Server Statistics

This appendix provides the complete list of server statistics available in Cisco Prime Network Registrar. This chapter contains the following sections:

DNS Statistics

Following table provides the complete list of DNS server statistics available in Cisco Prime Network Registrar. For information on how to view these statistics using web UI and CLI, see DNS Statistics.

Table 1: DNS Statistics

Statistic	Description
DNS Server Statistics	
Server Identifier (id)	Identifies this DNS Server.
Recursive Service	Describes the recursion services offered by this name server. Values are: • available(1) - performs recursion on requests from clients. • restricted(2) - recursion is performed on requests only from certain clients, for example; clients on an access control list. • unavailable(3) - recursion is not available.
Process Uptime	Reports the time elapsed since the DNS Server process was started.
Time Since Reset	Reports the time elapsed since the DNS Server was last reset (restarted).

Statistic	Description
Server Status	Describes the name server state. Possible values are: • other(1) - server in some unknown state; • initializing(3) - server (re)initializing; • running(4) - server currently running.
counter-reset-time	Reports the most recent time the server counters were reset by the **dns resetStats** command.
sample-time	Reports the time the server collected the last set of sample statistics.
Statistics Interval	Reports the sample interval used by the server when collecting the last set of sample statistics.
Total Zones	Reports the total number of zones managed by the DNS server, including both primary and secondary zones.
Total RRs	Reports the total number of RRs in the server, contained in both primary and secondary zones.
DNS Server Performance Statistics	
packets-in	Reports the total number of packets received.
packets-out	Reports the total number of packets sent.
packets-in-udp	Reports the total number of UDP packets received.
packets-out-udp	Reports the total number of UDP packets sent.
packets-in-tcp	Reports the total number of TCP packets received.
packets-out-tcp	Reports the total number of TCP packets sent.
ipv4-packets-in	Reports the total number of IPv4 packets received.
ipv4-packets-out	Reports the total number of IPv4 packets sent.
ipv6-packets-in	Reports the total number of IPv6 packets received.
ipv6-packets-out	Reports the total number of IPv6 packets sent.
update-packets	Reports the number of successful DNS updates.
updated-rrs	Reports the total number of RRs added and deleted, including updates from the CPNR UIs, whether or not there were database errors.
notifies-in	Reports the number of inbound notifies. Each notify packet received is counted separately.
notifies-out	Reports the number of outbound notifies. Each notify packet sent is counted separately.

Statistic	Description
ixfrs-in	Reports the number of successful inbound incremental transfers, including incremental requests that resulted in full zone transfers.
ixfrs-out	Reports the number of successful outbound incremental transfers.
ixfrs-full-resp	Reports the number of outbound full zone transfers in response to IXFR requests. These may have been due to IXFR errors, insufficient serial history, or too many changes in the zone.
axfrs-in	Reports the number of successful inbound AXFRs.
axfrs-out	Reports the number of successful outbound full zone transfers, including those counted in ixfrs-full-resp.
xfrs-in-at-limit	Reports the number of times that inbound transfers reached the concurrent limit.
xfrs-out-at-limit	Reports the number of times that outbound transfers reached the concurrent limit.
responses-with-NOTIMP	Reports the numbers of requests with OP codes that are not implemented.
DNS Server Query Statistics	
queries-total	Total number of queries received by the DNS Server.
queries-failed-acl	Reports the number of query ACL (*restrict-query-acl*) failures.
queries-over-udp	Total number of queries received over UDP by the DNS Server.
queries-over-tcp	Total number of queries received over TCP by the DNS Server.
queries-over-ipv4	Total number of IPv4 queries received by the DNS Server.
queries-over-ipv6	Total number of IPv6 queries received by the DNS Server.
queries-over-tls	Total number of queries received over TLS by the DNS Server.
queries-over-tls-failed	Total number of TLS queries failed during TLS handshake.
queries-with-edns	Reports the number of OPT RR packets processed.
queries-type-A	Number of A queries received.
queries-type-AAAA	Number of AAAA queries received.
queries-type-ANY	Number of ANY queries received.
queries-type-CAA	Number of CAA queries received.
queries-type-CNAME	Number of CNAME queries received.
queries-type-DNSKEY	Number of DNSKEY queries received.

Statistic	Description
queries-type-DS	Number of DS queries received.
queries-type-HTTPS	Number of HTTPS RR (TYPE 65) queries received.
queries-type-MX	Number of MX queries received.
queries-type-NAPTR	Number of NAPTR queries received.
queries-type-NS	Number of NS queries received.
queries-type-NSEC	Number of NSEC queries received.
queries-type-PTR	Number of PTR queries received.
queries-type-RRSIG	Number of RRSIG queries received.
queries-type-SOA	Number of SOA queries received.
queries-type-SRV	Number of SRV queries received.
queries-type-TXT	Number of TXT queries received.
queries-type-SVCB	Number of SVCB (TYPE 64) queries received.
queries-type-URI	Number of URI queries received.
queries-type-other	All other queries received.
queries-rpz	Reports the number of queries for Response Policy Zones (RPZ).
queries-dnssec	Reports the total number of queries requesting that responses to include DNSSEC related RRs (EDNS option DO bit).
query-answers-total	Reports the total number of query responses.
query-answers-with-NOERROR	Reports the number of queries that were authoritatively answered.
query-answers-with-NXDOMAIN	Reports the number of queries that failed with no such name responses.
query-answers-with-NODATA	Reports the number of queries that failed with no data (empty answer) responses.
query-answers-with-REFUSED	Reports the number of queries refused.
query-answers-with-NOTAUTH	Reports the number of queries that failed with not authoritative responses.
query-answers-with-FORMERR	Reports the number of query responses with rcode of FORMERR.
query-answers-with-SERVFAIL	Reports the number of query responses with rcode of SERVFAIL.
query-answers-with-referral	Reports the number of requests that were referred to other servers.
query-answers-with-other-errors	Reports the number of queries with other errors.

Statistic	Description
query-answers-rpz-hits	Reports the number of RPZ queries that matched RRs in Response Policy Zones.
query-answers-rpz-misses	Reports the number of RPZ queries that did not match RRs in Response Policy Zones.
queries-dropped	Reports the number of non-error dropped packets. Queries restricted by server, TSIG, or update policies are included, but DNS updates, xfer requests, and notifies are excluded.
queries-dropped-recursive	Number of recursive queries dropped.
queries-dropped-unwanted-class	Total number of queries dropped due to unwanted classes. Only queries of class IN are allowed.
queries-dropped-unwanted-type	Total number of queries dropped due to unwanted types. Unwanted RR types are specified in the *query-types-unwanted* DNS server attribute.
cache-hits	Reports the number of times incoming client queries were found in the query cache.
cache-misses	Reports the number of times incoming client queries were not found in the query cache.
DNS Server Update Statistics	
update-total	Total number of updates received by the DNS server.
update-total-rrs	The total number of RRs updated by DNS update requests.
update-failed-acl	Total number of updates that refused due to failing ACL and/or Update Policy authorization.
update-dropped	Total number of updates that are dropped by the DNS server.
update-prereq-only	Total number of prereq-only updates received by the DNS server.
update-simulated	Total number of updates that are simulated. Simulated RR updates return a NOERROR response, but don't cause any RR changes.
update-over-udp	Total number of updates received over UDP.
update-over-tcp	Total number of updates received over TCP.
update-over-ipv4	Total number of updates received over IPv4.
update-over-ipv6	Total number of updates received over IPv6.
update-delete	Total number of RRs deleted by DNS update.
update-add	Total number of RRs added by DNS update.
update-refresh	Total number of RRs refreshed by DNS update.

Statistic	Description
update-type-A	Total number of updates for A records.
update-type-AAAA	Total number of updates for AAAA records.
update-type-DHCID	Total number of updates for DHCID records.
update-type-TXT	Total number of updates for TXT records.
update-type-other	Total number of updates for all other record types that are not specifically counted.
update-resp-total	Total number of update responses returned by the DNS server.
update-resp-NOERROR	Total number of update responses with rcode of NOERROR.
update-resp-failures	Total number of updates that failed.
update-resp-REFUSED	Total number of update responses with rcode of REFUSED.
update-resp-NOTAUTH	Total number of update responses with rcode of NOTAUTH.
update-resp-NOTZONE	Total number of update responses with rcode of NOTZONE.
update-resp-FORMERR	Total number of update responses with rcode of FORMERR.
update-resp-SERVFAIL	Total number of update responses with rcode of SERVFAIL.
update-resp-prereq-failures	Total number of update responses with prereq failures (YXDOMAIN, YXRRSET, NXDOMAIN, NXRRSET).
update-resp-YXDOMAIN	Total number of update responses with rcode of YXDOMAIN.
update-resp-YXRRSET	Total number of update responses with rcode of YXRRSET.
update-resp-NXDOMAIN	Total number of update responses with rcode of NXDOMAIN.
update-resp-NXRRSET	Total number of update responses with rcode of NXRRSET.
DNS Server Security Statistics	
security-events	Total number of security events detected and captured.
security-events-alarm	Total number of security events detected and captured within a configurable interval that are used to trigger DNS Security Event Resource Limit alarms.
security-events- amplification-attack	Total number of security events due to amplification attack detected and captured.
security-events-dns-tunneling	Total number of security events due to DNS tunneling detected and captured.
security-events-dos	Total number of security events due to a potential DoS attack detected and captured.

Statistic	Description
security-events-poisoning	Total number of security events due to DNS poisoning detected and captured.
security-events-snooping	Total number of security events due to caching or data snooping detected and captured.
rcvd-tsig-packets	Reports the number of TSIG RR packets processed, if TSIG processing is enabled for the type of packet.
detected-tsig-bad-time	Reports the number of bad timestamps in incoming TSIG packets.
detected-tsig-bad-key	Reports the number of bad keynames (those with an invalid or unknown key) in incoming TSIG packets.
detected-tsig-bad-sig	Reports the number of bad signatures in incoming TSIG packets.
rcvd-tsig-bad-time	Reports the number of BADTIME errors received after sending a TSIG packet.
rcvd-tsig-bad-key	Reports the number of BADKEY errors received after sending a TSIG packet.
rcvd-tsig-bad-sig	Reports the number of BADSIG errors received after sending a TSIG packet.
unauth-xfer-reqs	Reports the number of ACL authorization failures in zone transfers.
unauth-update-reqs	Reports the number of ACL authorization failures in DNS updates. Administrative RR updates (from CPNR UIs) are excluded.
restrict-query-acl	Reports the number of ACL authorization failures in DNS queries.
acl-blocklist-dropped-requests	Reports the number of DNS requests dropped by the server subject to *acl-blocklist*.
dnssec-zones	Reports the number of zones with DNSSEC enabled.
dnssec-sign-zone	Reports the number of times the server signed a DNSSEC zone.
dnssec-queries	Reports the total number of queries requesting that responses to include DNSSEC related RRs (EDNS option DO bit).
dnssec-responses	Reports the total number of responses to DNNSEC enabled queries (EDNS option DO bit).
dnssec-requests-dropped	Reports the total number of DNS requests that were dropped due to the server being in the process of signing a DNSSEC zone.
tls-queries	Total number of queries received over TLS by the DNS Server.
tls-queries-failed	Total number of TLS queries failed during TLS handshake.
DNS Server Errors Statistics	

Statistic	Description
update-errors	Reports the total number of updates resulting in errors. This excludes negative responses to update prerequisite checks, and TSIG responses. Both update packets and updates generated by the CNR UIs may be included in this count.
update-prereq-failures	Reports the total number of updates resulting in prerequisite failures.
ixfr-in-errors	Reports the total in-bound IXFR errors, excluding packet format errors.
ixfr-out-errors	Reports the total IXFR error responses sent, excluding packet format errors.
axfr-in-errors	Reports the total in-bound AXFR errors, excluding packet format errors.
axfr-out-errors	Reports the total AXFR error responses sent, excluding packet format errors.
sent-total-errors	Reports the total number of requests the server answered with errors (RCODE values other than 0,3,6,7, and 8). See RFC 1611.
sent-format-errors	Reports the number of requests received that were unparseable. See RFC 1611.
sent-refusal-errors	Reports the number of requests that resulted in REFUSED. See RFC1611.
xfer-in-auth-errors	Reports the number of secondary IXFR/AXFR requests that were refused because of authorization errors.
xfer-failed-attempts	Reports the number of secondary IXFR/AXFR failures, excluding authorization refusals.
exceeded-max-dns-packets	Reports the number of times inbound packets exceeded the maximum DNS packets defined by *max-dns-packets*.
DNS Server Max Counter Statistics	
concurrent-xfrs-in	Reports the maximum number of concurrent threads processing inbound transfers during the last sampling period.
concurrent-xfrs-out	Reports the maximum number of concurrent threads processing outbound transfers during the last sampling period.
ha-batch-count-limit	Reports the number of times the ha-dns-max-batch-count limit was reached during the last sampling period.
ha-rr-pending-list	Reports the maximum number of RRs in the pending List, waiting acknowledgement from the HA DNS backup server, during the last sampling period.
ha-rr-active-list	Reports the maximum number of RRs in the active list, waiting to be sent to the HA DNS backup server, during the last sampling period.

Statistic	Description
ha-persisted-edit-list	Reports the maximum number of names persisted in the edit list database during the last sampling period.
ha-update-latency-max	Reports the maximum DNS update latency in seconds, during the last sampling period. Latency is measured as the time an update remains in the pending List.
dns-concurrent-packets	Reports the maximum number of concurrent packets processed by the DNS server during the sampling period.
DNS Server Host Health Check Statistics	
hhc-domains	Reports the total number of domains checked for ping and gtp-echo Host Health Check.
hhc-domains-failed	Reports the total number of domains check failed for ping and gtp-echo Host Health Check. When all the RRs in the RR set are down, this stat is incremented.
hhc-domains-passed	Reports the total number of domains check passed for ping and gtp-echo Host Health Check. Any A/AAAA RR in the RR set is up, this stat is incremented.
hhc-rrs	Reports the total number of RRs checked for ping and gtp-echo Host Health Check.
hhc-rrs-passed	Reports the total number of RRs that have passed ping and gtp-echo health check.
hhc-rrs-failed	Reports the total number of RRs that have failed ping and gtp-echo health check.
hhc-ping-domains	Reports the total number of domains checked for ping Host Health Check.
hhc-ping-domains-failed	Reports the total number of domains check failed for ping Host Health Check. When all the RRs in the RR set are down, this stat is incremented.
hhc-ping-domains-passed	Reports the total number of domains check passed for ping Host Health Check. When any RR in the RR set is up, this stat is incremented.
hhc-ping-rrs	Reports the total number of RRs checked for ping Host Health Check.
hhc-ping-rrs-failed	Reports the total number of RRs that have failed ping Host Health Check health check.
hhc-ping-rrs-passed	Reports the total number of RRs that have passed ping Host Health Check health check.
hhc-gtp-echo-domains	Reports the total number of domains checked for gtp-echo Host Health Check.

Statistic	Description
hhc-gtp-echo-domains-failed	Reports the total number of domains check failed for gtp-echo Host Health Check. When all the RRs in the RR set are down, this stat is incremented.
hhc-gtp-echo-domains-passed	Reports the total number of domains check passed for gtp-echo Host Health Check. When any RR in the RR set is up, this stat is incremented.
hhc-gtp-echo-rrs	Reports the total number of RRs checked for gtp-echo Host Health Check.
hhc-gtp-echo-rrs-failed	Reports the total number of RRs that have failed gtp-echo Host Health Check health check.
hhc-gtp-echo-rrs-passed	Reports the total number of RRs that have passed gtp-echo Host Health Check health check.
DNS Server DB Statistics	
rrdb-txn	Reports the total number of RR DB database transactions.
rrdb-txn-commits	Reports the total number of RR DB database transactions committed.
rrdb-txn-aborts	Reports the total number of RR DB database transactions aborted.
rrdb-reads	Reports the total number of RR DB read operations.
rrdb-writes	Reports the total number of RR DB write operations.
rrdb-deletes	Reports the total number of RR DB delete operations.
rrdb-check-pts	Reports the total number of RR DB check point operations.
rrdb-log-purges	Reports the total number of RR DB log purge operations.
rrdb-log-purges-count	Reports the total number of RR DB logs purged.
csetq-count	Reports the total of number of change sets queued up to be written to the cset DB.
csetdb-txn	Reports the total number of CSET DB database transactions.
csetdb-txn-commits	Reports the total number of CSET DB database transactions committed.
csetdb-txn-aborts	Reports the total number of CSET DB database transactions aborted.
csetdb-reads	Reports the total number of CSET DB read operations.
csetdb-writes	Reports the total number of CSET DB write operations.
csetdb-deletes	Reports the total number of CSET DB delete operations.
csetdb-csets-trimmed	Reports the total number of change sets trimmed from the CSET DB by the history trimming process or by inline trimming.

Statistic	Description
csetdb-check-pts	Reports the total number of CSET DB check point operations.
csetdb-log-purges	Reports the total number of CSET DB log purge operations.
csetdb-log-purges-count	Reports the total number of CSET DB logs purged.
DNS Server Cache Statistics	
cache-size	Reports the size of the in-memory query cache in bytes.
cache-records	Reports the total number of RR name sets stored in the query cache.
cache-rrs	Reports the total number of RRs stored in the query cache.
cache-nxdomain	Reports the total number of NXDOMAIN entries in the query cache.
cache-hits	Reports the number of times incoming client queries were found in the query cache.
cache-misses	Reports the number of times incoming client queries were not found in the query cache.
cache-full	Reports the number of times the query cache was found to be at its configured limit (*mem-cache-size*).
DNS Server HA Statistics	
ha-state-current	Current HA server state.
ha-state-last-change-time	Last time when HA state changed.
ha-state-startup	Number of occurrences where the server enters Startup State (HA_STARTUP).
ha-state-negotiating	Number of occurrences where the server enters the Negotiating state (HA_STATE_NEGOTIATING).
ha-state-normal	Number of occurrences where the server enters Normal State (HA_NORMAL).
ha-state-comm-interrupted	Number of occurrences where the server enters the communication-interrupted state (HA_STATE_COMMINTR).
ha-state-partner-down	Number of occurrences where the server enters the partner-down state (HA_STATE_PARTNERDOWN).
ha-msg-req-sent	Number of HA request messages sent to the HA partner.
ha-msg-req-sent-time	Specifies the date and time the HA server last sent a request message to the HA partner.
ha-msg-req-recv	Number of HA request messages received from the HA partner.

Statistic	Description
ha-msg-req-recv-time	Specifies the date and time the HA server last received a request message from the HA partner.
ha-msg-connect-recv	Number of connection establishment request messages received (HA_DNS_ESTABLISH_CONNECTION).
ha-msg-connect-sent	Number of connection establishment request messages sent (HA_DNS_ESTABLISH_CONNECTION).
ha-msg-heartbeat-recv	Number of heartbeat request messages received (HA_DNS_HEARTBEAT).
ha-msg-heartbeat-sent	Number of heartbeat request messages sent (HA_DNS_HEARTBEAT).
ha-msg-reconcile-recv	Number of zone reconciliation request messages received (HA_DNS_RECONCILIATION).
ha-msg-reconcile-sent	Number of zone reconciliation request messages sent (HA_DNS_RECONCILIATION).
ha-msg-resp-recv	Number of response messages received. Response messages are used to acknowledge all types of request messages.
ha-msg-resp-sent	Number of response messages sent. Response messages are used to acknowledge all types of request messages.
ha-msg-rrsync-recv	Number of rr-sync messages request received (HA_DNS_RR_SYNC).
ha-msg-rrsync-sent	Number of rr-sync request messages sent (HA_DNS_RR_SYNC).
ha-msg-rrupdate-recv	Number of rr-update request messages received (HA_DNS_RR_UPDATE).
ha-msg-rrupdate-sent	Number of rr-update request messages sent (HA_DNS_RR_UPDATE).
ha-msg-zonesync-recv	Number of zone synchronization request messages received (HA_DNS_ZONE_SYNC).
ha-msg-zonesync-sent	Number of zone synchronization request messages sent (HA_DNS_ZONE_SYNC).
ha-msg-shutdown-recv	Number of shutdown request messages received.
ha-msg-shutdown-sent	Number of shutdown request messages sent.
ha-resp-inconsistent	Number of responses reporting an inconsistent server state (HA_DNS_RESP_ERR_INCONSISTENT_STATE).
ha-sync-conflict	Number of zones with name conflicts during nameset reconciliation.
ha-sync-discard-name	Number of name conflicts where one nameset must be discarded to synchronize the zone.

Statistic	Description
ha-sync-merge-name	Number of name conflicts which the namesets can be merged to synchronize the zone.
ha-full-zone-resync	Number of zones requiring full-zone resynchronization for nameset reconciliation.
ha-zone-mismatch	Number of zones reporting a mismatch error (HA_DNS_RESP_ERR_MISMATCH).
ha-resp-servfail	Number of responses reporting a server failure error (HA_DNS_RESP_ERR_SERVFAIL).
ha-resp-unknown	Number of responses with an unknown message type (HA_DNS_RESP_ERR_UNKNOWN_MSG_TYPE).
ha-update-reject	Number of DNS updates rejected by the server.
DNS Server IPv6 Statistics	
ipv6-packets-in	Total number of IPv6 packets received.
ipv6-packets-out	Total number of IPv6 packets sent.

CDNS Statistics

Following table provides the complete list of CDNS server statistics available in Cisco Prime Network Registrar. For information on how to view these statistics using web UI and CLI, see CDNS Statistics.

Table 2: CDNS Statistics

Statistic	Description
CDNS Server Statistics	
Server Identifier (name)	Name identifying the DNS Caching Server.
Recursive Service (config-recurs)	Recursion services offered by this name server.
Current Time (time-current)	Current time given by the CDNS Server.
Process Up (time-up)	Amount of time the server has been up and running.
Server Restart Time (restart-time)	Time when the DNS Caching Server was last restarted or reloaded.
Counter Reset Time (reset-time)	The most recent time the stats were reset (that is, **cdns resetStats** in CLI).
Sample Time (sample-time)	Time the server collected the last set of sample statistics.
Statistics Interval (sample-interval)	Sample interval used by the server when collecting sample statistics.

Statistic	Description
Time Since Last Poll (time-elapsed)	Time elapsed since last statistics poll.
queries-total	Total number of queries received by the CDNS Server.
queries-failing-acl	Number of queries being dropped or refused due to ACL failures.
recursive-replies-total	Total number of query replies that were not found in the cache and required external resolution.
recursive-time-average	The average time, in milliseconds, to complete a recursive query when not found in the cache.
recursive-time-median	The median time, in milliseconds, to complete a recursive query when not found in the cache.
immediate-response-count	The number of responses sent without recursion.
immediate-response-average	The average time, in microseconds to respond to a query when no recursion is needed.
immediate-response-median	The median time, in microseconds, to respond to a query when no recursion is needed.
exceeded-max-target-count	Number of queries that exceeded the maximum number of name servers glue lookups allowed.
requestlist-total	Total number of queued requests waiting for recursive replies.
answers-secure	Number of answers that correctly validated.
answers-unsecure	Number of answers that did not correctly validate.
tls-errors-in	Total number of TLS related errors on inbound DNS query attempts.
tls-errors-out	Total number of TLS related errors on outbound DNS query attempts.
queries-over-https-failed	Total number of queries failed with HTTPS errors.
https-query-buffer	Number of HTTPS queries in memory buffer.
https-response-buffer	Number of HTTPS responses in memory buffer.
Query Details Statistics	
queries-total	Total number of queries received by the CDNS Server.
queries-per-second	Number of queries per second received.
queries-over-tcp	Total number of queries received over TCP by the CDNS Server. This statistic is also incremented when queries are received over HTTPS.
queries-over-ipv6	Total number of IPv6 queries received by the CDNS Server.

Statistic	Description
queries-over-tls	Total number of queries received over TLS by the CDNS Server. This statistic is also incremented when queries are received over HTTPS.
queries-over-https	Total number of queries received over HTTPS by the CDNS Server.
queries-with-edns	Number of queries with EDNS OPT RR present.
queries-with-edns-do	Number of queries with EDNS OPT RR with DO (DNSSEC OK) bit set.
queries-with-flag-QR	Number of incoming queries with QR (query response) flag set. These queries are dropped.
queries-with-flag-AA	Number of incoming queries with AA (auth answer) flag set. These queries are dropped.
queries-with-flag-TC	Number of incoming queries with TC (truncation) flag set. These queries are dropped.
queries-with-flag-RD	Number of incoming queries with RD (recursion desired) flag set.
queries-with-flag-RA	Number of incoming queries with RA (recursion available) flag set.
queries-with-flag-Z	Number of incoming queries with Z flag set.
queries-with-flag-AD	Number of incoming queries with AD flag set.
queries-with-flag-CD	Number of incoming queries with CD flag set.
queries-type-A	Number of A queries received.
queries-type-AAAA	Number of AAAA queries received.
queries-type-ANY	Number of ANY queries received.
queries-type-CNAME	Number of CNAME queries received.
queries-type-HTTPS	Number of HTTPS (TYPE 65) queries received.
queries-type-SVCB	Number of SVCB (TYPE 64) queries received.
queries-type-PTR	Number of PTR queries received.
queries-type-NS	Number of NS queries received.
queries-type-SOA	Number of SOA queries received.
queries-type-MX	Number of MX queries received.
queries-type-DS	Number of DS queries received.
queries-type-DNSKEY	Number of DNSKEY queries received.
queries-type-RRSIG	Number of RRSIG queries received.

Statistic	Description
queries-type-NSEC	Number of NSEC queries received.
queries-type-NSEC3	Number of NSEC3 queries received.
queries-type-TXT	Number of TXT RR queries received.
queries-type-SRV	Number of SRV RR queries received.
queries-type-NAPTR	Number of NAPTR RR queries received.
queries-type-other	All other queries received.
smart-cache	Total number of times the CDNS Server employed a smart-cache response, when smart-cache is enabled.
Answer Details Statistics	
answers-total	Total number of query answers.
answers-with-NOERROR	Number of answers from cache or recursion that result in rcode of NOERROR being returned to client.
answers-with- NXDOMAIN	Number of answers from cache or recursion that result in rcode of NXDOMAIN being returned to client.
answers-with-REFUSED	Number of answers from cache or recursion that result in rcode of REFUSED being returned to client.
answers-with-SERVFAIL	Number of answers from cache or recursion that result in rcode of SERVFAIL being returned to client.
answers-with-FORMERR	Number of answers from cache or recursion that result in rcode of FORMERR being returned to client.
answers-with-NOTAUTH	Number of answers from cache or recursion that result in rcode of NOTAUTH being returned to client.
answers-with-NOTIMP	Number of answers from cache or recursion that result in rcode of NOTIMP being returned to client.
answers-with-NODATA	Number of answers that result in pseudo rcode of NODATA being returned to client.
answers-with-other-errors	Number of answers that result in pseudo rcode of NODATA being returned to client.
answers-rrset-unsecure	Number of RRSets marked as bogus by the validator.
answers-unwanted	Number of replies that were unwanted or unsolicited. High values could indicate spoofing threat.
queries-unwanted-class	Total number of queries with an unwanted classes.
Performance Statistics	

Statistic	Description
cache-hits	Total number of queries that were answered from cache.
cache-misses	Total number of queries that were not found in the cache.
cache-prefetches	Number of prefetches performed.
mem-query-cache-exceeded	Number of times the message cache has gone over the configured limit. This indicates that the configured limit may be undersized for its environment.
mem-cache-exceeded	Number of times the RRSet cache has gone over the configured limit. This indicates that the configured limit may be undersized for its environment.
remote-ns-cache-exceeded	Number of times the remote name server cache has gone over the configured limit. This indicates that the configured limit may be undersized for its environment.
key-cache-exceeded	Number of times the key cache has gone over the configured limit. This indicates that the configured limit may be undersized for its environment.
requestlist-total-user	Total number of queued user requests waiting for recursive replies.
requestlist-total-system	Total number of queued system requests waiting for recursive replies.
requestlist-total-average	Average number of requests on the request list.
requestlist-total-max	Maximum number of requests on the request list.
requestlist-total-overwritten	Number of requests on the request list that were overwritten by newer entries.
requestlist-total-exceeded	Number of requests dropped because the request list was full.
mem-process	An estimate of the memory in bytes of the CDNS process.
mem-cache	Memory in bytes of RRSet cache. Note that the allocated memory will be maintained across server reloads, unless the *rrset-cache-size* configuration has changed.
mem-query-cache	Memory in bytes allocated to the message cache. Note that the allocated memory will be maintained across server reloads, unless the *msg-cache-size* configuration has changed.
mem-iterator	Memory in bytes used by the CDNS iterator module.
mem-validator	Memory in bytes used by the CDNS validator module.
DNS64 Statistics	
dns64-a2aaaa-conversions	Number of times DNS64 has converted a type A RR to a type AAAA RR.

Statistic	Description
dns64-ptr-conversions	Number of times DNS64 has converted an IPv4 PTR RR to an IPv6 PTR RR.
Upstream Statistics	
upstream-queries-udp	The number of upstream queries sent using UDP.
upstream-queries-tcp	The number of upstream queries sent using TCP.
upstream-queries-tls	The number of upstream queries sent using TLS.
Firewall Statistics	
firewall-dropped	Number of times DNS Firewall dropped a query.
firewall-redirected	Number of times DNS Firewall redirected a query.
firewall-refused	Number of times DNS Firewall refused a query.
firewall-redirect-nxdomain	Number of times DNS Firewall redirected a query with an NXDOMAIN answer.
firewall-rpz	Number of times DNS Firewall RPZ rules matched an incoming query.
rpz-nxdomain	Number of queries where rpz required an nxdomain response.
rpz-nodata	Number of queries where rpz required a nodata response.
rpz-passthru	Number of queries where rpz required a passthru.
rpz-drop	Number of queries where rpz required a drop action.
rpz-tcp	Number of queries where rpz required a tcp query.
rpz-local	Number of queries where rpz required a local response.
rpz-cname	Number of queries where rpz required a cname response.
rpz-disabled	Number of queries where rpz did not override.
rpz-no-override	Number of queries where rpz did not require override.
rpz-invalid	Number of queries where rpz was invalid.
Rate Limiting Statistics	
client-rate-limit	Number of times a client has been rate limited, when *client-rate-limiting* is enabled.
domain-rate-limit	Number of times a zone has been rate limited, when *domain-rate-limiting* is enabled.
Security Events Statistics	

Statistic	Description
security-events	Total number of security events detected and captured.
security-events-alarm	Total number of security events detected and captured within a configurable interval that are used to trigger DNS Security Event Resource Limit alarms.
security-events-amplification-attack	Total number of security events due to amplification attack detected and captured.
security-events-dns-tunneling	Total number of security events due to DNS tunneling detected and captured.
security-events-dos	Total number of security events due to a potential DoS attack detected and captured.
security-events-firewall	Total number of security events due to DNS firewall detected and captured.
security-events-malware	Total number of security events due to malware detected and captured.
security-events-phishing	Total number of security events due to DNS phishing detected and captured.
security-events-poisoning	Total number of security events due to DNS cache poisoning detected and captured.
security-events-snooping	Total number of security events due to DNS cache snooping detected and captured.
Top Name Statistics	
last-access-time	Reports the date and time that this data was collected.
last-reset-time	Reports the date and time that the counters were reset.
timestamp	Reports the date and time that this report was generated.
top-names	Reports the name and cache hit rate of the top names queried. The number of entries in the list is determined by the server top-names-max-count and top-names-max-age configuration attributes.
total-counted	Reports the total number of queries counted in this collection period.

DHCP Statistics

Following table provides the complete list of DHCP server statistics available in Cisco Prime Network Registrar. For information on how to view these statistics using web UI and CLI, see DHCP Statistics.

Table 3: DHCP Statistics

Statistic	Description
DHCP Server Statistics	
total-scopes	The number of scopes configured in the server.
request-buffers-in-use	Displays the number of request buffers the DHCP server is using at the time the statistics are calculated.
decaying-max-request-buffers-in-use	Shows the maximum number of request buffers that have recently been in use. This number will, over approximately 10-15 seconds, drift down to match the current request-buffers-in-use count.
request-buffers-allocated	Shows the number of request buffers that the server has allocated. (This is the maximum number of requests that the server can hold at any one time.)
response-buffers-allocated	Shows the number of response buffers that the server has allocated. (This is the maximum number of responses that the server can hold at any one time.)
response-buffers-in-use	Displays the number of response buffers the DHCP server is using at the time the statistics are calculated.
packets-dropped	Displays the number of incoming packets dropped in this time interval because of heavy load on the server. These packets were not processed in any way by the server, other than to discard them.
responses-dropped	Displays the number of responses dropped in this time interval, due to heavy load on the server. This is the number of times the server ran out of response buffers.
timeouts	Shows the number of timeouts (leases, offers) experienced in this time interval.
offer-timeouts	Displays the number of offer packets that timed out during this time interval.
grace-expirations	Displays the number of leases that timed out the grace period during this time interval.

Statistic	Description
ack-latency-counts	An ordered list of the number of DHCPACK responses falling into these categories: • < 50 ms • 50-200 ms • 200-500 ms • 500-1000 ms • 1-2 secs • 2-3 secs • 3-4 secs • > 4 secs When enhanced-sample-counters is disabled, only second timing resolution is available and all responses taking less than 1 second are counted in the 500-1000ms category.
Lease Counts (IPv4) Statistics	
active-leases	Shows the number of DHCPv4 leases and reservations that are currently unavailable to new clients. Leases in the following states are counted as active: • OFFERED • LEASED • RELEASED • EXPIRED • DISCONNECTED
client-reserved-active-leases	Shows the number of client reserved DHCPv4 leases that are currently unavailable to new clients. Leases in the following states are counted as active: • OFFERED • LEASED • RELEASED • EXPIRED • DISCONNECTED
client-reserved-leases	Shows the number of client reserved DHCPv4 leases configured in the server.

Statistic	Description
configured-leases	Shows the number of DHCPv4 leases and reservations that are configured on the server. This includes all possible leases in the ranges that are defined by the configuration.
reserved-leases	Shows the number of reserved DHCPv4 leases configured in the server.
reserved-active-leases	Shows the number of reserved DHCPv4 leases that are currently unavailable to new clients. Leases in the following states are counted as active: • OFFERED • LEASED • RELEASED • EXPIRED • DISCONNECTED
Packets Received (IPv4) Statistics	
packets-received	Displays the number of DHCP packets received in this time interval.
discovers	Shows the number of DHCPDISCOVER packets received in this time interval.
requests	Shows the number of DHCPREQUEST packets received in this time interval.
releases	Shows the number of DHCPRELEASE packets received in this time interval.
declines	Shows the number of DHCPDECLINE packets received in this time interval.
informs	Shows the number of DHCPINFORM packets received in this time interval.
lease-queries	Shows the number of DHCPLEASEQUERY packets (RFC4388 message ID 10 or Cisco-proprietary message ID 13) received in this time interval.
bootp-received	Displays the number of bootp packets received in this time interval.
invalid-packets	Displays the number of invalid DHCP packets received in this time interval.
acks-per-second	Shows the average rate at which DHCPACK packets were sent to clients in this time interval.
Packets Sent (IPv4) Statistics	
packets-sent	Displays the number of DHCP packets sent in this time interval.

Statistic	Description
offers	Shows the number of DHCPOFFER packets sent in this time interval.
acks	Shows the number of DHCPACK packets sent in this time interval.
naks	Shows the number of DHCPNAK packets sent in this time interval.
bootp-sent	Displays the number of bootp packets sent in this time interval.
lease-queries-unknown	Displays the number of DHCPLEASEUNKNOWN packets (message ID 12) sent in this time interval.
lease-queries-unassigned	Displays the number of DHCPLEASEUNASSIGNED packets (message ID 11) sent in this time interval.
lease-queries-active	Displays the number of DHCPLEASEACTIVE packets (message ID 13) sent in this time interval.
Packets Failed (IPv4) Statistics	
dropped-total	Displays the total number of DHCP packets dropped due to server or client configuration issues in this time interval.
discards	Displays the number of DHCP packets dropped in this time interval because the server could not construct a response.
duplicates	Displays the number of DHCP duplicate packets dropped in this time interval.
extension-drops	Displays the number of DHCP packets that an extension requested and that were dropped in this time interval.
extension-errors	Displays the number of DHCP packets that an extension failed to process and that the server dropped in this time interval.
client-class-fails	Shows the number of DHCP packets dropped because the server could not assign a client-class.
invalid-clients	Displays the number of DHCP packets dropped in this time interval because server configuration prevents responding to the packet.
over-max-waiting	Displays the number of DHCP packets dropped because the server *max-waiting-packets* attribute was exceeded in this time interval.
request-dropped-old	Displays the number of DHCP packets dropped in request processing because the server *drop-old-packets* attribute was exceeded in this time interval.
response-dropped-old	Displays the number of DHCP packets dropped in response processing because the server *drop-old-packets* attribute was exceeded in this time interval.
unknown-scopes	Displays the number of DHCP packets dropped in this time interval because the server could not assign an appropriate scope.

Statistic	Description
queue-limited-discovers-dropped	Shows the number of DHCPDISCOVERs that were dropped because the request buffer limit (controlled by discover-queue-limit) was exceeded.
request-dropped-others	Displays the number of DHCP packets dropped in request processing for other reasons in this time interval.
response-dropped-others	Displays the number of DHCP packets dropped in response processing for other reasons in this time interval.
Packets Received (TCP IPv4) Statistics	
tcp-current-connections	Shows the number of currently open TCP connections to the DHCP server.
tcp-total-connections	Shows the number of TCP connections that were opened to the DHCP server in this time interval.
tcp-active-lease-queries	Shows the number of DHCPACTIVELEASEQUERY packets received over all TCP connections in this time interval.
tcp-bulk-lease-queries	Shows the number of DHCPBULKLEASEQUERY packets received over all TCP connections in this time interval.
tcp-connections-dropped	Shows the number of TCP requests that were terminated in this time interval because the TCP connection was closed (or reset) by the requester. This excludes normal connection closes or server reloads.
Packets Sent (TCP IPv4) Statistics	
tcp-lq-done	Shows the number of DHCPLEASEQUERYDONE packets sent over TCP in this time interval.
tcp-lq-status	Shows the number of DHCPLEASEQUERYSTATUS packets sent over TCP in this time interval.
tcp-lq-active	Shows the number of DHCPLEASEACTIVE packets sent over TCP in this time interval.
tcp-lq-unassigned	Shows the number of DHCPLEASEUNASSIGNED packets sent over TCP in this time interval.
Status Sent (TCP IPv4) Statistics	
tcp-lq-status-unspec-fail	Shows the number of DHCPLEASESTATUS packets with a status code of UNSPECFAIL sent over TCP in this time interval.
tcp-lq-status-query-terminated	Shows the number of DHCPLEASESTATUS packets with a status code of QUERYTERMINATED sent over TCP in this time interval.
tcp-lq-status-malformed-query	Shows the number of DHCPLEASESTATUS packets with a status code of MALFORMEDQUERY sent over TCP in this time interval.

Statistic	Description
tcp-lq-status-not-allowed	Shows the number of DHCPLEASESTATUS packets with a status code of NOTALLOWED sent over TCP in this time interval.
tcp-lq-status-data-missing	Shows the number of DHCPLEASESTATUS packets with a status code of DATAMISSING sent over TCP in this time interval.
tcp-lq-status-connection-active	Shows the number of DHCPLEASESTATUS packets with a status code of CONNECTIONACTIVE sent over TCP in this time interval.
tcp-lq-status-catchup-complete	Shows the number of DHCPLEASESTATUS packets with a status code of CATCHUPCOMPLETE sent over TCP in this time interval.
Failover Statistics	
request-buffers-in-use	Displays the number of failover request buffers the DHCP server is using at the time the statistics are calculated.
request-buffers-allocated	Shows the number of request buffers that the server has allocated to support the failover capability.
decaying-max-request-buffers-in-use	Shows the maximum number of request buffers that have recently been in use. This number will, over approximately 10-15 seconds, drift down to match the current request-buffers-in-use count.
queued-binding-updates	Shows the current number of binding updates (both v4 and v6) that are queued at this time.
active-binding-update-latency-average	Shows the average active binding update latency in milliseconds (see the active-binding-update-latency-counts for more details).
active-binding-update-latency-maximum	Shows the maximum active binding update latency in milliseconds (see the active-binding-update-latency-counts for more details).
active-binding-update-latency-counts	Shows an ordered list of the number of active binding update latencies falling into these categories: <= 50 ms 51-200 ms 201-500 ms 501-1000 ms 1-2 secs 2-3 secs 3-4 secs > 4 secs This gives the distribution of the elapsed time between when a binding update is initiated until it is acknowledged by the partner. This provides a useful measure of the network and partner processing time for binding updates and their acknowledgements.

Statistic	Description
queued-binding-update-latency-average	Shows the average queued binding update latency in milliseconds (see the queued-binding-update-latency-counts for more details).
queued-binding-update-latency-maximum	Shows the maximum queued binding update latency in milliseconds (see the queued-binding-update-latency-counts for more details).
queued-binding-update-latency-counts	Shows an ordered list of the number of queued binding update latencies falling into these categories: <= 50 ms 51-200 ms 201-500 ms 501-1000 ms 1-2 secs 2-3 secs 3-4 secs > 4 secs This gives the distribution of the elapsed time between when a binding update is requested (queued) until it is acknowledged by the partner. This provides a useful measure of how long it effectively takes from when a server wants to update its partner and when that update actually completes. The active and queued values will generally be similar unless there are many pending updates as then many have to wait for earlier updates to complete being becoming active.
packets-received	Shows the number of failover packets received in this time interval.
binding-updates-received	Displays the number of failover DHCPBNDUPD packets received in this time interval.
binding-acks-received	Displays the number of failover DHCPBNDACK packets received in this time interval.
binding-naks-received	Displays the number of failover DHCPBNDNAK packets received in this time interval.
v6-binding-updates-received	Displays the number of failover BNDUPD6 messages received in this time interval.
v6-binding-acks-received	Displays the number of failover BNDUPD6 messages, where no updates were negatively acknowledged, received in this time interval.
v6-binding-nacks-received	Displays the number of failover BNDUPD6 messages, where one or more updates were negatively acknowledged, received in this time interval.
pool-requests-received	Displays the number of failover DHCPPOOLREQ packets received in this time interval.

Statistic	Description
v6-pool-requests-received	Displays the number of failover POOLREQ6 messages received in this time interval.
v6-pool-responses-received	Displays the number of failover POOLRESP6 messages received in this time interval.
update-requests-received	Shows the number of failover DHCPUPDATEREQ/DHCPUPDATEREQALL packets received in this time interval.
update-done-received	Displays the number of failover DHCPUPDATEDONE packets received in this time interval.
v6-update-requests-received	Displays the number of failover UPDREQ6/UPDREQALL6 messages received in this time interval.
v6-update-done-received	Displays the number of failover UPDDONE6 messages received in this time interval.
state-received	Displays the number of failover STATE messages received in this time interval.
connects-received	Displays the number of failover CONNECT messages received in this time interval.
connect-acks-received	Displays the number of failover CONNECTACK messages received in this time interval.
contacts-received	Displays the number of failover CONTACT messages received in this time interval.
disconnects-received	Displays the number of failover DISCONNECT messages received in this time interval.
packets-sent	Displays the number of failover packets sent in this time interval.
binding-updates-sent	Shows the number of failover DHCPBNDUPD packets sent in this time interval.
binding-acks-sent	Displays The number of failover DHCPBNDACK packets sent in this time interval.
binding-naks-sent	Displays the number of failover DHCPBNDNAK packets sent in this time interval.
v6-binding-updates-sent	Displays the number of failover BNDUPD6 messages sent in this time interval.
v6-binding-acks-sent	Displays the number of failover BNDUPD6 messages, where no updates were negatively acknowledged, sent in this time interval.
v6-binding-nacks-sent	Displays the number of failover BNDUPD6 messages, where one or more updates were negatively acknowledged, sent in this time interval.

Statistic	Description
pool-responses-sent	Displays the number of failover DHCPPOOLRESP packets sent in this time interval.
v6-pool-requests-sent	Displays the number of failover POOLREQ6 messages sent in this time interval.
v6-pool-responses-sent	Displays the number of failover POOLRESP6 messages sent in this time interval.
update-requests-sent	Displays the number of failover DHCPUPDATEREQ/DHCPUPDATEREQALL packets sent in this time interval.
update-done-sent	Displays the number of failover DHCPUPDATEDONE packets sent in this time interval.
v6-update-requests-sent	Displays the number of failover UPDREQ6/UPDREQALL6 messages sent in this time interval.
v6-update-done-sent	Displays the number of failover UPDDONE6 messages sent in this time interval.
state-sent	Displays the number of failover STATE messages sent in this time interval.
connects-sent	Displays the number of failover CONNECT messages sent in this time interval.
connect-acks-sent	Displays the number of failover CONNECTACK messages sent in this time interval.
contacts-sent	Displays the number of failover CONTACT messages sent in this time interval.
disconnects-sent	Displays the number of failover DISCONNECT messages sent in this time interval.
unavailable-requests	Displays the number of times a failover request buffer was unavailable for a received packet. This is incremented each time an attempt fails to allocate a request buffer, including retries.
invalid-messages-received	Displays the number of failover messages received in this time interval that contained an unknown request or could not be parsed.
discarded-messages	Displays the number of failover messages received in this time interval that were discarded because they were determined to be related to an earlier failover connection.
successful-connections	Displays the number of failover connections successfully opened with the partner (CONNECT/CONNECTACK exchanged) in this time interval.
failed-connections	Displays the number of failover connections that failed to be successfully connected in this time interval.

Statistic	Description
invalid-connections	Displays the number of failover connections that were not from our parnter.
connections-terminated-by-server	Displays the number of failover connections that were terminated unexpectedly by this server. These represent exceptional situations outside of the normal processing behavior.
connections-terminated-by-partner	Displays the number of failover connections that were terminated unexpectedly (without a DISCONNECT message from the partner). These represent exceptional conditions where the connection to the partner server was lost for some reason. It may be that the partner server dropped the connection, or it might be the result of a failure in the network connecting this server to its partner.
IPv6 Statistics	
total-prefixes	The number of prefixes configured in the server.
offer-timeouts	Shows the number of offer packets that timed out in this time interval.
grace-expirations	Shows the number of leases that timed out the grace period in this time interval.
reply-latency-counts	An ordered list of the number of Reply responses falling into these categories: • < 50 ms • 50-200 ms • 200-500 ms • 500-1000 ms • 1-2 secs • 2-3 secs • 3-4 secs • > 4 secs When enhanced-sample-counters is disabled, only second timing resolution is available and all responses taking less than 1 second are counted in the 500-1000ms category.
server-duid	Shows the current DHCPv6 server-identifier (DUID) for the server.
Lease Counts (IPv6) Statistics	

Statistic	Description
active-leases	Shows the number of DHCPv6 leases, reservations, and delegated prefixes that are currently unavailable to new clients. Leases in the following states are counted as active: • OFFERED • LEASED • RELEASED • EXPIRED • REVOKED
allocated-leases	Shows the number of DHCPv6 leases, reservations, and delegated prefixes that are presently allocated in the server.
client-reserved-active-leases	Shows the number of DHCPv6 client reserved leases and client reserved prefixes that are currently unavailable to new clients. Leases in the following states are counted as active: • OFFERED • LEASED • RELEASED • EXPIRED • DISCONNECTED
client-reserved-leases	Shows the number of DHCPv6 client reserved leases and client reserved prefixes that are presently allocated on the server.
reserved-leases	Shows the number of DHCPv6 reserved leases and reserved prefixes that are configured on the server.
reserved-active-leases	Shows the number of DHCPv6 reserved leases and reserved prefixes that are currently unavailable to new clients. Leases in the following states are counted as active: • OFFERED • LEASED • RELEASED • EXPIRED • DISCONNECTED
Packets Received (IPv6) Statistics	
packets-received	Shows the number of DHCPv6 packets received in this time interval.

Statistic	Description
packets-received-relay	Shows the number of DHCPv6 packets received using RELAY in this time interval.
solicits	Shows the number of DHCPv6 solicits received in this time interval.
requests	Shows the number of DHCPv6 requests received in this time interval.
confirms	Shows the number of DHCPv6 confirms received in this time interval.
renews	Shows the number of DHCPv6 renews received in this time interval.
rebinds	Shows the number of DHCPv6 rebinds received in this time interval.
releases	Shows the number of DHCPv6 releases received in this time interval.
declines	Shows the number of DHCPv6 declines received in this time interval.
info-requests	Shows the number of DHCPv6 info-requests received in this time interval.
leasequeries	Shows the number of DHCPv6 Leasequery messages received.
invalid-packets	Shows the number of invalid DHCPv6 packets received in this time interval.
other-server	Shows the number of packets dropped because the packet was for some other server (server-id option did not match this server's) or because failover determined that the partner would respond.
Packets Sent (IPv6) Statistics	
packets-sent	Shows the number of DHCPv6 packets sent in this time interval.
packets-sent-relay	Shows the number of DHCPv6 packets sent using RELAY in this time interval.
advertises	Shows the number of DHCPv6 advertises sent in this time interval.
replies	Shows the number of DHCPv6 replies sent in this time interval.
reconfigures	Shows the number of DHCPv6 reconfigures sent in this time interval.
leasequery-replies	Shows the number of responses to DHCPv6 Leasequery messages which may or may not have been successful.
Packets Failed (IPv6) Statistics	
dropped-total	Shows the total number of DHCPv6 packets dropped due to server or client configuration in this time interval.
auth-fails	Shows the number of DHCPv6 auth_fails dropped in this time interval.
discards	Shows the number of DHCPv6 packets discarded due to RFC 8415 validation failures in this time interval.

Statistic	Description
duplicates	Shows the number of DHCPv6 duplicate packets dropped in this time interval.
extension-drops	Shows the number of DHCPv6 packets that an extension requested and that were dropped in this time interval.
extension-errors	Shows the number of DHCPv6 packets that an extension failed to process and that the server dropped in this time interval.
over-max-waiting	Shows the number of DHCPv6 packets dropped because the server *max-waiting-packets* attribute was exceeded in this time interval.
request-dropped-old	Shows the number of DHCPv6 packets dropped in request processing because the server *drop-old-packets* attribute was exceeded in this time interval.
response-dropped-old	Shows the number of DHCPv6 packets dropped in response processing because the server *drop-old-packets* attribute was exceeded in this time interval.
invalid-clients	Shows the number of DHCPv6 packets from invalid clients dropped in this time interval. Server configuration prevents responding to the packet.
unknown-links	The number of DHCPv6 packets dropped from unknown links in this time interval.
client-class-fails	Shows the number of DHCPv6 packets dropped because the server could not assign a client-class.
queue-limited-solicits-dropped	Shows the number of SOLICITs that were dropped because the request buffer limit (controlled by *discover-queue-limit*) was exceeded.
request-dropped-others	Shows the number of DHCPv6 packets dropped in request processing for other reasons in this time interval.
response-dropped-others	Shows the number of DHCPv6 packets dropped in response processing for other reasons in this time interval.
Packets Received (TCP IPv6) Statistics	
tcp-current-connections	Shows the number of currently open TCP connections to the DHCP server for DHCPv6 Active and Bulk Leasequery.
tcp-total-connections	Shows the number of TCP connections that were opened to the DHCP server for DHCPv6 Active and Bulk Leasequery in this time interval.
bulk-leasequeries	Shows the number of LEASEQUERY packets received over all TCP connections in this time interval.
tcp-connections-dropped	Shows the number of TCP requests that were terminated in this time interval because the TCP connection was closed (or reset) by the DHCPv6 requester. This excludes normal connection closes or server reloads.

Statistic	Description
active-leasequeries	Shows the number of ACTIVELEASEQUERY packets received over all TCP connections in this time interval.
Packets Sent (TCP IPv6) Statistics	
bulk-leasequery-replies	Shows the number of LEASEQUERY-REPLY packets sent over all TCP connections in this time interval.
bulk-leasequery-data	Shows the number of LEASEQUERY-DATA packets sent over all TCP connections in this time interval.
bulk-leasequery-done	Shows the number of LEASEQUERY-DONE packets sent over all TCP connections in this time interval.
active-leasequery-replies	Shows the number of LEASEQUERY-REPLY packets sent over all TCP connections in this time interval for active leasequery.
active-leasequery-data	Shows the number of LEASEQUERY-DATA packets sent over all TCP connections in this time interval for active leasequery.
active-leasequery-done	Shows the number of LEASEQUERY-DONE packets sent over all TCP connections in this time interval for active leasequery.
Status Sent (TCP IPv6) Statistics	
tcp-lq-status-unspec-fail	Shows the number of LEASEQUERY-REPLY packets with a status code of UnspecFail(1) sent over TCP in this time interval.
tcp-lq-status-unknown-query	Shows the number of LEASEQUERY-REPLY packets with a status code of UnknownQueryType(7) sent over TCP in this time interval.
tcp-lq-status-malformed-query	Shows the number of LEASEQUERY-REPLY packets with a status code of MalformedQuery(8) sent over TCP in this time interval.
tcp-lq-status-not-configured	Shows the number of LEASEQUERY-REPLY packets with a status code of NotConfigured(9) sent over TCP in this time interval.
tcp-lq-status-not-allowed	Shows the number of LEASEQUERY-REPLY packets with a status code of NotAllowed(10) sent over TCP in this time interval.
tcp-lq-status-query-terminated	Shows the number of LEASEQUERY-REPLY/LEASEQUERY-DONE packets with a status code of QueryTerminated(11) sent over TCP in this time interval.
tcp-lq-status-data-missing	Shows the number of LEASEQUERY-REPLY packets with a status code of DataMissing sent over TCP in this time interval.
tcp-lq-status-catch-up-complete	Shows the number of LEASEQUERY-DATA packets with a status code of CatchUpComplete sent over TCP in this time interval.