



# **cluster kernel-service commands**

## ONTAP 9.8 commands

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# cluster kernel-service commands

## cluster kernel-service show

Display cluster service state in the kernel

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

### Description

```
The `cluster kernel-service show` command displays the following information from the master node for each node in the cluster:
```

- Node name
- The quorum status of that node
- The availability status of that node
- The operational status of that 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 ] }**

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

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

The node in the cluster where the information be being reported from. If this parameter is not specified, the command displays information about all nodes in the cluster.

**[-cluster-node <text>] - Cluster Node**

The node in the cluster that the information listed is regarding. If this parameter is specified, the command displays information only about the nodes with the specified state value.

**[-status-quorum {out-of-quorum|in-quorum}] - Quorum Status**

The quorum status of the node specified by `-cluster-node` . If this parameter is specified, the command displays information only about the nodes with the specified state value.

**[-status-avail {false|true|unknown}] - Availability Status**

The availability status of the node specified by `-cluster-node` . If this parameter is specified, the command displays information only about the nodes with the specified state value.

**[-status-oper {unknown|operational|not-operational}] - Operational Status**

The operational status of the node specified by `-cluster-node` . If this parameter is specified, the command displays information only about the nodes with the specified state value.

## Examples

The following example displays information about all nodes in the cluster:

```
cluster1::*> cluster kernel-service show
Master          Cluster          Quorum          Availability
Operational
Node           Node           Status          Status          Status
-----
cluster1-01    cluster1-01    in-quorum      true
operational
                cluster1-02    in-quorum      true
operational
2 entries were displayed.

cluster1::*> cluster kernel-service show -instance
Master Node: cluster1-01
      Cluster Node: cluster1-01
      Quorum Status: in-quorum
Availability Status: true
Operational Status: operational
Master Node: cluster1-01
      Cluster Node: cluster1-02
      Quorum Status: in-quorum
Availability Status: true
Operational Status: operational
2 entries were displayed.
```

## cluster kernel-service config modify

Modify cluster service state in the kernel

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

### Description

The `cluster kernel-service config modify` used to manage the cluster kernel-service subsystem for a node.

### Parameters

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

The node in the cluster where the configuration is being modified.

### **`[-kcs-enable-takeover {true|false}] - Initiated Takeover Enabled`**

This indicates whether the kernel service subsystem for this node will initiate a takeover of any node determined to be *out of quorum* if allowed by the HA subsystem.

## Examples

```
cluster1::*> cluster kernel-service config modify -node cluster1-01 -kcs
-enable-core false
```

## cluster kernel-service config show

Display cluster service state in the kernel

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

### Description

The `cluster kernel-service config show` is used to display the configuration of the cluster kernel service subsystem for one or more nodes.

### 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`**

The node in the cluster where the information be being reported from. If this parameter is not specified, the command displays information about all nodes in the cluster.

**`[-clam-master-id <integer>] - CLAM Master Node ID`**

The node ID of the master node for the cluster. If this parameter is specified, the command displays information only about the nodes with the specified state value.

**`[-kcs-enable-takeover {true|false}] - Initiated Takeover Enabled`**

Indicates if the distributed kernel service subsystem will initiate a takeover of any node determined to be *out of quorum* if the HA subsystem allows it. If this parameter is specified, the command displays information only about the nodes with the specified state value.

**`[-kcs-enabled {true|false}] - KCS Enabled`**

The state of the kernel service subsystem on the specified node. If this parameter is specified, the command displays information only about the nodes with the specified state value.

## `[-quorum-epoch <integer>] - Quorum Epoch`

The number of quorum changes for this node.

## Examples

```
cluster1::*> cluster kernel-service config show
Node                               Failover Core   Master           FSM
          Enabled Enabled Enabled Node           State
-----
cluster1-01      true   false  false  cluster1-01  Master:
Waiting for heartbeat timeout
cluster1-02      true   false  false  cluster1-01  Non-Master:
Waiting for backoff timeout
2 entries were displayed.

cluster1::*> cluster kernel-service config show -instance
Node: cluster1-01
          Master Node: cluster1-01
          Master Node ID: 1000
          Enabled: true
          Initiated Takeover Enabled: false
Initiated Core on Takeover Enabled: false
          Current FSM State: Master: Waiting for heartbeat timeout
          Running Version: 1
          Quorum Epoch: 115
          Voting Status: false
          CHAAQ Enabled: true

Node: cluster1-02
          Master Node: cluster1-01
          Master Node ID: 1000
          Enabled: true
          Initiated Takeover Enabled: false
Initiated Core on Takeover Enabled: false
          Current FSM State: Non-Master: Waiting for backoff
timeout
          Running Version: 1
          Quorum Epoch: 115
          Voting Status: false
          CHAAQ Enabled: true

2 entries were displayed.
```

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