network route commands

ONTAP 9.8 commands

NetApp
February 11, 2024

This PDF was generated from https://docs.netapp.com/us-en/ontap-cli-98/network-route-create.html on February 11, 2024. Always check docs.netapp.com for the latest.

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network route commands

network route create

Create a static route

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `network route create` command creates a static route within a Vserver.

Parameters

`-vserver <vserver>` - Vserver Name

Use this parameter to specify the Vserver on which the route is to be created.

`-destination <IP Address/Mask>` - Destination/Mask

Use this parameter to specify the IP address and subnet mask of the route's destination. The format for this value is: address, slash ("/"), mask. `0.0.0.0/0` is a valid destination value to create default IPv4 route. And `::/0` is a valid destination value to create default IPv6 route

`-gateway <IP Address>` - Gateway

Use this parameter to specify the IP address of the gateway server leading to the route's destination.

`[-metric <integer>]` - Metric

Use this parameter to specify the metric of the route.

Examples

The following example creates default routes within Vserver vs0 for IPv4 and IPv6.

```
cluster1::> network route create -vserver vs0 -destination 0.0.0.0/0
-gateway 10.61.208.1
cluster1::> network route create -vserver vs0 -destination ::/0 -gateway
3ffe:1::1
```

network route delete

Delete a static route

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `network route delete` command deletes a static route from a Vserver.

Parameters

-vserver <vserver> - Vserver Name

Use this parameter to specify the Vserver on which the route is to be deleted.

-destination <IP Address/Mask> - Destination/Mask

Use this parameter to specify the IP address and subnet mask of the route's destination. The format for this value is: address, slash ("/"), mask. For example, `0.0.0.0/0` is a correctly formatted value for the -destination parameter.

-gateway <IP Address> - Gateway

Use this parameter to specify the gateway on which the route is to be deleted.

Examples

The following example deletes a route within Vserver vs0 for destination 0.0.0.0/0.

```
cluster1::network route delete -vserver vs0 -destination 0.0.0.0/0
```

network route show-lifs

Show the Logical Interfaces for each route entry

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `network route show-lifs` command displays the association of static routes and Logical Interfaces (LIFs) within one or more Vservers. You can view routes within specified Vservers, routes with specified destinations, and routes with specified gateways.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver>] - Vserver Name

Use this parameter to display only routes that have the specified Vserver as their origin.

[-destination <IP Address/Mask>] - Destination/Mask

Use this parameter to display only routes that have the specified IP address and subnet mask as their destination. The format for this value is: address, slash ("/"), mask. For example, `0.0.0.0/0` is a valid value for the -destination parameter.

[-gateway <IP Address>] - Gateway

Use this parameter to display only routes that have the specified IP address as their gateway.

[-lifs <lif-name>,…] - Logical Interfaces

Use this parameter to display only the routes that are associated with the specified Logical Interfaces (LIFs).

[-address-family {ipv4|ipv6|ipv6z}] - Address Family

Use this parameter to display only the routes that belong to specified address family.

network route show

Display static routes

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `network route show` command displays a group of static routes within one or more Vservers. You can view routes within specified Vservers, routes with specified destinations, and routes with specified gateways.

Parameters

{ [-fields <fieldname>,…]

Use this parameter to display only certain fields of the routing tables.

| [-instance] }

Use this parameter to display all fields of the routing tables.

[-vserver <vserver>] - Vserver Name

Use this parameter to display only routes that have the specified Vserver as their origin.

[-destination <IP Address/Mask>] - Destination/Mask

Use this parameter to display only routes that have the specified IP address and subnet mask as their destination. The format for this value is: address, slash ("/"), mask. The example below has `0.0.0.0/0` as a valid value for the -destination parameter.

[-gateway <IP Address>] - Gateway

Use this parameter to display only routes that have the specified IP address as their gateway.

[-metric <integer>] - Metric

Use this parameter to display only routes that have the specified metric.

[-ipspace <IPspace>] - IPspace Name

Use this parameter to optionally specify the IPspace associated with the Vserver. This parameter can be used in conjunction with the Vserver parameter in order to configure the same route across multiple Vservers within an IPspace.

[-address-family {ipv4|ipv6|ipv6z}] - Address family of the route

Use this parameter to display only the routes that have the specified address-family.

Examples

The following example displays information about all routing groups.

```
cluster1::> network route show
  (network route show)
Server              Destination     Gateway         Metric
------------------- --------------- --------------- ------
node1
                    0.0.0.0/0       10.61.208.1     20
node2
                    0.0.0.0/0       10.61.208.1     20
vs0
                    0.0.0.0/0       10.61.208.1     20
3 entries were displayed.
```

network route active-entry show

Display active routes

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `network route active-entry show` command displays installed routes on one or more nodes. You can view routes within specified nodes, within specified Vservers, routes in specified subnet groups, and routes with specified destinations.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-verbose] (privilege: advanced)

Use this parameter to display the reference count, use, interface, and Path MTU fields.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver>] - Vserver Name (privilege: advanced)

Displays the routes that have the specified Vserver as their origin.

[-node {<nodename>|local}] - Node (privilege: advanced)

Displays the routes from the specified node.

[-address-type {ipv4|ipv6|ipv6z}] - Address Family (privilege: advanced)

Displays the routes that have the specified IP address type.

[-subnet-group <IP Address/Mask>] - Subnet Group (privilege: advanced)

Displays the group of routes that belong to the specified subnet. Routes within the specified subnet group are used first before the default set. The "default" subnet group is a system-provided set of default routes.

[-destination <text>] - Destination (privilege: advanced)

Displays the routes that have the specified IP address or subnet as their destination. The format for the subnet is: <address>/<mask>. IPv6 address includes the scope value after percentage ("%"). 0.0.0.0/0, 169.254.4.60, ff02::%e0a/32 and fe80::250:56ff:fea6:db7c%e0b are valid values for this parameter.

[-interface <text>] - Interface Name (privilege: advanced)

Displays the routes that use the specified interface to transmit packets to the destination. A valid interface has the format of {<netport>|<ifgrp>}, such as "e0a", "e0a-1" and "a0a", or it can be a loopback interface, such as "lo" and "losk".

[-route-interface-address <text>] - Route Interface Address (privilege: advanced)

Displays the routes that use the specified IP address on the transmit interface.

[-gateway <text>] - Gateway (privilege: advanced)

Displays the routes that have the specified gateway. The gateway can be an IP address, such as "10.10.2.1" and "fe80::1%lo", MAC address, such as "0:5:73:a0:1:7" or refer to a local link, such as "link#3".

[-metric <integer>] - Metric (privilege: advanced)

Displays the routes that have the specified metric.

[-flags <text>] - Flags (privilege: advanced)

Displays the routes that have the specified flags. The type string for "-flags" needs to be one or more of the following {U|G|H|R|D|S|1|2|L|C} in the order shown.

- U - Usable
- G - Gateway
- H - Host
- R - Reject
- D - Dynamic
- S - Static
- 1 - Protocol1
- 2 - Protocol2
- L - Llinfo
- C - Clone

Multiple values can be specified (for example: UHL).

[-reference-count <integer>] - Reference Count (privilege: advanced)

Displays the routes that have the specified reference count in the system.

[-lookup-count <integer>] - Lookup Count (privilege: advanced)

Displays the routes that have the specified use count (the count of lookups for the route).

[-path-mtu <integer>] - Path MTU (privilege: advanced)

Displays the routes that have the specified path maximum transmission unit.

Examples

The following example displays active routes on all nodes in Vserver vs0 with subnet-group 10.10.10.0/24.

```
cluster1::*> network route active-entry show -vserver vs0 -subnet-group
10.10.10.0/24
  (network route active-entry show)

Vserver: vs0
Node: node1
Subnet Group: 10.10.10.0/24
Destination             Gateway              Interface   Metric  Flags
----------------------  -------------------  ---------   ------  -----
default                 10.10.10.1           e0c              0  UGS

Vserver: vs0
Node: node2
Subnet Group: 10.10.10.0/24
Destination             Gateway              Interface   Metric  Flags
----------------------  -------------------  ---------   ------  -----
default                 10.10.10.1           e0c              0  UGS
2 entries were displayed.
```

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