



show dns-client

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show dns-client

Table 1: show dns-client statistics client <client_name> Command Output Descriptions

Field	Description
DNS Usage Statistics	
Query Type	The type of DNS queries performed. Possible type of DNS queries are: A: The total A (IPv4 address record) type of queries. SRV: The total SRV (service locator) type of queries. AAAA: The total AAAA (IPv6 address record) type of queries. NAPTR: The total NAPTR (Naming Authority Pointer) type of queries.
Attempts	The total number of DNS query of specific type attempted.
Successes	The total number of attempted and successful DNS query of specific type.
Failures	The total number of attempted but failed DNS query of specific type.
Total queries	The total number of queries including A, SRV, and NAPTR type of queries.
DNS Cache Statistics	

Field	Description
Central Cache	The domain name lookups cached in central (remote) location.
Local Cache	The domain name lookups cached in local location.
Total Lookups	The total domain name lookups cached in central (remote) and local location.
Cache Hits (Positive Response)	The total number of hits with positive response.
Cache Hits (Negative Response)	The total number of hits with negative response.
Not Found in Cache	The total number of hits which have no record in central or local cache memory.
Hit Ratio (Percentage)	The percentage of domain records hit and found in central or local cache memory.
DNS Resolver Statistics	
Primary (or Secondary) Name Server	The IP address of the primary or secondary DNS (as specified by the display field title).
Query Type	The type of DNS queries performed. Possible type of DNS queries are: A: The total A (IPv4 address record) type of queries. SRV: The total SRV (service locator) type of queries. AAAA: The total AAAA (IPv6 address record) type of queries. NAPTR: The total NAPTR (Naming Authority Pointer) type of queries.
Attempts	The total number of DNS query of specific type attempted.
Successes	The total number of attempted and successful DNS query of specific type.
Failures	The total number of attempted but failed DNS query of specific type.
Total Resolver Queries	The total number of resolver queries made to the specified DNS of all query types.
Successful Queries	The total number of queries resolved successfully.
Query Timeouts	The total number of queries went timeout.
Domain Not Found	The total number of queries where domain name not found.
Connection Refused	The total number of queries for a domain for which connection refused.

Field	Description
Other Failures	The total number of queries failed due to reasons other than listed here.

show dns-client statistics dns-query NF P-CSCF apn name <apn-name>

Table 2: show dns-client statistics dns-query NF P-CSCF apn name <apn-name> Command Output Descriptions

Field	Description
Total Queries Sent	The total number of queries.
Success Queries	The total number of attempted and successful DNS queries of a specific type.
Success Positive Cache Queries	The total number of successful queries from the DNS cache.
Domain Not Found	The total number of queries where the domain name is not found.
Query Timeouts	The total number of queries that timed out.
Socket Related Error	The total number of queries when the DNS Client encounters a socket.
Unable to Connect	The total number of unsuccessful queries when unable to connect to the DNS server.
Cache Corrupted	The total number of unsuccessful queries due to cache corruption.
Other Failures	The total number of queries failed due to other failure reasons..

Use the following command to clear the DNS statistics for P-CSCF network function, which is configured under emergency APN:

```
clear dns-query NF P-CSCF apn name apn-name
```

show dns-client statistics dns-query NF P-CSCF apn all

Table 3: show dns-client statistics dns-query NF P-CSCF apn all Command Output Descriptions

Field	Description
Total Queries Sent	The total number of queries..
Success Queries	The total number of attempted and successful DNS query of a specific type.

```
show dns-client log fqdn-limit-logs client <client-name>
```

Field	Description
Success Positive Cache Queries	The total number of queries from the DNS cache.
Domain Not Found	The total number of queries where domain name not found.
Query Timeouts	The total number of queries went timeout.
Socket Related Error	The total number of queries count when DNS Client encounters a socket.
Unable to Connect	The total number of unsuccessful query counts when not able to connect to the DNS server.
Cache Corrupted	The total number of unsuccessful queries count due to cache corruption.
Other Failures	The total number of queries failed due to reasons other than listed here.

Use the following clear command to clear the DNS statistics for P-CSCF Network function, which is configured under emergency APN:

```
clear dns-query NF P-CSCF apn all
```

show dns-client log fqdn-limit-logs client <client-name>

Use the following show command to check the details of the DNS client rate-limit logging. The Rate-limit here is related to the number of FQDNs configured via the following CLI:

```
cache honor-low-ttl <value> fqdns-per-sec <value>
```

This command shows the timestamp when the FQDN limit is reached.

```
show dns-client log fqdn-limit-logs client <client-name>
```

For example:

```
[ISP1]laas-setup# show dns-client logs fqdn-limit-logs client PGW_DNS
TimeStamp                FQDN Limit Details

Wed 2021-09-08 01:57:01 FQDN limit reached for DNS Server low ttl value
Wed 2021-09-08 02:01:17 FQDN limit cleared for DNS Server low ttl value
Wed 2021-09-08 02:01:17 FQDN limit reached for DNS Server low ttl value
Wed 2021-09-08 02:04:12 FQDN limit cleared for DNS Server low ttl value
Wed 2021-09-08 02:04:12 FQDN limit reached for DNS Server low ttl value
Wed 2021-09-08 02:06:44 FQDN limit cleared for DNS Server low ttl value
Wed 2021-09-08 02:14:15 FQDN limit reached for DNS Server low ttl value
[ISP1]laas-setup#
```

Use the following clear command to clear the details of the DNS client rate-limit logging.

```
clear dns-client <client_name> log fqdn-limit logs
```