network connections commands

ONTAP 9.7 commands

NetApp
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network connections active show-clients

Show a count of the active connections by client

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

Description

The `network connections active show-clients` command displays information about client connections, including the client's IP address and the number of client connections.

> The results of this command set are refreshed independently every 30 seconds and might not reflect the immediate state of the system.

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.

[-node {<nodename>|local}] - Node

Use this parameter to display information only about the connections on the node you specify.

[-vserver <vserver>] - Vserver

This parameter is used by the system to break down the output per vserver.

[-remote-address <Remote IP>] - Remote IP Address

Use this parameter to display information only about the connections that use the remote IP address you specify.

[-count <integer>] - Client Count

Use this parameter to only clients with the number of active client connections you specify.

Examples

The following example displays information about active client connections:

```
cluster1::> network connections active show-clients
Node    Vserver Name    Client IP Address     Count
------  --------------  -----------------     ------
node0   vs1             192.0.2.253                1
        vs2             192.0.2.252                2
        vs3             192.0.2.251                5
node1   vs1             192.0.2.250                1
        vs2             192.0.2.252                3
        vs2             customer.example.com       4
```

network connections active show-lifs

Show a count of the active connections by logical interface

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

Description

The `network connections active show-lifs` command displays the number of active connections on each logical interface, organized by node and Vserver.

> The results of this command set are refreshed independently every 30 seconds and might not reflect the immediate state of the system.

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.

[-node {<nodename>|local}] - Node

Use this parameter to display information only about the connections on the node you specify.

[-vserver <vserver>] - Vserver

Use this parameter to display information only about the connections that are using the node or Vserver you specify.

[-lif-name <lif-name>] - Logical Interface Name

Use this parameter to display information only about the connections that are using the logical interface you specify.

[-count <integer>] - Client Count

Use this parameter to display only logical interfaces with the number of active client connections you specify.

[-blocked-count <integer>] - (DEPRECATED)-Load Balancing Blocking Count

> This parameter has been deprecated and may be removed in a future version of Data ONTAP.

Use this parameter to display information only about data logical interfaces blocked from migrating and the connection that is blocking it.

Examples

The following example displays information about the servers and logical interfaces being used by all active connections:

```
cluster1::> network connections active show-lifs
Node      Vserver Name  Interface Name  Count
--------  ------------  --------------- ------
node0
          vs0           datalif1             3
          vs0           cluslif1             6
          vs0           cluslif2             5
node1
          vs0           datalif2             3
          vs0           cluslif1             3
          vs0           cluslif2             5
node2
          vs1           datalif2             1
          vs1           cluslif1             5
          vs1           cluslif2             3
node3
          vs1           datalif1             1
          vs1           cluslif1             2
          vs1           cluslif2             1
```

At privilege levels above "admin", the command displays an extra column.

```
cluster1::*> network connections active show-lifs
                                                LB Migrate
Node       Vserver Name  Interface Name  Count  Blocking
--------   ------------  --------------- ------ ----------
node0
           vs0           datalif1             3          0
           vs0           cluslif1             6          0
           vs0           cluslif2             5          2
node1
           vs0           datalif2             3          0
           vs0           cluslif1             3          0
           vs0           cluslif2             5          0
node2
           vs1           datalif2             1          0
           vs1           cluslif1             5          0
           vs1           cluslif2             3          2
node3
           vs1           datalif1             1          0
           vs1           cluslif1             2          0
           vs1           cluslif2             1          0
```

network connections active show-protocols

Show a count of the active connections by protocol

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

Description

The `network connections active show-protocols` command displays the number of active connections per protocol, organized by node.

> The results of this command set are refreshed independently every 30 seconds and might not reflect the immediate state of the system.

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.

[-node {<nodename>|local}] - Node

Use this parameter to display information only about the connections on the node you specify.

[-vserver <vserver>] - Vserver

This parameter is used by the system to break down the output per vserver.

[-proto {UDP|TCP}] - Protocol

Use this parameter to display information only about the connections that use the network protocol you specify. Possible values include tcp (TCP), udp (UDP), and NA (not applicable).

[-count <integer>] - Client Count

Use this parameter to display only protocols with the number of active client connections you specify.

Examples

The following example displays information about all network protocols being used by active connections:

```
cluster1::> network connections active show-protocols
Node      Vserver Name    Protocol   Count
-------  --------------  ---------  ------
node0
          vs1             UDP            19
          vs1             TCP            11
          vs2             UDP            17
node1
          vs1             UDP            14
          vs2             TCP            10
```

network connections active show-services

Show a count of the active connections by service

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

Description

The `network connections active show-services` command displays the number of active connections by protocol service, organized by node.

> The results of this command set are refreshed independently every 30 seconds and might not reflect the immediate state of the system.

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.

[-node {<nodename>|local}] - Node

Use this parameter to display information only about the connections on the node you specify.

[-vserver <vserver>] - Vserver

This parameter is used by the system to break down the output per vserver

[-service <protocol service>] - Protocol Service

Use this parameter to display information only about the connections that use the protocol service you specify. Possible values include: nfs, iscsi, and loopback.

[-count <integer>] - Client Count

Use this parameter to display information only about protocol services with the number of active client connections you specify.

Examples

The following example displays information about all protocol services being used by active connections:

```
cluster1::> network connections active show-services
Node        Vserver Name    Service    Count
---------  --------------  ---------  ------
node0
           vs1             mount           3
           vs1             nfs            14
           vs1             nlm_v4          4
           vs1             cifs_srv        3
           vs1             port_map       18
           vs2             rclopcp        27
node1
           vs1             nfs             5
           vs2             rclopcp        12
           vs2             nfs             4
           vs2             port_map        8
```

network connections active show

Show the active connections in this cluster

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

Description

The `network connections active show` command displays information about active network connections.

The results of this command set are refreshed independently every 30 seconds and might not reflect the immediate state of the system.

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.

| [-print-ip-addresses]

Print IP addresses for remote hosts — do not attempt to resolve the addresses to a hostname.

| [-instance] }

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

[-node {<nodename>|local}] - Node

Selects the connections that match this parameter value.

[-cid <Cid>] - Connection ID

Selects the connections that match this parameter value.

[-vserver <vserver>] - Vserver

Selects the connections that match this parameter value.

[-lif-name <lif-name>] - Logical Interface Name

Selects the connections that match this parameter value.

[-local-address <IP Address>] - Local IP address

Selects the connections that match this parameter value.

[-local-port <integer>] - Local Port

Selects the connections that match this parameter value.

[-remote-ip <InetAddress>] - Remote IP Address

Selects the connections that match this parameter value.

[-remote-host <Remote IP>] - Remote Host

Selects the connections that match this parameter value.

[-remote-port <integer>] - Remote Port

Selects the connections that match this parameter value.

[-proto {UDP|TCP}] - Protocol

Selects the connections that match this parameter value. Possible values are tcp (TCP), udp (UDP), and NA (not applicable).

[-lifid <integer>] - Logical Interface ID

Selects the connections that match this parameter value.

[-service <protocol service>] - Protocol Service

Selects the connections that match this parameter value. Possible values include: nfs, iscsi, and loopback.

[-lru {yes|no}] - Least Recently Used

Selects the connections that match this parameter value.

[-blocks-lb {true|false}] - Connection Blocks Load Balance Migrate

Selects the logical interfaces that are blocked (true) or not blocked (false) from migrating due to an active client connection.

Examples

The following example displays information about active network connections for the node named node0:

```
cluster1::> network connections active show node -node0

Vserver Interface        Remote
Name    Name:Local Port  IP Address:Port   Protocol/Service
------- ---------------- ----------------- ----------------
node0   cluslif1:7070    192.0.2.253:48621 UDP/rclopcp
node0   cluslif1:7070    192.0.2.253:48622 UDP/rclopcp
node0   cluslif2:7070    192.0.2.252:48644 UDP/rclopcp
node0   cluslif2:7070    192.0.2.250:48646 UDP/rclopcp
node0   cluslif1:7070    192.0.2.245:48621 UDP/rclopcp
node0   cluslif1:7070    192.0.2.245:48622 UDP/rclopcp
node0   cluslif2:7070    192.0.2.251:48644 UDP/rclopcp
node0   cluslif2:7070    192.0.2.251:48646 UDP/rclopcp
node0   cluslif1:7070    192.0.2.248:48621 UDP/rclopcp
node0   cluslif1:7070    192.0.2.246:48622 UDP/rclopcp
node0   cluslif2:7070    192.0.2.252:48644 UDP/rclopcp
node0   cluslif2:7070    192.0.2.250:48646 UDP/rclopcp
node0   cluslif1:7070    192.0.2.254:48621 UDP/rclopcp
node0   cluslif1:7070    192.0.2.253:48622 UDP/rclopcp
[...]
```

At privilege levels above "admin", the command displays an extra column.

```
cluster1::*> network connections active show node -node0
                                                                Blocks
Vserver Interface        Remote                                 LB
Name    Name:Local Port  IP Address:Port   Protocol/Service Migrate
------- ---------------- ----------------- ---------------- -------
node0   cluslif1:7070    192.0.2.253:48621 UDP/rclopcp      false
node0   cluslif1:7070    192.0.2.253:48622 UDP/rclopcp      false
node0   cluslif2:7070    192.0.2.252:48644 UDP/rclopcp      false
node0   cluslif2:7070    192.0.2.250:48646 UDP/rclopcp      false
node0   cluslif1:7070    192.0.2.245:48621 UDP/rclopcp      false
node0   cluslif1:7070    192.0.2.245:48622 UDP/rclopcp      false
node0   cluslif2:7070    192.0.2.251:48644 UDP/rclopcp      false
node0   cluslif2:7070    192.0.2.251:48646 UDP/rclopcp      false
node0   cluslif1:7070    192.0.2.248:48621 UDP/rclopcp      false
node0   cluslif1:7070    192.0.2.246:48622 UDP/rclopcp      false
node0   cluslif2:7070    192.0.2.252:48644 UDP/rclopcp      false
node0   cluslif2:7070    192.0.2.250:48646 UDP/rclopcp      false
node0   cluslif1:7070    192.0.2.254:48621 UDP/rclopcp      false
node0   cluslif1:7070    192.0.2.253:48622 UDP/rclopcp      false
[...]
```

network connections listening show

Show the listening connections in this cluster

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

Description

The `network connections listening show` command displays information about network connections that are in an open and listening state.

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.

[-node {<nodename>|local}] - Node

Selects the listening connections that match this parameter value.

[-mgmt-cid <integer>] - Management Connection ID

Selects the listening connections that match this parameter value.

[-vserver <vserver>] - Vserver

Selects the listening connections that match this parameter value.

[-cid <integer>] - System Connection ID

Selects the listening connections that match this parameter value.

[-lif-name <lif-name>] - Logical Interface Name

Selects the listening connections that match this parameter value.

[-local-address <IP Address>] - Local IP Address

Selects the listening connections that match this parameter value.

[-local-port <integer>] - Local Port

Selects the listening connections that match this parameter value.

[-remote-ip <InetAddress>] - Remote IP Address

Selects the listening connections that match this parameter value.

[-remote-host <Remote IP>] - Remote Host

Selects the listening connections that match this parameter value.

[-remote-port <integer>] - Remote Port

Selects the listening connections that match this parameter value.

[-proto {UDP|TCP}] - Protocol

Selects the listening connections that match this parameter value. Possible values include tcp (TCP), udp (UDP), and NA (not applicable).

[-lifid <integer>] - Logical Interface ID

Selects the listening connections that match this parameter value.

[-service <protocol service>] - Protocol Service

Selects the listening connections that match this parameter value. Possible values include: nfs, iscsi, and loopback.

[-lru {yes|no}] - Least Recently Used

Selects the listening connections that match this parameter value.

Examples

The following example displays information about all listening network connections:

```
cluster1::> network connections listening show
Vserver Name Interface Name:Local Port  Protocol/Service
------------ -------------------------- -----------------
node0        cluslif1:7700              UDP/rclopcp
node0        cluslif2:7700              UDP/rclopcp
node1        cluslif1:7700              UDP/rclopcp
node1        cluslif2:7700              UDP/rclopcp
node2        cluslif1:7700              UDP/rclopcp
node2        cluslif2:7700              UDP/rclopcp
node3        cluslif1:7700              UDP/rclopcp
node3        cluslif2:7700              UDP/rclopcp
8 entries were displayed.
```

The following example displays detailed information about listening network connections for the node named node0:

```
cluster1::> network connections listening show -node node0
          Node: node0
Management Connection Id: 0
  System Connection Id: 0
         Vserver: vs0
 Logical Interface Name: datalif1
    Local IP address: 192.0.2.130
       Local Port: 111
    Remote IP address:
       Remote Port: 0
        Protocol: UDP
  Logical Interface Id: 1029
    Protocol Service: port_map
   least recently used: yes
          Node: node0
Management Connection Id: 1
  System Connection Id: 0
         Server: vs0
 Logical Interface Name: datalif2
    Local IP address: 192.0.2.131
       Local Port: 111
    Remote IP address:
       Remote Port: 0
        Protocol: UDP
  Logical Interface Id: 1030
    Protocol Service: port_map
   least recently used: yes
```