logid)= 54001
  )
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)= 54001
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
  $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(
        total_trate + total_erate + total_orate
      )
    )/ 100.00 / sum(count) as decimal(10, 2)
  ) as log_rate,
  cast(
    sum(totalsession)/ sum(count) as decimal(10, 0)
  ) as sessions,
  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(mem_peak) as mem_peak,
  max(disk_peak) as disk_peak,
  max(cpu_peak) as cpu_peak,
  cast(
    max(lograte_peak)/ 100.00 as decimal(10, 2)
  ) as lograte_peak,
  max(session_peak) as session_peak,
  max(transmit_peak) as transmit_kbps_peak,
  cast(
    sum(cps)/ sum(count) as decimal(10, 0)
  ) as cps_ave,
  max(cps_peak) as cps_peak
from
  ###(select $flex_timestamp as timestamp, devid, count(*) as
count, sum(coalesce(mem, 0)) as total_mem, max(coalesce(mem, 0))
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, sum(coalesce(trate, 0)) as total_trate, sum
(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as
total_orate, 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 from $log where $fil-
ter and action='perf-stats' group by timestamp, devid)### t where
$filter-drilldown group by hodex, devid order by hodex
```

Dataset Name	Description	Log Category
perf-stat-mem-usage-drilldown	Fortigate resource detail 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,
  cast(
    (
      sum(
        total_trate + total_erate + total_orate
      )
    )/ 100.00 / sum(count) as decimal(10, 2)
  ) as log_rate,
  cast(
    sum(totalsession)/ sum(count) as decimal(10, 0)
  ) as sessions,
  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(mem_peak) as mem_peak,
  max(disk_peak) as disk_peak,
  max(cpu_peak) as cpu_peak,
  cast(
    max(lograte_peak)/ 100.00 as decimal(10, 2)
  ) as lograte_peak,
  max(session_peak) as session_peak,
  max(transmit_peak) as transmit_kbps_peak,
  cast(
    sum(cps)/ sum(count) as decimal(10, 0)
  ) as cps_ave,
  max(cps_peak) as cps_peak
from
  ###(select $flex_timestamp as timestamp, devid, count(*) as
count, sum(coalesce(mem, 0)) as total_mem, max(coalesce(mem, 0))
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, sum(coalesce(trate, 0)) as total_trate, sum
(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as
total_orate, 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 from $log where $fil-
ter and action='perf-stats' group by timestamp, devid)### t where
$filter-drilldown group by hodex, devid order by hodex
```

Dataset Name	Description	Log Category
perf-stat-disk-usage-drilldown	Fortigate resource detail 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,
  cast(
    (
      sum(
        total_trate + total_erate + total_orate
      )
    )/ 100.00 / sum(count) as decimal(10, 2)
  ) as log_rate,
  cast(
    sum(totalsession)/ sum(count) as decimal(10, 0)
  ) as sessions,
  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(mem_peak) as mem_peak,
  max(disk_peak) as disk_peak,
  max(cpu_peak) as cpu_peak,
  cast(
    max(lograte_peak)/ 100.00 as decimal(10, 2)
  ) as lograte_peak,
  max(session_peak) as session_peak,
  max(transmit_peak) as transmit_kbps_peak,
  cast(
    sum(cps)/ sum(count) as decimal(10, 0)
  ) as cps_ave,
  max(cps_peak) as cps_peak
from
  ###(select $flex_timestamp as timestamp, devid, count(*) as
count, sum(coalesce(mem, 0)) as total_mem, max(coalesce(mem, 0))
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, sum(coalesce(trate, 0)) as total_trate, sum
(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as
total_orate, 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 from $log where $fil-
ter and action='perf-stats' group by timestamp, devid)### t where
$filter-drilldown group by hodex, devid order by hodex
```

Dataset Name	Description	Log Category
perf-stat-sessions-drilldown	Fortigate resource detail 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,
  cast(
    (
      sum(
        total_trate + total_erate + total_orate
      )
    )/ 100.00 / sum(count) as decimal(10, 2)
  ) as log_rate,
  cast(
    sum(totalsession)/ sum(count) as decimal(10, 0)
  ) as sessions,
  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(mem_peak) as mem_peak,
max(disk_peak) as disk_peak,
max(cpu_peak) as cpu_peak,
cast(
  max(lograte_peak)/ 100.00 as decimal(10, 2)
) as lograte_peak,
max(session_peak) as session_peak,
max(transmit_peak) as transmit_kbps_peak,
cast(
  sum(cps)/ sum(count) as decimal(10, 0)
) as cps_ave,
max(cps_peak) as cps_peak
from
  ###(select $flex_timestamp as timestamp, devid, count(*) as
count, sum(coalesce(mem, 0)) as total_mem, max(coalesce(mem, 0))
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, sum(coalesce(trate, 0)) as total_trate, sum
(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as
total_orate, 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 from $log where $fil-
ter and action='perf-stats' group by timestamp, devid)### t where
$filter-drilldown group by hodex, devid order by hodex
```

Dataset Name	Description	Log Category
perf-stat-lograte-drilldown	Fortigate resource detail 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,
  cast(
    (
      sum(
        total_trate + total_erate + total_orate
      )
    )/ 100.00 / sum(count) as decimal(10, 2)
  ) as log_rate,
  cast(
    sum(totalsession)/ sum(count) as decimal(10, 0)
  ) as sessions,
  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(mem_peak) as mem_peak,
  max(disk_peak) as disk_peak,
  max(cpu_peak) as cpu_peak,
  cast(
    max(lograte_peak)/ 100.00 as decimal(10, 2)
  ) as lograte_peak,
  max(session_peak) as session_peak,
  max(transmit_peak) as transmit_kbps_peak,
  cast(
    sum(cps)/ sum(count) as decimal(10, 0)
```

```
) as cps_ave,
  max(cps_peak) as cps_peak
from
  ###(select $flex_timestamp as timestamp, devid, count(*) as
count, sum(coalesce(mem, 0)) as total_mem, max(coalesce(mem, 0))
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, sum(coalesce(trate, 0)) as total_trate, sum
(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as
total_orate, 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 from $log where $fil-
ter and action='perf-stats' group by timestamp, devid)### t where
$filter-drilldown group by hodex, devid order by hodex
```

Dataset Name	Description	Log Category
perf-stat-connections-drilldown	Fortigate resource detail 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,
  cast(
    (
      sum(
        total_trate + total_erate + total_orate
      )
    )/ 100.00 / sum(count) as decimal(10, 2)
```

```
  ) as log_rate,
  cast(
    sum(totalsession)/ sum(count) as decimal(10, 0)
  ) as sessions,
  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(mem_peak) as mem_peak,
  max(disk_peak) as disk_peak,
  max(cpu_peak) as cpu_peak,
  cast(
    max(lograte_peak)/ 100.00 as decimal(10, 2)
  ) as lograte_peak,
  max(session_peak) as session_peak,
  max(transmit_peak) as transmit_kbps_peak,
  cast(
    sum(cps)/ sum(count) as decimal(10, 0)
  ) as cps_ave,
  max(cps_peak) as cps_peak
from
  ###(select $flex_timestamp as timestamp, devid, count(*) as
count, sum(coalesce(mem, 0)) as total_mem, max(coalesce(mem, 0))
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, sum(coalesce(trate, 0)) as total_trate, sum
(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as
total_orate, 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 from $log where
```

```
$filter and action='perf-stats' group by timestamp, devid)### t
where $filter-drilldown group by hodex, devid order by hodex
```

Dataset Name	Description	Log Category
perf-stat-bandwidth-drilldown	Fortigate resource detail 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,
  cast(
    (
      sum(
        total_trate + total_erate + total_orate
      )
    )/ 100.00 / sum(count) as decimal(10, 2)
  ) as log_rate,
  cast(
    sum(totalsession)/ sum(count) as decimal(10, 0)
  ) as sessions,
  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(mem_peak) as mem_peak,
  max(disk_peak) as disk_peak,
  max(cpu_peak) as cpu_peak,
  cast(
    max(lograte_peak)/ 100.00 as decimal(10, 2)
```

```
  ) as lograte_peak,
  max(session_peak) as session_peak,
  max(transmit_peak) as transmit_kbps_peak,
  cast(
    sum(cps)/ sum(count) as decimal(10, 0)
  ) as cps_ave,
  max(cps_peak) as cps_peak
from
  ###(select $flex_timestamp as timestamp, devid, count(*) as
count, sum(coalesce(mem, 0)) as total_mem, max(coalesce(mem, 0))
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, sum(coalesce(trate, 0)) as total_trate, sum
(coalesce(erate, 0)) as total_erate, sum(coalesce(orate, 0)) as
total_orate, 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 from $log where $fil-
ter and action='perf-stats' group by timestamp, devid)### t where
$filter-drilldown group by hodex, devid order by hodex
```

Dataset Name	Description	Log Category
perf-stat-usage-summary-average	Fortigate resource summary view	event

```
select
  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(
        total_trate + total_erate + total_orate
      )
    )/ 100.00 / sum(count) as decimal(10, 2)
  ) as log_rate,
  cast(
    sum(totalsession)/ sum(count) as decimal(10, 0)
  ) as sessions,
  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(mem_peak) as mem_peak,
  max(disk_peak) as disk_peak,
  max(cpu_peak) as cpu_peak,
  cast(
    max(lograte_peak)/ 100.00 as decimal(10, 2)
  ) as lograte_peak,
  max(session_peak) as session_peak,
  max(transmit_peak) as transmit_kbps_peak
from
  ###(select devid, count(*) as count, sum(coalesce(mem, 0)) as
total_mem, max(coalesce(mem, 0)) 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, sum
(coalesce(trate, 0)) as total_trate, sum(coalesce(erate, 0)) as
total_erate, sum(coalesce(orate, 0)) as total_orate, 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 from $log where $filter and action='perf-stats'
group by devid)### t group by devid order by devid
```

Dataset Name	Description	Log Category
perf-stat-usage-summary-peak	Fortigate resource summary view	event

```
select
  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(
        total_trate + total_erate + total_orate
      )
    )/ 100.00 / sum(count) as decimal(10, 2)
  ) as log_rate,
  cast(
    sum(totalsession)/ sum(count) as decimal(10, 0)
  ) as sessions,
  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(mem_peak) as mem_peak,
  max(disk_peak) as disk_peak,
  max(cpu_peak) as cpu_peak,
  cast(
    max(lograte_peak)/ 100.00 as decimal(10, 2)
  ) as lograte_peak,
  max(session_peak) as session_peak,
  max(transmit_peak) as transmit_kbps_peak
from
```

```
    ###(select devid, count(*) as count, sum(coalesce(mem, 0)) as
total_mem, max(coalesce(mem, 0)) 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, sum
(coalesce(trate, 0)) as total_trate, sum(coalesce(erate, 0)) as
total_erate, sum(coalesce(orate, 0)) as total_orate, 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 from $log where $filter and action='perf-stats'
group by devid)### t group by devid order by devid
```

Dataset Name	Description	Log Category
perf-stat-usage-details-drilldown-master	Fortigate resource summary view	event

```
select
  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(
        total_trate + total_erate + total_orate
      )
    )/ 100.00 / sum(count) as decimal(10, 2)
  ) as log_rate,
  cast(
    sum(totalsession)/ sum(count) as decimal(10, 0)
  ) as sessions,
  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(mem_peak) as mem_peak,
  max(disk_peak) as disk_peak,
  max(cpu_peak) as cpu_peak,
  cast(
    max(lograte_peak)/ 100.00 as decimal(10, 2)
  ) as lograte_peak,
  max(session_peak) as session_peak,
  max(transmit_peak) as transmit_kbps_peak
from
  ###(select devid, count(*) as count, sum(coalesce(mem, 0)) as
total_mem, max(coalesce(mem, 0)) 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, sum
(coalesce(trate, 0)) as total_trate, sum(coalesce(erate, 0)) as
total_erate, sum(coalesce(orate, 0)) as total_orate, 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 from $log where $filter and action='perf-stats'
group by devid)### t group by devid order by devid
```

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 and logid_to_int(logid) not in (4, 7,
14) 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 from $log-app-ctrl where $filter and lower
(appcat)='botnet' group by app)### union all ###(select cast('Mal-
ware & Botnet C&C' as char(32)) as threat_name, virus as threats
from $log-virus where $filter and nullifna(virus) is not null
group by virus)### union all ###(select cast('Malicious & Phishing
Sites' as char(32)) as threat_name, hostname as threats from $log-
webfilter where $filter and cat in (26, 61) group by hostname)###
union all ###(select cast('Critical & High Intrusion Attacks' as
char(32)) as threat_name, attack as total_num from $log-attack
where $filter and severity in ('critical', 'high') group by
attack)###) 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
      (
        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
  ) t
where
  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
```

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

Macro Name	Description	Dataset Used	Log Category
Highest Risk Application with Highest Session Count	Highest risk application with the highest session count	High-Risk-Application-By-Sessions	Traffic
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

Macro Name	Description	Dataset Used	Log Category
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
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