

## metrocluster configuration-settings commands

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## **Table of Contents**

me	etrocluster configuration-settings commands	. 1
	metrocluster configuration-settings show-status	. 1
	metrocluster configuration-settings calibration measure	. 3
	metrocluster configuration-settings calibration show	. 4
	metrocluster configuration-settings connection check	. 6
	metrocluster configuration-settings connection connect	. 7
	metrocluster configuration-settings connection disconnect	. 11
	metrocluster configuration-settings connection show	13
	metrocluster configuration-settings dr-group create	19
	metrocluster configuration-settings dr-group delete	20
	metrocluster configuration-settings dr-group show	22
	metrocluster configuration-settings interface create	24
	metrocluster configuration-settings interface delete	28
	metrocluster configuration-settings interface show	30
	metrocluster configuration-settings mediator add	33
	metrocluster configuration-settings mediator remove	34
	metrocluster configuration-settings mediator show	34

# metrocluster configuration-settings commands metrocluster configuration-settings show-status

Display the configuration settings status for a MetroCluster setup

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

#### **Description**

The metrocluster configuration-settings show-status command displays the configuration settings status for nodes in a MetroCluster setup. If a DR group has not been created, then status for nodes in the local cluster only are displayed.

#### **Parameters**

#### { [-fields <fieldname>,...]

If you specify the -fields <fieldname>, ... parameter, the command displays only the fields that you specify.

#### | [-instance ] }

If this parameter is specified, the command displays detailed information about all entries.

#### [-cluster-uuid <UUID>] - Cluster UUID

If this parameter is specified, the command displays detailed information about all nodes in the cluster matching the specified cluster-uuid.

#### [-cluster <Cluster name>] - Cluster Name

If this parameter is specified, the command displays detailed information about all the nodes in the specified cluster.

#### [-node <text>] - Node Name

If this parameter is specified, the command displays information for the matching nodes.

#### [-configuration-status <text>] - Configuration Settings Status

If this parameter is specified, the command displays detailed information about all nodes with the specified configuration status.

#### [-config-error-info <text>] - Configuration Error Information

If this parameter is specified, the command displays detailed information about all nodes with the specified configuration error information.

#### **Examples**

The following example shows the display of MetroCluster setup status:

Nodes do not have a valid platform-specific personality value (equivalent to HAOSC parameter on non-Apollo platforms) for a MetroCluster setup.

	ster configuration-sett	
Cluster	Node	Configuration Settings
Status		
clusA	A1	not a MetroCluster setup
	A2	not a MetroCluster setup
2 entries were dis	splayed.	
MetroCluster setup	uses FC links rather	than IP
xref:{relative_pat	th}clusA::> metrocluste	er configuration-settings show-
status		
Cluster	Node	Configuration Settings
Status		
clusA	A1	not applicable for FC and
SAS		
	A2	not applicable for FC and
SAS		
2 entries were dis	splayed.	
Output of the comm	mand when MetroCluster	setup uses IP links and before
_		setup uses IP links and before
`"metrocluster con	nfiguration-settings dr	g-group create"` command is run:
`"metrocluster conclusA::> metroclus	nfiguration-settings dr ster configuration-sett	r-group create"` command is run:
`"metrocluster conclusA::> metroclus	nfiguration-settings dr	g-group create"` command is run:
`"metrocluster conclusA::> metroclus	nfiguration-settings dr ster configuration-sett	r-group create"` command is run:
`"metrocluster conclusA::> metroclus	nfiguration-settings dr ster configuration-sett	r-group create"` command is run:
`"metrocluster conclusA::> metroclus Cluster Status	nfiguration-settings dr ster configuration-sett Node	r-group create"` command is run: lings show-status Configuration Settings
`"metrocluster conclusA::> metroclus	nfiguration-settings dr ster configuration-sett Node	ready for DR group create regroup create" command is run: cings show-status Configuration Settings
"metrocluster conclusA::> metroclus Cluster Status	nfiguration-settings drater configuration-sett  Node  A1  A2	r-group create"` command is run: lings show-status Configuration Settings
`"metrocluster conclusA::> metroclus Cluster Status	nfiguration-settings drater configuration-sett  Node  A1  A2	ready for DR group create regroup create" command is run: cings show-status Configuration Settings
"metrocluster conclusA::> metroclus Cluster Status clusA 2 entries were dis	nfiguration-settings drater configuration-sett Node  A1 A2 splayed.	ready for DR group create regroup create" command is run: cings show-status Configuration Settings
"metrocluster conclusA::> metroclus Cluster Status clusA 2 entries were dis	nfiguration-settings drester configuration-sett Node  A1 A2 splayed. mand after `"metroclust	ready for DR group create ready for DR group create
"metrocluster conclusA::> metroclus Cluster Status clusA  2 entries were dis Output of the comm	nfiguration-settings drester configuration-sett Node  A1 A2 splayed. mand after `"metroclust	regroup create" command is run:  cings show-status Configuration Settings  ready for DR group create ready for DR group create ready for DR group create cer configuration-settings dr-grou
"metrocluster conclusA::> metroclus Cluster Status clusA  2 entries were dis Output of the comm	nfiguration-settings drater configuration-sett Node  A1 A2 splayed. mand after `"metroclust	regroup create" command is run:  cings show-status Configuration Settings  ready for DR group create ready for DR group create ready for DR group create cer configuration-settings dr-grou
"metrocluster conclusA::> metroclus Cluster Status clusA  2 entries were dis Output of the comm create" command i clusA::> metroclus	A1 A2 splayed. mand after `"metroclust ster configuration-sett	regroup create" command is run:  cings show-status  Configuration Settings  ready for DR group create  ready for DR group create  ready for DR group create  cer configuration-settings dr-grou  cings show-status
"metrocluster conclusA::> metroclus Cluster Status clusA  2 entries were dis Output of the comm create" command i clusA::> metroclus Cluster	A1 A2 splayed. mand after `"metroclust ster configuration-sett	regroup create" command is run:  cings show-status  Configuration Settings  ready for DR group create  ready for DR group create  ready for DR group create  cer configuration-settings dr-grou  cings show-status
"metrocluster conclusA::> metroclus Cluster Status clusA  2 entries were dis Output of the comm create" command i clusA::> metroclus Cluster	A1 A2 splayed. mand after `"metroclust ster configuration-sett Node	regroup create" command is run:  cings show-status  Configuration Settings  ready for DR group create  ready for DR group create  ready for DR group create  cer configuration-settings dr-grou  cings show-status
"metrocluster conclusA::> metroclus Cluster Status clusA  2 entries were dis Output of the comm create" command i clusA::> metroclus Cluster Status	A1 A2 splayed. mand after `"metroclust ster configuration-sett Node	regroup create" command is run:  cings show-status  Configuration Settings  ready for DR group create  ready for DR group create  ready for DR group create  cer configuration-settings dr-grou  cings show-status
"metrocluster conclusA::> metroclus Cluster Status  clusA  2 entries were dis Output of the comm create"` command i clusA::> metroclus Cluster Status	A1 A2 splayed. mand after `"metroclust ster configuration-sett Node	regroup create" command is run:  cings show-status Configuration Settings  ready for DR group create ready for DR group create cer configuration-settings dr-grou  cings show-status Configuration Settings
"metrocluster conclusA::> metroclus Cluster Status  clusA  2 entries were dis Output of the comm create"` command i clusA::> metroclus Cluster Status	A1 A2 splayed. mand after `"metroclust ster configuration-sett A1 A2 splayed. mand after `"motoclust ster configuration-sett Node  A1	regroup create" command is run:  cings show-status Configuration Settings  ready for DR group create ready for DR group create ready for DR group create  cer configuration-settings dr-grou  cings show-status Configuration Settings  ready for interface create
"metrocluster conclusA::> metroclus Cluster Status clusA  2 entries were dis Output of the comm create"` command i clusA::> metroclus Cluster Status	nfiguration-settings drater configuration-sett Node  A1 A2 splayed. mand after `"metroclust is run: ster configuration-sett Node	regroup create" command is run:  cings show-status Configuration Settings  ready for DR group create ready for DR group create cer configuration-settings dr-grou  cings show-status Configuration Settings
"metrocluster conclusA::> metroclus Cluster Status  clusA  2 entries were dis Output of the comm create"` command i clusA::> metroclus Cluster Status	A1 A2 splayed. mand after `"metroclust ster configuration-sett A2 splayed. mand after `"motoclust ster configuration-sett Node  A1 A2	regroup create" command is run:  cings show-status Configuration Settings  ready for DR group create ready for DR group create ready for DR group create  cer configuration-settings dr-grou  cings show-status Configuration Settings  ready for interface create ready for interface create
"metrocluster conclusA::> metroclus Cluster Status clusA  2 entries were dis Output of the comm create"` command i clusA::> metroclus Cluster Status	A1 A2 Splayed. mand after `"metroclust ster configuration-sett Node  A1 A2 Splayed. mand after `"motroclust ster configuration-sett Node  A1 A2 B1	regroup create" command is run:  cings show-status Configuration Settings  ready for DR group create ready for DR group create ready for DR group create  cer configuration-settings dr-grou  cings show-status Configuration Settings  ready for interface create ready for interface create ready for interface create
"metrocluster conclusA::> metroclus Cluster Status	nfiguration-settings drester configuration-sett Node  A1 A2 splayed. nand after `"metroclust is run: ster configuration-sett Node  A1 A2 B1 B2	regroup create" command is run:  cings show-status Configuration Settings  ready for DR group create ready for DR group create ready for DR group create  cer configuration-settings dr-grou  cings show-status Configuration Settings  ready for interface create ready for interface create
"metrocluster conclusA::> metroclus Cluster Status	A1 A2 Ster configuration-sett Node  A1 A2 Splayed. Mand after `"metroclust Is run: Ster configuration-sett Node  A1 A2 Splayed.  B1 B2 Splayed.	regroup create" command is run:  tings show-status Configuration Settings  ready for DR group create ready for DR group create cer configuration-settings dr-grou  tings show-status Configuration Settings  ready for interface create
"metrocluster conclusA::> metroclus Cluster Status clusA  2 entries were dis Output of the comm create" command i clusA::> metroclus Cluster Status	A1 A2 Ster configuration-sett Node  A1 A2 Splayed. Mand after `"metroclust Is run: Ster configuration-sett Node  A1 A2 Splayed.  B1 B2 Splayed.	re-group create" command is run:  tings show-status Configuration Settings  ready for DR group create ready for DR group create cer configuration-settings dr-grou  tings show-status Configuration Settings  ready for interface create

Status  clusA  A1 ready for next interface  create  A2 ready for connection connect  clusB  B1 ready for connection connect  B2 ready for connection connect  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run:  usA::> metrocluster configuration-settings show-status	clusA::> metroclu	uster configuration-set	tings show-status
clusA  A1 ready for next interface  Create  A2 ready for connection connect  B1 ready for connection connect  B2 ready for connection connect  A2 ready for connection connect  B2 ready for connection connect  A2 ready for connection connect  B2 ready for connection connect  Connection connect  A2 ready for connection connect  Connection connect  Configuration-settings connection connect  Configuration-settings show-status  Cluster Node Configuration Settings  ClusA A1 completed  A2 completed  B2 completed  ClusB B1 completed  B2 completed  A4 entries were displayed.  Cutput of the command after ` "metrocluster configuration-settings connection connect" command is run and there are connection errors:  ClusA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status	Cluster	Node	Configuration Settings
clusA  Al ready for next interface  Create  A2 ready for connection connect  ClusB  B1 ready for connection connect  B2 ready for connection connect  Cusp ready for connection connect  B2 ready for connection connect  B3 ready for connection connect  Cusp ready for connection connect  Cusput of the command after 'metrocluster configuration-settings  Connection connect" 'command is run:  UssA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status  ClusA  A1 completed  Cuspleted  Connection connection settings  Connection connection Settings  Cuspleted	Status		
Al ready for next interface  Create  A2 ready for connection connect  ClusB  B1 ready for connection connect  B2 ready for connection connect  Featy for connection connect  B2 ready for connection connect  Featy featy for connect  Featy fea			
Al ready for next interface  Create  A2 ready for connection connect  ClusB  B1 ready for connection connect  B2 ready for connection connect  Featy for connection connect  B2 ready for connection connect  Featy featy for connect  Featy fea			
create  A2 ready for connection connect  ClusB  B1 ready for connection connect  B2 ready for connection connect  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings  connection connect" ` command is run:  usA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status	clusA		
A2 ready for connection connect  B1 ready for connection connect  B2 ready for connection connect  A entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run:  usA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status		A1	ready for next interface
B1 ready for connection connect ready for connection connect 82 ready for connection connect 4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run:  usA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status	create		
B1 ready for connection connect B2 ready for connection connect 4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run: usA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status		A2	ready for connection connect
B2 ready for connection connect 4 entries were displayed. Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run: usA::> metrocluster configuration-settings show-status Cluster Node Configuration Settings Status	clusB		
4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run:  usA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status		В1	ready for connection connect
Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run:  usA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status		В2	ready for connection connect
connection connect" `command is run:  usA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status	4 entries were di	isplayed.	
usA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status	Output of the com	nmand after ` "metroclu	ster configuration-settings
Cluster Node Configuration Settings Status	connection connec	ct" ` command is run:	
Status  ClusA  A1 completed A2 completed ClusB  B1 completed B2 completed  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect"` command is run and there are connection errors: ClusA::> metrocluster configuration-settings show-status Cluster  Node  Configuration Settings Status	usA::> metroclust	ter configuration-setti	ngs show-status
Status  ClusA  A1 completed A2 completed ClusB  B1 completed B2 completed  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect"` command is run and there are connection errors: ClusA::> metrocluster configuration-settings show-status Cluster  Node  Configuration Settings Status	Cluster	Node	Configuration Settings
clusA  A1 completed A2 completed  clusB  B1 completed B2 completed  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect"` command is run and there are connection errors: clusA::> metrocluster configuration-settings show-status  Cluster  Node  Configuration Settings  Status	Status		, and the second
A1 completed  ClusB  B1 completed  B2 completed  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run and there are connection errors: clusA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status			
A1 completed  ClusB  B1 completed  B2 completed  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run and there are connection errors: clusA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status			
A2 completed  clusB  B1 completed  B2 completed  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run and there are connection errors: clusA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status	clusA		
A2 completed  ClusB  B1 completed  B2 completed  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run and there are connection errors: clusA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status		A1	completed
clusB  B1 completed  B2 completed  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run and there are connection errors: clusA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status		A2	
B1 completed  B2 completed  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run and there are connection errors: clusA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status	clusB		<u>.</u>
B2 completed  4 entries were displayed.  Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run and there are connection errors: clusA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status		В1	completed
4 entries were displayed.  Output of the command after `"metrocluster configuration-settings connection connect" `command is run and there are connection errors: clusA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status			_
Output of the command after ` "metrocluster configuration-settings connection connect" ` command is run and there are connection errors: clusA::> metrocluster configuration-settings show-status Cluster Node Configuration Settings Status	4 entries were di		23
connection connect" command is run and there are connection errors:  clusA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status			ster configuration-settings
clusA::> metrocluster configuration-settings show-status  Cluster Node Configuration Settings  Status   clusA A1 connection error  A2 completed  clusB B1 connection error  B2 completed	<del>-</del>		
Cluster Node Configuration Settings Status			
Status			_
clusA A1 connection error A2 completed clusB B1 connection error B2 completed		Node	configuration becomings
A2 completed clusB B1 connection error B2 completed			
A2 completed clusB B1 connection error B2 completed			
A2 completed clusB B1 connection error B2 completed	clusA	д 1	connection error
clusB B1 connection error B2 completed	014011		
B2 completed	clusB		
1	CIUDD		
	1 ontrios more di		Compresed

## metrocluster configuration-settings calibration measure

Measure latency and bandwith values

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

#### **Description**

The metrocluster configuration-settings calibration measure command measures the bandwidth and latency between local and remote nodes in a MetroCluster over IP configuration.

This command should not be run when the MetroCluster configuration is under a heavy load. Bandwidth measurements will attempt to fully saturate network connections to the remote cluster and may disrupt the quality of service.

#### **Examples**

The following example shows the output for the calibration measure command in MetroCluster over IP configurations:

```
clusA::*> metrocluster configuration-settings calibration measure
Warning: This operation will attempt to fully saturate the network
connection to
     the remote cluster for measuring bandwidth. This may disrupt
           performance and should not be run when MetroCluster is under
heavy
     load. Do you want to continue? \{y|n\}: y
  Measuring latency and bandwidth between node "A1" (10.140.113.214) and
node "B1" (10.140.113.26) over port "e0f".
  Measuring latency and bandwidth between node "A1" (10.140.113.215) and
node "B1" (10.140.113.27) over port "e0g".
  Measuring latency and bandwidth between node "A2" (10.140.113.216) and
node "B2" (10.140.113.25) over port "e0f".
  Measuring latency and bandwidth between node "A2" (10.140.113.217) and
node "B2" (10.140.113.28) over port "e0g".
  Measurements complete. Use the "metrocluster configuration-settings
calibration show" command to display the results.
```

## metrocluster configuration-settings calibration show

Display the calibration measurements for local nodes in MetroCluster over IP configuration

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

## **Description**

The metrocluster configuration-settings calibration show command shows the bandwidth and latency between local and remote nodes in a MetroCluster over IP configuration.

#### **Parameters**

#### { [-fields <fieldname>,...]

If you specify the <code>-fields</code> <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.

#### [-calibration-id <integer>] - Calibration ID

This field specifies Calibration ID.

#### [-subnet <IP Address>] - IP Subnet

This field specifies subnet.

#### [-node-uuid <UUID>] - Node UUID

This field specifies UUID of the node.

#### [-home-port {<netport>|<ifgrp>}] - Home Port

This field specifies name of the port used to measure latency and bandwidth.

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

This field specifies name of the node.

#### [-collection-time <MM/DD/YYYY HH:MM:SS>] - Collection Time of Sample

This field specifies collection time of sample.

#### [-source-address <IP Address>] - Source Network Address

This field specifies IP address of the port on the node.

#### [-destination-address <IP Address>] - Destination Network Address

This field specifies IP address of the port on the partner node.

#### [-latency <double>] - Latency in ms

This field specifies latency in ms.

#### [-bandwidth <double>] - Bandwidth in Mb/s

This field specifies bandwidth in Mb/s.

#### **Examples**

The following example shows the output for the calibration show command in MetroCluster over IP configurations:

			Home	Latency	<sup>7</sup> Bandwid	th
ID Subnet	Node	Port	(ms)	(Mb/s	col	lection Time
1 172.21.96.0	- A1					
			eOf	0.341	764	8/6/2019
:20:07						
			e0g	0.311	629	8/6/2019
:20:22						
A2			- 0.5	0 207	1065	0/6/2010
:20:36			eui	0.307	1265	8/6/2019
.20.30			e0a	0.307	1063	8/6/2019
:20:50			9			-, -,

## metrocluster configuration-settings connection check

Check the network connections between partner nodes

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

## **Description**

The metrocluster configuration-settings connection check command checks the settings of a MetroCluster over IP configuration.

This command is used for MetroCluster configurations that are connected through IP links.

## **Examples**

The following example shows the output for the check command in MetroCluster over IP configurations:

```
clusA:: *> metrocluster configuration-settings connection check
[Job 68] Job succeeded: Connect is successful.
Begin connection check.
Start checking the partner cluster.
    Check partner cluster: PASS.
Start checking the configuration settings.
    Check configuration settings: PASS.
Start pinging the network endpoints from cluster "clusA".
    Ping network endpoints: PASS.
Start pinging the network endpoints from cluster "clusB".
    Ping network endpoints: PASS.
Start checking the network MTU sizes from cluster "clusA".
    Check network MTU sizes: PASS.
Start checking the network MTU sizes from cluster "clusB".
    Check network MTU sizes: PASS.
Start checking the network subnets from cluster "clusA".
    Check network subnets: PASS.
Start checking the network subnets from cluster "clusB".
    Check network subnets: PASS.
Start checking the storage daemons on cluster "clusA".
    Check storage daemons: PASS.
Start checking the storage daemons on cluster "clusB".
    Check storage daemons: PASS.
End of connection check.
```

## metrocluster configuration-settings connection connect

Configure the network connections between partner nodes

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

#### **Description**

The metrocluster configuration-settings connection connect command configures the connections that mirror NV logs and access remote storage between partner nodes in a MetroCluster setup.

This command is used for MetroCluster setups that are connected though IP links. MetroCluster setups that are connected through FC links will configure the FC connections automatically.

The metrocluster configuration-settings commands are run in the following order to set up MetroCluster:

- · metrocluster configuration-settings dr-group create,
- · metrocluster configuration-settings interface create,
- metrocluster configuration-settings connection connect.

#### Before this command is run

- The DR groups must have been configured. Run the metrocluster configuration-settings dr-group show command to verify that every node is partnered in a DR group.
- The network logical interfaces must have been configured on every node. Use the metrocluster configuration-settings interface show command to verify that every node has network logical interfaces configured to mirror NV logs and access remote storage.

After this command completes successfully, every node will:

- Have NV log mirroring configured and mirroring disabled. NV log mirroring will be enabled by the metrocluster configure command.
- Have access to remote storage. Use the storage disk show -pool Pool1 command to view the remote disks that are hosted on DR partner nodes.

The DR groups and network logical interfaces that were configured by the metrocluster configuration-settings commands cannot be deleted after the connections have been configured. The metrocluster configuration-settings connection disconnect command must be run to remove the connections before the DR groups and network logical interfaces can be deleted.

#### **Parameters**

#### **Examples**

The following example shows configuration of connections in a MetroCluster over IP setup:

```
clusA::> metrocluster configuration-settings connection connect
[Job 269] Job succeeded: Connect is successful.
clusA::> metrocluster configuration-settings connection show
DR
                  Source
                               Destination
Group Cluster Node
                 Network Address Network Address Partner Type Config
State
_____
1
    clusA A1
              Home Port: e0f
                  completed
              Home Port: e0f
                  completed
              Home Port: e0f
                  10.140.113.214 10.140.113.249 DR Auxiliary
completed
              Home Port: e0g
                  10.140.113.215 10.140.113.217 HA Partner
```

completed				
1	Home	Port: e0g		
			10.140.113.248	DR Partner
completed				
	Home	Port: e0g		
		10.140.113.215	10.140.113.25	DR Auxiliary
completed				
		A2		
	Home	Port: e0f		
		10.140.113.216	10.140.113.214	HA Partner
completed				
	Home	Port: e0f		
		10.140.113.216	10.140.113.249	DR Partner
completed				
	Home	Port: e0f	10 140 112 010	DD 2 111
gomplated		10.140.113.216	10.140.113.218	υκ Auxiliary
completed	Цото	Port: e0g		
	поше		10.140.113.215	HN Dartner
completed		10.140.113.217	10.140.113.213	na rarcher
Compiced	Home	Port: e0g		
	1101110		10.140.113.25	DR Partner
completed		10,110,110,111	1011101110110	210 2 012 0110 2
1	Home	Port: e0g		
			10.140.113.248	DR Auxiliary
completed				-
clusB B2				
	Home	Port: e0f		
		10.140.113.249	10.140.113.218	HA Partner
completed				
	Home	Port: e0f		
		10.140.113.249	10.140.113.216	DR Partner
completed				
	Home	Port: e0f		
7		10.140.113.249	10.140.113.214	DR Auxiliary
completed		Davit O		
	Home	Port: e0g	10 140 112 040	IIA Dantaga
completed		10.140.113.23	10.140.113.248	na ratullet
completed	Home	Port: e0g		
	1101116	10.140.113.25	10.140.113.217	DR Partner
completed		10.110.110.20	10.110.110.217	DIC TOTAL CITAL
5 5 mp + 0 0 0 0	Home	Port: e0g		
	220.110	10.140.113.25	10.140.113.215	DR Auxiliarv
completed				- 4
1		B1		

<i>,</i>			
Home	e Port: e0f		
	10.140.113.218	10.140.113.249	HA Partner
completed			
Home	e Port: e0f		
	10.140.113.218	10.140.113.214	DR Partner
completed			
Home	e Port: e0f		
	10.140.113.218	10.140.113.216	DR Auxiliarv
completed			
-	e Port: e0g		
Home		10.140.113.25	UN Dartnor
gompleted	10.140.113.240	10.140.113.23	IIV LATCHET
completed	- D		
HOme	e Port: e0g	10 110 110 015	
	10.140.113.248	10.140.113.215	DR Partner
completed			
Home	e Port: e0g		
	10.140.113.248	10.140.113.217	DR Auxiliary
completed			
24 entries were disp	layed.		
clusA::> metrocluste	r configuration-s	settings show-sta	itus
Cluster	Node	Configu	ration Settings
Status		_	-
clusA			
014011	A1	complet	ed
	A1 A2	<del>-</del>	
-1D	AZ	complet	.eu
clusB	D.1		,
	В1	complet	
	В2	complet	ced
4 entries were displ	ayed.		

#### **Related Links**

- metrocluster configuration-settings dr-group create
- metrocluster configuration-settings interface create
- metrocluster configuration-settings dr-group show
- metrocluster configuration-settings interface show
- metrocluster configure
- storage disk show
- metrocluster configuration-settings connection disconnect

## metrocluster configuration-settings connection disconnect

Tear down the network connections between partner nodes

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

#### Description

The metrocluster configuration-settings connection disconnect command removes the connections between nodes in a DR group that are used to mirror NV logs and access remote storage.

This command cannot be run if a node in the DR group has remote disks assigned to the node. The assigned ownership of remote disks can be removed by running the storage disk removeowner command.

The metrocluster configuration-settings commands are run in the following order to remove MetroCluster over IP configuration:

- metrocluster configuration-settings connection disconnect,
- · metrocluster configuration-settings interface delete,
- · metrocluster configuration-settings dr-group delete .

#### **Parameters**

#### -dr-group-id <integer> - DR Group ID

This parameter identifies the DR group to be disconnected.

#### **Examples**

The following example illustrates removal of connections in a four-node MetroCluster setup:

```
clusA::> metrocluster configuration-settings connection disconnect -dr
-group-id 1
[Job 270] Job succeeded: Disconnect is successful.
clusA::> metrocluster configuration-settings show-status
Cluster
                          Node
                                            Configuration Settings
Status
______
clusA
                          Α1
                                            ready for connection connect
                          A2
                                            ready for connection connect
clusB
                                            ready for connection connect
                          В1
                          В2
                                            ready for connection connect
4 entries were displayed.
clusA::> metrocluster configuration-settings connection show
                                     Destination
DR
                     Source
```

1 clusA Al	Group Cluster Node State	Network Address	Network Address	Partner Type	Config
Home Port: e0f					
disconnected  Home Port: e0f 10.140.113.214 10.140.113.218 DR Partner  disconnected  Home Port: e0f 10.140.113.214 10.140.113.218 DR Partner  disconnected  Home Port: e0f 10.140.113.214 10.140.113.249 DR Auxiliary  disconnected  Home Port: e0g 10.140.113.215 10.140.113.217 HA Partner  disconnected  Home Port: e0g 10.140.113.215 10.140.113.248 DR Partner  disconnected  Home Port: e0g 10.140.113.215 10.140.113.25 DR Auxiliary  disconnected  Home Port: e0f 10.140.113.216 10.140.113.214 HA Partner  disconnected  Home Port: e0f 10.140.113.216 10.140.113.249 DR Partner  disconnected  Home Port: e0f 10.140.113.216 10.140.113.248 DR Partner	1 clusA A1				
disconnected         Home Port: e0f       10.140.113.214       10.140.113.218       DR Partner         disconnected       Home Port: e0f       10.140.113.214       10.140.113.249       DR Auxiliary         disconnected       Home Port: e0g       10.140.113.215       10.140.113.217       HA Partner         disconnected       Home Port: e0g       10.140.113.215       10.140.113.248       DR Partner         disconnected       Home Port: e0g       10.140.113.215       10.140.113.25       DR Auxiliary         disconnected       A2       Home Port: e0f       10.140.113.216       10.140.113.214       HA Partner         disconnected       Home Port: e0f       10.140.113.216       10.140.113.249       DR Partner         disconnected       Home Port: e0f       10.140.113.249       DR Partner	Hom	e Port: e0f			
# Home Port: e0f		10.140.113.214	10.140.113.216	HA Partner	
disconnected  Home Port: e0f	disconnected				
## Home Port: e0f ## 10.140.113.214	Hom				
Home Port: e0f		10.140.113.214	10.140.113.218	DR Partner	
disconnected  Home Port: e0g					
disconnected  Home Port: e0g	Hom		10 140 110 040	DD 7 131	
Home Port: e0g	d	10.140.113.214	10.140.113.249	DR Auxiliary	
disconnected  Home Port: e0g		a Port. of			
disconnected  Home Port: e0g	HOIII	-	10 140 113 217	HA Partner	
Home Port: e0g	disconnected	10.140.113.213	10.110.110.21/	IN TATCHEL	
disconnected  Home Port: e0g		e Port: eOa			
disconnected  Home Port: e0g	2202		10.140.113.248	DR Partner	
10.140.113.215 10.140.113.25 DR Auxiliary  disconnected  A2  Home Port: e0f	disconnected	-			
disconnected  A2  Home Port: e0f  10.140.113.216 10.140.113.214 HA Partner  disconnected  Home Port: e0f  10.140.113.216 10.140.113.249 DR Partner  disconnected  Home Port: e0f  10.140.113.216 10.140.113.218 DR Auxiliary	Hom	e Port: e0g			
A2 Home Port: e0f 10.140.113.216 10.140.113.214 HA Partner  disconnected Home Port: e0f 10.140.113.216 10.140.113.249 DR Partner  disconnected Home Port: e0f 10.140.113.216 10.140.113.218 DR Auxiliary		10.140.113.215	10.140.113.25	DR Auxiliary	
Home Port: e0f	disconnected				
10.140.113.216 10.140.113.214 HA Partner  disconnected  Home Port: e0f		A2			
disconnected  Home Port: e0f  10.140.113.216 10.140.113.249 DR Partner  disconnected  Home Port: e0f  10.140.113.216 10.140.113.218 DR Auxiliary	Hom	e Port: e0f			
Home Port: e0f		10.140.113.216	10.140.113.214	HA Partner	
10.140.113.216 10.140.113.249 DR Partner disconnected  Home Port: e0f 10.140.113.216 10.140.113.218 DR Auxiliary					
disconnected  Home Port: e0f  10.140.113.216 10.140.113.218 DR Auxiliary	Hom				
Home Port: e0f 10.140.113.216 10.140.113.218 DR Auxiliary		10.140.113.216	10.140.113.249	DR Partner	
10.140.113.216 10.140.113.218 DR Auxiliary		- D			
<del>-</del>	Hom		10 140 112 210	DD 71111111111	
disconnected	disconnected	10.140.113.216	10.140.113.218	DK AUXIIIary	
Home Port: e0g		e Port. ela			
10.140.113.217	non		10.140.113.215	HA Partner	
disconnected	disconnected	10.110.110.21/	_0.110.110.210	111 1 41 61161	
Home Port: e0g		e Port: e0g			
10.140.113.217 10.140.113.25 DR Partner		-	10.140.113.25	DR Partner	
disconnected	disconnected				
Home Port: e0g	Hom	e Port: e0g			
10.140.113.217 10.140.113.248 DR Auxiliary		10.140.113.217	10.140.113.248	DR Auxiliary	
disconnected	disconnected				
clusB B2	clusB B2				
Home Port: e0f	Hom				
10.140.113.249 10.140.113.218 HA Partner		10.140.113.249	10.140.113.218	HA Partner	
disconnected	disconnected				

Home Port: e0f 10.140.113.249 10.140.113.216 DR Partner disconnected Home Port: e0f 10.140.113.249 10.140.113.214 DR Auxiliary disconnected Home Port: e0g 10.140.113.25 10.140.113.248 HA Partner disconnected Home Port: e0g 10.140.113.25 10.140.113.217 DR Partner disconnected Home Port: e0g 10.140.113.25 10.140.113.215 DR Auxiliary disconnected В1 Home Port: e0f disconnected Home Port: e0f disconnected Home Port: e0f disconnected Home Port: e0g disconnected Home Port: e0g disconnected Home Port: e0g disconnected 24 entries were displayed.

#### **Related Links**

- · storage disk removeowner
- metrocluster configuration-settings interface delete
- metrocluster configuration-settings dr-group delete

## metrocluster configuration-settings connection show

Display the connections between partner nodes in a MetroCluster setup

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

#### **Description**

The metrocluster configuration-settings connection show command displays the connection configuration information between the nodes in a MetroCluster setup.

#### **Parameters**

#### { [-fields <fieldname>,...]

If you specify the -fields <fieldname>, ... parameter, the command displays only the fields that you specify.

#### | [-instance ] }

If this parameter is specified, the command displays detailed information about all entries.

#### [-dr-group-id <integer>] - DR Group ID

If this parameter is specified, the command displays information for the matching DR group.

#### [-cluster-uuid <UUID>] - Cluster UUID

If this parameter is specified, the command displays information for the matching cluster specified by uuid.

#### [-cluster <Cluster name>] - Cluster Name

If this parameter is specified, the command displays information for the matching cluster.

#### [-node-uuid <UUID>] - Node UUID

If this parameter is specified, the command displays information for the matching node specified by uuid.

#### [-node <text>] - Node Name

If this parameter is specified, the command displays information for the matching nodes.

#### [-home-port {<netport>|<ifgrp>}] - Home Port

If this parameter is specified, the command displays information for the matching home-port.

#### [-relationship-type <Roles of MetroCluster Nodes>] - Relationship Role Type

If this parameter is specified, the command displays information for the matching relationship-type.

#### [-source-address <IP Address>] - Source Network Address

If this parameter is specified, the command displays information for the matching source address.

#### [-destination-address <IP Address>] - Destination Network Address

If this parameter is specified, the command displays information for the matching destination address.

#### [-partner-cluster-uuid <UUID>] - Partner Cluster UUID

If this parameter is specified, the command displays information for the matching partner-cluster-uuid.

#### [-partner-node-uuid <UUID>] - Partner Node UUID

If this parameter is specified, the command displays information for the matching partner-node-uuid.

#### [-partner-node <text>] - Partner Node Name

If this parameter is specified, the command displays information for the matching partner-node.

#### [-partner-type <text>] - Partner Relationship Type

If this parameter is specified, the command displays information for the matching partner-type.

#### [-config-state <text>] - Configuration State

If this parameter is specified, the command displays information for the matching config-state.

#### [-config-error-info <text>] - Configuration Error Information

If this parameter is specified, the command displays information for the matching config-error-info.

#### **Examples**

The following example shows the output of metrocluster configuration-settings connection connect command:

```
Output of the command before the connections are established using the
xref:{relative path}metrocluster-configuration-settings-connection-
connect.html[metrocluster configuration-settings connection connect]
command:
clusA::> metrocluster configuration-settings connection show
                Source
                            Destination
Group Cluster Node Network Address Network Address Partner Type Config
State
   clusA A1
            Home Port: e0f
                disconnected
            Home Port: e0f
                disconnected
            Home Port: e0f
                10.140.113.214 10.140.113.249 DR Auxiliary
disconnected
            Home Port: e0q
                disconnected
            Home Port: e0g
                disconnected
            Home Port: e0g
                disconnected
                 A2
            Home Port: e0f
```

	10.140.113.21	6 10.140.113.214	HA Partner
disconnected	Home Port: e0f		
	10.140.113.21	6 10.140.113.249	DR Partner
disconnected	Home Port: e0f		
		6 10.140.113.218	DR Auxiliary
disconnected			
	Home Port: e0g	7 10.140.113.215	HA Partner
disconnected			
	Home Port: e0g	7 10 140 112 05	DD Dawka au
disconnected	10.140.113.21	7 10.140.113.25	DR Partner
	Home Port: e0g		
disconnected	10.140.113.21	7 10.140.113.248	DR Auxiliary
clusB B2			
	Home Port: e0f		
disconnected	10.140.113.24	9 10.140.113.218	HA Partner
	Home Port: e0f		
disconnected	10.140.113.24	9 10.140.113.216	DR Partner
disconnected	Home Port: e0f		
	10.140.113.24	9 10.140.113.214	DR Auxiliary
disconnected	Home Port: e0g		
		10.140.113.248	HA Partner
disconnected	Hama Danka a Oa		
	Home Port: e0g 10.140.113.25	10.140.113.217	DR Partner
disconnected			
	Home Port: e0g	10.140.113.215	DR Auxiliary
disconnected	10.110.110.20	10.110.110.210	z
	B1		
	Home Port: e0f 10.140.113.21	8 10.140.113.249	HA Partner
disconnected			
	Home Port: e0f	8 10.140.113.214	DR Partner
disconnected	10.110.113.21		DIVITAL CHOL
	Home Port: e0f	0 10 140 110 011	
disconnected	10.140.113.21	8 10.140.113.216	DK AUXILIATY

Home Port: e0g disconnected Home Port: e0g disconnected Home Port: e0g 10.140.113.248 10.140.113.217 DR Auxiliary disconnected 24 entries were displayed. Output of the command after the connections are established using the xref:{relative path}metrocluster-configuration-settings-connectionconnect.html[metrocluster configuration-settings connection connect] command: clusA::> metrocluster configuration-settings connection show Source Destination Group Cluster Node Network Address Network Address Partner Type Config State 1 clusA A1 Home Port: e0f 10.140.113.214 10.140.113.216 HA Partner completed Home Port: e0f completed Home Port: e0f 10.140.113.214 10.140.113.249 DR Auxiliary completed Home Port: e0g completed Home Port: e0g completed Home Port: e0g completed A2 Home Port: e0f completed Home Port: e0f completed

	Цстс	Port: e0f		
	nome		10 140 110 010	DD 7 '1'
		10.140.113.216	10.140.113.218	DK Auxiliary
completed				
	Home	Port: e0g		
		10.140.113.217	10.140.113.215	HA Partner
completed				
	Home	Port: e0g		
		10.140.113.217	10.140.113.25	DR Partner
completed				
Compieced	Цото	Port: e0g		
	поше		10 140 112 040	DD 7
2		10.140.113.217	10.140.113.248	DR AuxIIIary
completed				
clusB B2				
	Home	Port: e0f		
		10.140.113.249	10.140.113.218	HA Partner
completed				
	Home	Port: e0f		
		10.140.113.249	10.140.113.216	DR Partner
completed				
	Home	Port: e0f		
	Home		10.140.113.214	DD Augiliang
		10.140.113.249	10.140.113.214	DR AUXILIALY
completed				
	Home	Port: e0g		
		10.140.113.25	10.140.113.248	HA Partner
completed				
	Home	Port: e0g		
		10.140.113.25	10.140.113.217	DR Partner
completed				
	Home	Port: e0g		
			10.140.113.215	DR Auxiliarv
completed				
3 3 mp 2 0 0 0 d		В1		
	Ното	Port: e0f		
	HOINE		10 140 112 040	IIA Domina
7		10.140.113.218	10.140.113.249	na Partner
completed				
	Home	Port: e0f		
		10.140.113.218	10.140.113.214	DR Partner
completed				
	Home	Port: e0f		
		10.140.113.218	10.140.113.216	DR Auxiliary
completed				
	Home	Port: e0g		
			10.140.113.25	HA Partner
completed			_0.110.110.20	111111111111111111111111111111111111111
COMPTECER	II.c.m.	Dont. of		
	ноте	Port: e0g	10 140 110 015	
		10.140.113.248	10.140.113.215	DK Partner
C				

completed

Home Port: e0g

10.140.113.248 10.140.113.217 DR Auxiliary

completed

24 entries were displayed.

#### **Related Links**

· metrocluster configuration-settings connection connect

## metrocluster configuration-settings dr-group create

Create a DR group in a MetroCluster over IP setup

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

#### **Description**

The metrocluster configuration-settings dr-group create command partners the nodes that will comprise a DR group in a MetroCluster setup.

This command is used for MetroCluster setups that are connected though IP links. MetroCluster setups that are connected through FC links will configure DR groups automatically and do not require the metrocluster configuration-settings commands.

The metrocluster configuration-settings commands are run in the following order to set up MetroCluster:

- metrocluster configuration-settings dr-group create,
- metrocluster configuration-settings interface create
- · metrocluster configuration-settings connection connect.

Before running this command, cluster peering must be configured between the local and partner clusters. Run the cluster peer show command to verify that peering is available between the local and partner clusters.

This command configures a local node and a remote node as DR partner nodes. The command also configures the HA partner of the local node and the HA partner of the remote node as the other DR partner nodes in the DR group.

#### **Parameters**

#### -partner-cluster <Cluster name> - Partner Cluster Name

Use this parameter to specify the name of the partner cluster.

#### -local-node {<nodename>|local} - Local Node Name

Use this parameter to specify the name of a node in the local cluster.

#### -remote-node <text> - Remote Node Name

Use this parameter to specify the name of a node in the partner cluster that is to be the DR partner of the

specified local node.

#### **Examples**

The following example shows the creation of the MetroCluster DR group:

```
clusA::> metrocluster configuration-settings dr-group create -partner
-cluster clusB -local-node A1 -remote-node B1
[Job 268] Job succeeded: DR Group Create is successful.
clusA::> metrocluster configuration-settings dr-group show
DR Group ID Cluster
                                  Node
                                                    DR Partner Node
clusA
                                   A1
                                                     В1
                                   A2
                                                     B2
          clusB
                                   В2
                                                     A2
                                                     Α1
                                   В1
4 entries were displayed.
clusA::> metrocluster configuration-settings show-status
Cluster
                        Node
                                          Configuration Settings
Status
clusA
                                          ready for interface create
                        Α1
                        Α2
                                          ready for interface create
clusB
                        В1
                                          ready for interface create
                        В2
                                          ready for interface create
4 entries were displayed.
```

#### **Related Links**

- · metrocluster configuration-settings interface create
- metrocluster configuration-settings connection connect
- · cluster peer show

## metrocluster configuration-settings dr-group delete

Delete a DR group in a MetroCluster over IP setup

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

#### **Description**

The metrocluster configuration-settings dr-group delete command deletes a DR group and its node partnerships that were configured using the metrocluster configuration-settings dr-group create command.

This command cannot be run if the metrocluster configuration-settings interface create command has configured a network logical interface on a network port provisioned for MetroCluster. The metrocluster configuration-settings interface delete command must then be run to delete the network logical interfaces on every node in the DR group.

The metrocluster configuration-settings commands are run in the following order to remove the MetroCluster over IP configuration:

- · metrocluster configuration-settings connection disconnect,
- · metrocluster configuration-settings interface delete,
- metrocluster configuration-settings dr-group delete.

#### **Parameters**

#### -dr-group-id <integer> - Dr group ld

This parameter indentifies the DR group to be deleted.

#### **Examples**

The following example shows the deletion of the MetroCluster DR group:

```
clusA::> metrocluster configuration-settings dr-group delete -dr-group-id
Warning: This command deletes the existing DR group relationship. Are you
sure
         you want to proceed ? {y|n}: y
[Job 279] Job succeeded: DR Group Delete is successful.
clusA::> metrocluster configuration-settings dr-group show
No DR groups exist.
clusA::> metrocluster configuration-settings show-status
Cluster
                           Node
                                              Configuration Settings
Status
clusA
                           Α1
                                              ready for DR group create
                           A2
                                              ready for DR group create
clusB
                                              ready for DR group create
                           В1
                                              ready for DR group create
                           B2
4 entries were displayed.
```

#### **Related Links**

- metrocluster configuration-settings dr-group create
- · metrocluster configuration-settings interface create
- metrocluster configuration-settings interface delete
- · metrocluster configuration-settings connection disconnect

## metrocluster configuration-settings dr-group show

Display the DR groups in a MetroCluster over IP setup

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

## Description

The metrocluster configuration-settings dr-group show command displays the DR groups and their nodes in the MetroCluster over IP setup.

#### **Parameters**

#### { [-fields <fieldname>,...]

If you specify the -fields <fieldname>, ... parameter, the command displays only the fields that you specify.

#### |[-instance]}

If this parameter is specified, the command displays detailed information about all entries.

#### [-dr-group-id <integer>] - DR Group ID

If this parameter is specified, the command displays information for the matching DR group.

#### [-cluster-uuid <UUID>] - Cluster UUID

If this parameter is specified, the command displays information for the matching cluster uuid.

#### [-cluster <Cluster name>] - Cluster Name

If this parameter is specified, the command displays information for the specified cluster.

#### [-node-uuid <UUID>] - Node UUID

If this parameter is specified, the command displays information for the matching nodes uuid.

#### [-node <text>] - Node Name

If this parameter is specified, the command displays information for the matching nodes.

#### [-dr-partner-node-uuid <UUID>] - DR Partner Node UUID

If this parameter is specified, the command displays information for the matching DR partner node uuid.

#### [-dr-partner-node <text>] - DR Partner Node Name

If this parameter is specified, the command displays information for the matching DR partner nodes.

#### **Examples**

The following example illustrates the display of DR group configuration in a four-node MetroCluster setup:

clusA::> metrocluster configur	ration-settings dr-gr	oup show
DR Group ID Cluster	Node	DR Partner Node
1 clusA		
	A1	B1
	A2	В2
clusB		
	В2	A2
	В1	A1
4 entries were displayed.		

## metrocluster configuration-settings interface create

#### Create a MetroCluster interface

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

#### Description

The metrocluster configuration-settings interface create command configures the network logical interfaces that will be used on a node in a MetroCluster setup to mirror NV logs and access remote storage.

This command is used for MetroCluster setups that are connected though IP links. MetroCluster setups that are connected through FC links do not require the user to provision network logical interfaces to mirror NV logs and access remote storage.

The metrocluster configuration-settings commands are run in the following order to set up MetroCluster:

- · metrocluster configuration-settings dr-group create,
- metrocluster configuration-settings interface create,
- · metrocluster configuration-settings connection connect.

Before running this command, the node's DR group must be configured using the metrocluster configuration-settings dr-group create command. Run the metrocluster configuration-settings dr-group show command to verify that the node's DR group has been configured.

#### **Parameters**

#### -cluster-name <Cluster name> - Cluster Name

Use this parameter to specify the name of the local or partner cluster.

#### -home-node <text> - Home Node

Use this parameter to specify the home node in the cluster which hosts the interface.

#### -home-port {<netport>|<ifgrp>} - Home Port

Use this parameter to specify the home port provisioned for MetroCluster.

#### -address <IP Address> - Network Address

Use this parameter to specify the network address to be assigned to the home port.

#### -netmask <Contiguous IP Mask> - Netmask

Use this parameter to specify the network mask to be assigned to the interface.

#### [-gateway <IP Address>] - Gateway

Use this parameter to specify the gateway to be assigned for the routed network.

#### [-vlan-id <integer>] - Virtual LAN ID

Use this parameter to specify the VLAN id.

#### **Examples**

This example shows configuring logical interface on MetroCluster IP capable port:

```
clusA::> metrocluster configuration-settings interface create -cluster
-name clusA -home-node A1 -home-port e0f -address 10.140.113.214 -netmask
255.255.192.0
[Job 281] Job succeeded: Interface Create is successful.
clusA::> metrocluster configuration-settings interface show
DR
Config
Group Cluster Node Network Address Netmask Gateway
State
1 clusA A1
             Home Port: e0f
                               10.140.113.214 255.255.192.0 -
completed
Output after configuring all the interfaces:
clusA::> metrocluster configuration-settings interface show
DR
Config
Group Cluster Node Network Address Netmask Gateway
State
1 clusA A1
              Home Port: e0f
                 10.140.113.214 255.255.192.0 -
completed
              Home Port: e0g
                 10.140.113.215 255.255.192.0 -
completed
                  A2
              Home Port: e0f
                 10.140.113.216 255.255.192.0 -
completed
              Home Port: e0g
                 10.140.113.217 255.255.192.0 -
completed
    clusB B2
              Home Port: e0f
                10.140.113.249 255.255.192.0 -
completed
```

Home Port: e0g 10.140.113.25 255.255.192.0 completed В1 Home Port: e0f 10.140.113.218 255.255.192.0 completed Home Port: e0g 10.140.113.248 255.255.192.0 completed 8 entries were displayed. clusA::> metrocluster configuration-settings show-status Cluster Node Configuration Settings Status clusA ready for connection connect A1 A2 ready for connection connect clusB ready for connection connect В1 В2 ready for connection connect 4 entries were displayed. clusA::> metrocluster configuration-settings connection show Source Destination Group Cluster Node Network Address Network Address Partner Type Config State 1 clusA A1 Home Port: e0f disconnected Home Port: e0f disconnected Home Port: e0f disconnected Home Port: e0g disconnected Home Port: e0g 

disconnected			
arsconneceda	Home Port: e0g		
	<del>_</del>	215 10.140.113.25	DD Auviliaru
diagonnogtod	10.140.113.	213 10.140.113.23	DR AUXILIALY
disconnected	7. 0		
	A2		
	Home Port: e0f		
	10.140.113.2	216 10.140.113.214	HA Partner
disconnected			
	Home Port: e0f		
	10.140.113.2	216 10.140.113.249	DR Partner
disconnected			
	Home Port: e0f		
	10.140.113.2	216 10.140.113.218	DR Auxiliary
disconnected			
	Home Port: e0g		
		217 10.140.113.215	HA Partner
disconnected			
	Home Port: e0g		
		217 10.140.113.25	DR Partner
disconnected			
arsommooda	Home Port: e0g		
	_	217 10.140.113.248	DD Auviliaru
disconnected	10.140.113.2	217 10.140.113.240	DK Auxillary
clusB B2	II D 0.5		
	Home Port: e0f	240 10 140 112 010	
	10.140.113.2	249 10.140.113.218	HA Partner
disconnected			
	Home Port: e0f		
	10.140.113.2	249 10.140.113.216	DR Partner
disconnected			
	Home Port: e0f		
	10.140.113.2	249 10.140.113.214	DR Auxiliary
disconnected			
	Home Port: e0g		
	10.140.113.2	25 10.140.113.248	HA Partner
disconnected			
	Home Port: e0g		
		25 10.140.113.217	DR Partner
disconnected			
	Home Port: e0g		
		25 10.140.113.215	DR Auxiliarv
disconnected	10.110.110.1		210 1101111111 y
31500111100000	В1		
	Home Port: e0f		
		218 10.140.113.249	IIA Dombroom
disconnected	10.140.113.2	210 10.140.113.249	HA Partner

Home Port: e0f 10.140.113.218 10.140.113.214 DR Partner disconnected Home Port: e0f 10.140.113.218 10.140.113.216 DR Auxiliary disconnected Home Port: e0g 10.140.113.248 10.140.113.25 HA Partner disconnected Home Port: e0g disconnected Home Port: e0g 10.140.113.248 10.140.113.217 DR Auxiliary disconnected 24 entries were displayed.

#### **Related Links**

- metrocluster configuration-settings dr-group create
- metrocluster configuration-settings connection connect
- metrocluster configuration-settings dr-group show

## metrocluster configuration-settings interface delete

Delete a MetroCluster interface

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

## **Description**

The metrocluster configuration-settings interface delete command deletes the network logical interface that was configured on a network port provisioned for MetroCluster.

This command cannot be run if the metrocluster configuration-settings connection connect command has set up the connections between the nodes in a DR group. The metrocluster configuration-settings connection disconnect command must then be run to remove the connections.

The metrocluster configuration-settings commands are run in the following order to remove the MetroCluster over IP configuration:

- metrocluster configuration-settings connection disconnect,
- metrocluster configuration-settings interface delete,
- metrocluster configuration-settings dr-group delete

#### **Parameters**

#### -cluster-name <Cluster name> - Cluster Name

Use this parameter to specify the name of the local or partner cluster.

#### -home-node <text> - Home Node

Use this parameter to specify the home node in the cluster which hosts the interface.

#### -home-port {<netport>|<ifgrp>} - Home Port

Use this parameter to specify the home port provisioned for MetroCluster.

#### **Examples**

The following example shows the deletion of interface in a MetroCluster setup:

```
clusA::> metrocluster configuration-settings interface delete -cluster
-name clusA -home-node A1 -home-port e0f
[Job 271] Job succeeded: Interface Delete is successful.
clusA::> metrocluster configuration-settings interface show
DR
Config
Group Cluster Node Network Address Netmask
                                                      Gateway
State
1 clusA A1
                 Home Port: e0g
                      10.140.113.215 255.255.192.0
completed
                       A2
                 Home Port: e0f
                      10.140.113.216 255.255.192.0
completed
                 Home Port: e0g
                      10.140.113.217 255.255.192.0
completed
      clusB B2
                 Home Port: e0f
                      10.140.113.249 255.255.192.0
completed
                 Home Port: e0g
                      10.140.113.25
                                     255.255.192.0
completed
                       В1
                 Home Port: e0f
                      10.140.113.218 255.255.192.0
```

```
completed
                Home Port: e0g
                    10.140.113.248 255.255.192.0 -
completed
7 entries were displayed.
clusA::> metrocluster configuration-settings show-status
Cluster
                          Node
                                            Configuration Settings
Status
______
clusA
                          Α1
                                            ready for next interface
create
                          A2
                                            ready for connection connect
clusB
                          В1
                                            ready for connection connect
                          В2
                                            ready for connection connect
4 entries were displayed.
Output of the command after deleting all the interfaces:
clusA::> metrocluster configuration-settings interface show
No interfaces exist.
clusA::> metrocluster configuration-settings show-status
Cluster
                          Node
                                           Configuration Settings
Status
clusA
                                            ready for interface create
                          A1
                          A2
                                            ready for interface create
clusB
                                            ready for interface create
                          В1
                          В2
                                            ready for interface create
4 entries were displayed.
```

#### **Related Links**

- metrocluster configuration-settings connection connect
- · metrocluster configuration-settings connection disconnect
- · metrocluster configuration-settings dr-group delete

## metrocluster configuration-settings interface show

Display the network logical interfaces provisioned for MetroCluster

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

#### **Description**

The metrocluster configuration-settings interface show command displays the network logical interfaces that were provisioned for MetroCluster.

#### **Parameters**

#### { [-fields <fieldname>,...]

If you specify the -fields <fieldname>, ... parameter, the command displays only the fields that you specify.

#### | [-instance ] }

If this parameter is specified, the command displays detailed information about all entries.

#### [-dr-group-id <integer>] - DR Group ID

If this parameter is specified, the command displays information for the matching DR group.

#### [-cluster-uuid <UUID>] - Cluster UUID

If this parameter is specified, the command displays information for the matching cluster specified by uuid.

#### [-cluster <Cluster name>] - Cluster Name

If this parameter is specified, the command displays information for the matching cluster..

#### [-node-uuid <UUID>] - Node UUID

If this parameter is specified, the command displays information for the matching nodes uuid.

#### [-node <text>] - Node Name

If this parameter is specified, the command displays information for the matching nodes.

#### [-home-port {<netport>|<ifgrp>}] - Home Port

If this parameter is specified, all interfaces with home-port set to this value are displayed.

#### [-address <IP Address>] - Network Address

If this parameter is specified, the command displays information for the matching network address.

#### [-netmask <Contiguous IP Mask>] - Netmask

If this parameter is specified, all interfaces with netmask set to this value are displayed.

#### [-gateway <IP Address>] - Gateway

If this parameter is specified, all interfaces with gateway set to this value are displayed.

#### [-config-state <text>] - Configuration State

If this parameter is specified, all interfaces with this field set to the specified value are displayed.

#### [-config-error-info <text>] - Configuration Error Information

If this parameter is specified, all interfaces with this field set to the specified value are displayed.

#### [-vlan-id <integer>] - Virtual LAN ID

If this parameter is specified, all interfaces with vlan-id set to this value are displayed.

#### **Examples**

The following example illustrates display of logical interfaces configured in a four-node MetroCluster setup:

```
clusA::> metrocluster configuration-settings interface show
DR
Config
Group Cluster Node Network Address Netmask
                                                    Gateway
State
1 clusA A1
                Home Port: e0f
                     10.140.113.214 255.255.192.0 -
completed
                Home Port: e0g
                     10.140.113.215 255.255.192.0
completed
                      A2
                Home Port: e0f
                     10.140.113.216 255.255.192.0
completed
                Home Port: e0g
                     10.140.113.217 255.255.192.0
completed
     clusB B2
                Home Port: e0f
                     10.140.113.249 255.255.192.0
completed
                Home Port: e0g
                     10.140.113.25 255.255.192.0 -
completed
                      В1
                Home Port: e0f
                     10.140.113.218 255.255.192.0 -
completed
                Home Port: e0g
                     10.140.113.248 255.255.192.0 -
completed
8 entries were displayed.
```

## metrocluster configuration-settings mediator add

Configure the network connections between the Mediator and MetroCluster nodes

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

#### Description

The metrocluster configuration-settings mediator add command configures the connection between the mediator and all the nodes in a MetroCluster configuration.

Before this command is run MetroCluster should be configured on all the clusters.

Mediator username and password are required to successfully add the mediator.

After this command completes successfully, every node will:

- · Have a connection with the mediator.
- The mediator disks will be assigned to the nodes in the MetroCluster configuration.
- · AUSO will be enabled.

#### **Parameters**

#### -mediator-address <IP Address - Mediator IP Address

Specifies the IP address of the mediator to which the nodes in the MetroCluster configuration will be connected.

#### **Examples**

The following example connects the nodes to the mediator in a MetroCluster configuration over IP setup:

```
clusA::> metrocluster configuration-settings mediator add -mediator
-address 10.234.133.115
         Adding mediator and enabling Automatic Unplanned Switchover. It
might take a few minutes to complete.
         Please enter the username for the mediator: mediatoradmin
         Please enter the password for the mediator:
         Confirm the mediator password:
         Creating mediator mailboxes...
         Setting up connections to mediator from all nodes in the
clusters...
         Setting mediator mailbox from all nodes in the cluster...
         Enabling Automatic Unplanned Switchover for all nodes in the
cluster...
         Successfully added mediator.
```

## metrocluster configuration-settings mediator remove

Tear down connections between the Mediator and MetroCluster nodes

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

#### **Description**

The metrocluster configuration-settings mediator remove command removes the connection between the mediator and all the nodes in a MetroCluster configuration.

Mediator username and password are required to successfully remove the mediator.

#### **Parameters**

#### [-dr-group-id <integer>] - DR Group Id (privilege: advanced)

Specifies the Disaster Recovery Group Identifier for which the mediator connections need to be removed.

#### **Examples**

The following example removes the connections between the nodes and the mediator in a MetroCluster configuration over IP setup:

```
clusA::> metrocluster configuration-settings mediator remove
    Removing the mediator and disabling Automatic Unplanned Switchover.

It may take a few minutes to complete.
    Please enter the username for the mediator: mediatoradmin
    Please enter the password for the mediator:
    Confirm the mediator password:
    Disabling Automatic Unplanned Switchover for all nodes in the cluster...
    Removing mediator mailboxes...
    Performing final cleanup...
    Successfully removed the mediator.
```

## metrocluster configuration-settings mediator show

Display the nodes connected to the mediator

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

## **Description**

The metrocluster configuration-settings mediator show command displays the connection status of the nodes with the Mediator in a MetroCluster configuration.

#### **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.

#### [-mediator-address <IP Address>] - Mediator IP Address

Specifies the IP address of the mediator to which the nodes in the MetroCluster configuration are connected.

#### [-port <integer>] - Mediator port number

Specifies the port of the mediator to which the nodes in the MetroCluster configuration are connected.

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

Specifies the nodes in the MetroCluster configuration which are connected to the mediator.

#### [-reachable {true|false}] - Connection Status of the Mediator

Specifies the connection status of the nodes with the mediator in the MetroCluster configuration.

#### [-configured {true|false}] - Mediator Configuration Status

Specifies the configuration status of the nodes with the mediator in the MetroCluster configuration.

#### **Examples**

The following example shows the mediator connection status in a MetroCluster configuration over IP setup:

JIUSTE	rl_node_01::*> m	etroclus	ter configuration-sett	ings mediator	show
	Mediator IP	Port	Node	Configura	tion
Connec	tion				
				Status	
Status					
	10.234.217.168				
		31784	cluster1_node_01	true	true
			cluster1_node_02	true	true
			cluster2_node_01	true	true
			cluster2 node 02	true	true

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