Network Switch CLI Guide

DNS Client Commands

Contents

DNS Client Commands

clear host

Syntax	clear host {*hostname*	*****}
Parameters	*hostname*—Name of the host for which hostname-to-address mappings are to be deleted from the DNS client name-to-address cache.

*—Specifies that all the dynamic hostname-to-address mappings are to be deleted from the DNS client name-to-address cache. |
Default Configuration	No hostname-to-address mapping entries are deleted from the DNS clientname-to-address cache.
Command Mode	Privileged EXEC mode.
Usage	Use the **clear host** command in privileged EXEC mode to delete dynamic hostname-to-address mapping entries from the DNS client name-to-addresscache.
Example	The following example deletes all dynamic entries from the DNS client name-to-address cache.

switchxxxxxx# **clear host *** |
| **User Guideline** | To remove the dynamic entry that provides mapping information for a single hostname, use the *hostname* argument. To remove all the dynamic entries, use the***** keyword.
To define a static hostname-to-address mappings in the DNS hostname cache,use the **ip host** command.
To delete a static hostname-to-address mappings in the DNS hostname cache,use the **no ip host** command. |

Ip domain lookup

Syntax	ip domain lookup no ip domain lookup
Parameters	N/A
Default Configuration	Enabled.
Command Mode	Global Configuration mode.
Usage	Use the **ip domain lookup command** in Global Configuration mode to enable the IPDomain Naming System (DNS)-based host name-to-address translation. To disable the DNS, use the **no** form of this command.
Example	The following example enables DNS-based host name-to-address translation. switchxxxxxx(config)# **ip domain lookup**
User Guideline	-

ip domain name

Syntax	ip domain name *name* no ip domain name
Parameters	*name*—Default domain name used to complete unqualified host names. Do not include the initial period that separates an unqualified name from the domain name. Length: 1–158 characters. Maximum label length of each domain level is 63 characters.
Default Configuration	No default domain name is defined.
Command Mode	Global Configuration mode.
Usage	Use the **ip domain name** command in Global Configuration mode. to define a default domain name that the switch uses to complete unqualified hostnames(names without a dotted-decimal domain name). To delete the static defined default domain name, use the **no** form of this command.
Example	The following example defines the default domain name as 'www.website.com'. switchxxxxxx(config)# **ip domain name website.com**
User Guideline	Any IP hostname that does not contain a domain name (that is, any name without a dot) will have the dot and the default domain name appended to it before being added to the host table. Domain names and host names are restricted to the ASCII letters A through Z (case-insensitive), the digits 0 through 9, the underscore and the hyphen. A period(.) is used to separate labels. The maximum size of each domain level is 63 characters. The maximum name size is 158 bytes.

ip domain polling-interval

Syntax	ip domain polling-interval *seconds* no ip domain polling-interval
Parameters	*seconds*—Polling interval in seconds. The range is from (2*(R+1)*T) to 3600.
Default Configuration	The default value is 2 * (R+1) * T, where R is a value configured by the ip domain retry command. T is a value configured by the ip domain timeout command.
Command Mode	Global Configuration mode.
Usage	Use the **ip domain polling-interval** command in Global Configuration mode to specify the polling interval. Use the **no** form of this command to return to the default behavior.
Example	The following example shows how to configure the polling interval of 100 seconds: switchxxxxxx(config)# **ip domain polling-interval 100**
User Guideline	Some applications communicate with the given IP address continuously. DNS clients for such applications, which have not received resolution of the IP addressor have not detected a DNS server using a fixed number of retransmissions, return an error to the application and continue to send DNS Request messages for the IP address using the polling interval.

ip domain retry

Syntax	**ip domain retry** *number* **no ip domain retry**
Parameters	*number*—Number of times to retry sending a DNS query to the DNS server. The range is from 0 to16.
Default Configuration	The default value is 1.
Command Mode	Global Configuration mode.
Usage	Use the **ip domain retry** command in Global Configuration mode to specify the number of times the device will send Domain Name System (DNS) queries when there is no replay. To return to the default behavior, use the **no** form of this command.
Example	The following example shows how to configure the switch to send out 10 DNS queries before giving up: switchxxxxxx(config)# **ip domain retry 10**
User Guideline	The number argument specifies how many times the DNS query will be sent to a DNS server until the switch decides that the DNS server does not exist.

ip domain timeout

Syntax	**ip domain timeout** *seconds* **no ip domain timeout**
Parameters	*seconds*—Time, in seconds, to wait for a response to a DNS query. The range is from 1 to 60.
Default Configuration	The default value is 2 seconds.
Command Mode	Global Configuration mode.
Usage	Use the **ip domain timeout** command in Global Configuration mode to specify the amount of time to wait for a response to a DNS query. To return to the default behavior, use the **no** form of this command.
Example	The following example shows how to configure the switch to wait 50 seconds for a response to a DNS query: switchxxxxxx(config)# **ip domain timeout 50**
User Guideline	Use the command to change the default time out value. Use the **no** form of this command to return to the default time out value.

ip host

Syntax	**ip host** hostname address1 [address2...address8] **no ip host** name **ip host** name [address1...address8]
Parameters	hostname—Name of the host. (Length: 1–158 characters. Maximum label length of each domain level is 63 characters). address1—Associated host IP address (IPv4 or IPv6, if IPv6 stack is supported). address2...address8—Up to seven additional associated IP addresses,delimited by a single space (IPv4 or IPv6, if IPv6 stack is supported).
Default Configuration	No host is defined.
Command Mode	Global Configuration mode.
Usage	Use the **ip host** Global Configuration mode command to define the static host name-to-address mapping in the DNS host name cache. Use the **no** form of this command to remove the static host name-to-address mapping.
Example	The following example defines a static host name-to-address mapping in the host cache. switchxxxxxx(config)# **ip host** accounting.website.com176.10.23.1
User Guideline	Host names are restricted to the ASCII letters A through Z (case-insensitive), the digits 0 through 9, the underscore and the hyphen. A period (.) is used to separate labels. An IP application will receive the IP addresses in the following order: IPv6 addresses in the order specified by the command. IPv4 addresses in the order specified by the command. Use the **no** format of the command with the address1...address8 argument to delete the specified addresses. The entry is deleted if all its addresses are deleted.

ip name-server

Syntax	**ip name-server** server1-address [server-address2...erver-address8] **no ip name-server** [server-address1...server-address8]
Parameters	server-address1—IPv4 or IPv6 addresses of a single name server. server-address2...server-address8—IPv4 or IPv6 addresses of additional name servers.
Default Configuration	No name server IP addresses are defined.
Command Mode	Global Configuration mode.
Usage	Use the **ip name-server** command in Global Configuration mode to specify the address of one or more name servers to use for name and address resolution. Use the **no** form of this command to remove the static specified addresses.
Example	The following example shows how to specify IPv4 hosts 172.16.1.111, 172.16.1.2,and IPv6 host 2001:0DB8::3 as the name servers: switchxxxxxx(config)#**ip name-server 172.16.1.111 172.16.1.2 2001:0DB8::3**
User Guideline	The preference of the servers is determined by the order in which they were entered. Each **ip name-server** command replaces the configuration defined by the previous one (if one existed).

show hosts

Syntax	**show hosts** [all	*hostname*]
Parameters	all—The specified host name cache information is to be displayed for all configured DNS views. This is the default. *hostname*—The specified host name cache information displayed is to be limited to entries for a particular host name.
Default Configuration	Default is all.
Command Mode	Privileged EXEC mode.
Usage	Use the **show hosts** command in privileged EXEC mode to display the default domain name, the style of name lookup service, a list of name server hosts, and the cached list of hostnames and addresses.
Example	The following is sample output with no parameters specified: switchxxxxxx# **show hosts** Name/address lookup is enabled Domain Timeout: 3 seconds Domain Retry: 4 times Domain Polling Interval: 10 seconds Default Domain Table Source Interface Preference Domain Static website.com dhcpv6 vlan 100 1 qqtca.com dhcpv6 vlan 100 2 company.com dhcpv6 vlan1100 1 pptca.com Name Server Table Source Interface Preference IP Address Static 1 192.0.2.204 Static 2 192.0.2.205 Static 3 192.0.2.105 dhcpv6 vlan1001 2002:0:22AC::11:231A:0BB4 DHCPv4 vlan1 1 192.1.122.20 DHCPv4 vlan1 2 154.1.122.20 Casche Table Flags: (static/dynamic, OK/Ne/??) OK – Okay, Ne – Negative Cache, ?? – No Response Host Flag Address; Age... in preference order example1.company.com (dynamic, OK) 2002:0:130F::0A0:1504:0BB4;1 112.0.2.10 176.16.8.8;123 124 173.0.2.30;39 example2.company.com (dynamic, ??) example3.company.com (static, OK) 120.0.2.27 example4.company.com(dynamic,OK)24 173.0.2.30;15 example5.company.com (dynamic, Ne);12
User Guideline	This command displays the default domain name, a list of name server hosts, and the cached list of host names and addresses.