



# **network tuning commands**

## **ONTAP 9.8 commands**

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# network tuning commands

## network tuning icmp modify

Modify ICMP tuning options

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

### Description

This command displays options which can be used to fine tune icmp protocol behavior.

### Parameters

**-node {<nodename>|local}** - Node

Sets this parameter to indicate on which node the ICMP tuning options are modified.

**[-is-drop-redirect-enabled {true|false}]** - Drop redirect ICMP

Sets this parameter to drop redirect ICMP message.

**[-tx-icmp-limit <integer>]** - Maximum number of ICMP packets sent per second

Sets the maximum number of ICMP messages including TCP RSTs can be sent per second.

**[-redirect-timeout <integer>]** - Maximum seconds for route redirect timeout

Sets this parameter to indicate the number of seconds after which the route is deleted. Value of zero means infinity. The default value is 300 seconds.

### Examples

```
cluster1::> network tuning icmp modify -node node1 -is-drop-redirect
-enabled false
```

## network tuning icmp show

Show ICMP tuning options

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

### Description

This command displays the current state of the ICMP tuning options for the given node.

### 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` ] }**

Displays all ICMP tuning options.

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

Specifies the node for which the ICMP tuning options are displayed.

**[`-is-drop-redirect-enabled` {true|false}] - Drop redirect ICMP**

Displays all entries that match the "is-drop-redirect-enabled" value.

**[`-tx-icmp-limit` <integer>] - Maximum number of ICMP packets sent per second**

Displays all entries that match the "tx-icmp-limit" value.

**[`-redirect-timeout` <integer>] - Maximum seconds for route redirect timeout**

Displays all the entries that match the "redirect-timeout" value.

## Examples

```
cluster1::> network tuning icmp show
Drop Redirect Maximum ICMP      Redirect Timeout
Node      ICMP          Sends per Second  in Seconds
-----
node1
          true          100              300
```

## network tuning icmp6 modify

Modify ICMPv6 tuning options

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

### Description

This command displays options which can be used to fine tune icmpv6 protocol behavior.

### Parameters

**-node** {<nodename>|local} - Node

Sets this parameter to indicate on which node the ICMPv6 tuning options are modified.

**[`-is-v6-redirect-accepted` {true|false}] - Accept redirects via ICMPv6**

Sets this parameter to indicate whether or not redirect ICMPv6 messages are accepted.

**[`-redirect-v6-timeout` <integer>] - Maximum seconds for route redirect timeout**

Sets this parameter to indicate the number of seconds after which the route is deleted. Value of zero means infinity. The default value is 300 seconds.

**[-tx-icmp6-err-limit <integer>] - Maximum number of ICMPv6 error messages sent per second**  
Sets the maximum number of ICMPv6 error messages that can be sent per second.

## Examples

```
cluster1::> network tuning icmp6 modify -node node1 -is-v6-redirect  
-accepted false
```

## network tuning icmp6 show

Show ICMPv6 tuning options

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

### Description

This command displays the current state of the ICMPv6 tuning options for the given node.

### 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 ] }**

Displays all ICMPv6 tuning options.

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

Specifies the node for which the ICMPv6 tuning options are displayed.

**[-is-v6-redirect-accepted {true|false}] - Accept redirects via ICMPv6**

Displays all entries that match the "is-v6-redirect-accepted" value.

**[-redirect-v6-timeout <integer>] - Maximum seconds for route redirect timeout**

Displays all the entries that match the "redirect-v6-timeout" value.

**[-tx-icmp6-err-limit <integer>] - Maximum number of ICMPv6 error messages sent per second**

Displays all entries that match the "tx-icmp6-err-limit" value.

## Examples

```

cluster1::> network tuning icmp6 show
Accept Redirect Maximum ICMPv6 Error Redirect Timeout
Node          ICMPv6          Sends per Second    in Seconds
-----
node1
              true           100                 300

```

## network tuning tcp modify

Modify TCP tuning options

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

### Description

This command sets TCP tuning options on the node.

### Parameters

**-node {<nodename>|local} - Node**

Indicates on which node the TCP tuning options will be modified.

**[-is-path-mtu-discovery-enabled {true|false}] - Path MTU discovery enabled**

Enables path MTU discovery feature.

**[-is-rfc3465-enabled {true|false}] - RFC3465 enabled**

Enables the rfc3465 feature.

**[-max-cwnd-increment <integer>] - Maximum congestion window segments incrementation**

Sets the maximum congestion window increment segments during slow start.

**[-is-rfc3390-enabled {true|false}] - RFC3390 enabled**

Enables the rfc3390 feature.

**[-is-sack-enabled {true|false}] - SACK support enabled**

Enables the selective ACK feature.

### Examples

```

cluster1::> network tuning tcp modify -node node1 -is-path-mtu-discovery
-enabled false

```

## network tuning tcp show

Show TCP tuning options

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

## Description

This command displays the current state of the TCP tuning options for the given node.

## 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 ] }

Displays all TCP tuning options.

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

Specifies the node for which the TCP tuning options will be displayed.

[-is-path-mtu-discovery-enabled {true|false}] - Path MTU discovery enabled

Displays all entries that match the "is-path-mtu-discovery-enabled" value.

[-is-rfc3465-enabled {true|false}] - RFC3465 enabled

Displays all entries that match the "is-rfc3465-enabled" value.

[-max-cwnd-increment <integer>] - Maximum congestion window segments incrementation

Displays all entries that match the "max-cwnd-increment" value.

[-is-rfc3390-enabled {true|false}] - RFC3390 enabled

Displays all entries that match the "is-rfc3390-enabled" value.

[-is-sack-enabled {true|false}] - SACK support enabled

Displays all entries that match the "is-sack-enabled" value.

## Examples

```
cluster1::> network tuning tcp show
      Path MTU          Maximum          Selective
Node   Discovery  RFC3465 Congestion Window RFC3390 Ack
      Enabled    Enabled Incrementation   Enabled Enabled
-----
node1
      true      true      2          true      true
```

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