metrocluster check commands

ONTAP 9.10.1 commands

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metrocluster check disable-periodic-check

Disable Periodic Check

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

Description

The `metrocluster check disable-periodic-check` command disables the periodic checking of the MetroCluster configuration.

After this command is run, the MetroCluster Check job will be prevented from periodically checking the configuration for errors.

Parameters

Examples

```
clusA::> metrocluster check disable-periodic-check
```

metrocluster check enable-periodic-check

Enable Periodic Check

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

Description

The `metrocluster check enable-periodic-check` command enables the periodic checking of the MetroCluster configuration.

After this command is run, the MetroCluster Check job will able to run in the background and periodically check the configuration for errors.

Parameters

Examples

```
clusA::> metrocluster check enable-periodic-check
```

metrocluster check run

Check the MetroCluster setup

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

Description

The `metrocluster check run` command performs checks on the MetroCluster configuration and reports configuration errors if any.

To run this command, at least one DR group needs to be configured. The command checks the following parts of the configuration:

Node Configuration:

- node-reachable: This check verifies that the node is reachable.
- metrocluster-ready: This check verifies that the node is ready for MetroCluster configuration.
- local-ha-partner: This check verifies that the HA partner node is in the same cluster.
- ha-mirroring-on: This check verifies that HA mirroring for the node is configured.
- symmetric-ha-relationship: This check verifies that the relationship between the node and its HA partner is symmetric.
- remote-dr-partner: This check verifies that the DR partner node is in the remote cluster.
- dr-mirroring-on: This check verifies that DR mirroring for the node is configured.
- symmetric-dr-relationship: This check verifies that the relationship between the node and its DR partner is symmetric.
- remote-dr-auxiliary-partner: This check verifies that the DR auxiliary partner node is in the remote cluster.
- symmetric-dr-auxiliary-relationship: This check verifies that the relationship between the node and its DR auxiliary partner is symmetric.
- storage-failover-enabled: This check verifies that storage failover is enabled.
- has-intercluster-lif: This check verifies that the node has an intercluster LIF.
- node-object-limit: This check verifies that the node object limit option for the node is turned on.

Aggregate Configuration:

- mirroring-status: This check verifies that the aggregate is mirrored.
- disk-pool-allocation: This check verifies that the disks belonging to this aggregate have been correctly allocated to the right pools.

At the end of the check the command displays a summary of the results. This summary output can be viewed again by running metrocluster check show . If any of the rows in this output show any warnings more details can be viewed by running the metrocluster check show command for that component.

Parameters

`[-skip-dr-simulation {true|false}]` - Skip the DR Readiness Checks (privilege: advanced)

If this optional parameter is set to true, the switchover and switchback simulations are not run.

Examples

The following example shows the execution of the command when there are no warnings:

```
clusA::> metrocluster check run

        Last Checked On: 4/9/2014 20:11:46
Component           Result
        ------------------- ---------
        nodes               ok
        clusters            ok
        lifs                ok
        config-replication  ok
        aggregates          ok
5 entries were displayed.
Command completed. Use the "metrocluster check show -instance" command or
sub-commands in "metrocluster check" directory for detailed results.
```

The following example shows the execution of the command when there are some warnings:

```
clusA::> metrocluster check run
Last Checked On: 4/9/2014 20:11:46
Component           Result
        ------------------- ---------
        nodes               warning
        clusters            ok
        lifs                ok
        config-replication  ok
        aggregates          ok
5 entries were displayed.
Command completed. Use the "metrocluster check show -instance" command or
sub-commands in "metrocluster check" directory for detailed results.
```

Related Links

- metrocluster check show

metrocluster check show

Show the results of the last instance of MetroCluster check

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

Description

The `metrocluster check show` command displays the results of the metrocluster check run command.

This command displays the high-level verification results for each of the components. If there are any errors for a component, running the show command for that component (for example metrocluster check node show or

metrocluster check aggregate show) will display more information about the warning.

> Please note that this command does not run the checks but only displays the results of checks. To look at the latest results, run the metrocluster check run command and then run this command.

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.

[-timestamp <MM/DD/YYYY HH:MM:SS>] - Time of Check

This is the time at which the metrocluster check run command was last run in this cluster and these results were produced. If this parameter is specified, only rows with this timestamp will be displayed.

[-component <MetroCluster Check Components>] - Name of the Component

This is the name of the component. If this parameter is specified, only rows with this component will be displayed.

[-result {ok|warning|not-run|not-applicable}] - Result of the Check

This is the result of the check for the component. If this parameter is specified, only rows with this result will be displayed.

[-additional-info <text>] - Additional Information/Recovery Steps

This is the additional info for the verification for this component. This field will have detailed information about the warning and recovery steps. If this parameter is specified, only rows with this additional info will be displayed.

Examples

The following example shows the execution of the command when there are no warnings:

```
clusA::> metrocluster check show
cked On: 4/9/2014 20:11:46
t           Result
------------------- ---------
nodes               ok
clusters            ok
lifs                ok
config-replication  ok
aggregates          ok
connections         ok
s were displayed.
```

The following example shows the execution of the command when there are some warnings:

```
clusA::> metrocluster check show
cked On: 4/9/2014 20:11:46
t           Result
------------------- ---------
nodes               warning
clusters            ok
lifs                ok
config-replication  ok
aggregates          ok
connections         ok
s were displayed.
```

The following example shows the execution of the command with -instance option:

```
clusA::> metrocluster check show -instance
Time of Check: 4/9/2014 20:12:36
                        Name of the Component: nodes
                          Result of the Check: warning
        Additional Information/Recovery Steps:
Time of Check: 4/9/2014 20:12:36
                        Name of the Component: cluster
                          Result of the Check: ok
        Additional Information/Recovery Steps:
Time of Check: 4/9/2014 20:12:36
                        Name of the Component: lifs
                          Result of the Check: ok
        Additional Information/Recovery Steps:
Time of Check: 4/9/2014 20:12:36
                        Name of the Component: config-replication
                          Result of the Check: ok
        Additional Information/Recovery Steps:
Time of Check: 4/9/2014 20:12:36
                        Name of the Component: aggregates
                          Result of the Check: warning
        Additional Information/Recovery Steps:
Time of Check: 4/9/2014 20:12:36
                        Name of the Component: connections
                          Result of the Check: ok
        Additional Information/Recovery Steps:
        6 entries were displayed.
```

Related Links

- metrocluster check run
- metrocluster check node show
- metrocluster check aggregate show

metrocluster check aggregate show

Show results of MetroCluster check for aggregates

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

Description

The `metrocluster check aggregate show` command displays the results of aggregate checks performed by the metrocluster check run command.

The command verifies the following aspects of the configuration of all aggregates in MetroCluster:

- mirroring-status: This check verifies that the aggregate is mirrored.
- disk-pool-allocation: This check verifies that the disks belonging to this aggregate have been correctly allocated to the right pools.

Additional information about the warnings (if any) and recovery steps can be viewed by running the command with the -instance option.

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 <Node name>] - Node Name

This is the name of the node for which the check was run. If this parameter is specified, only rows with this node will be displayed.

[-aggregate <aggregate name>] - Name of the Aggregate

This is the name of the aggregate for which the check was run. If this parameter is specified, only rows with this aggregate will be displayed.

[-check <MetroCluster Aggregate Check>] - Type of Check

This is the type of the check performed. If this parameter is specified, only rows with this check will be displayed.

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

This is the name of the cluster the node belongs to. If this parameter is specified, only rows with this cluster will be displayed.

[-result {ok|warning|not-run|not-applicable}] - Result of the Check

This is the result of the check. If this parameter is specified, only rows with this result will be displayed.

[-additional-info <text>,…] - Additional Information/Recovery Steps

This is additional information about the check. This field has more information and recovery steps for the warning. If this parameter is specified, only rows with this additional info will be displayed.

Examples

The following example shows the execution of the command in a MetroCluster configuration with two nodes per cluster:

```
clusA::> metrocluster check aggregate show

Last Checked On: 4/9/2014 20:11:46

Node                   Aggregate              Check                  Result
---------------------- ---------------------- ----------------------
---------
clusA-01               a1_required_data_aggr
                                              mirroring-status       ok
                                              disk-pool-allocation   ok
                       aggr0_a1
                                              mirroring-status       ok
                                              disk-pool-allocation   ok
clusA-02               a2_required_data_aggr
                                              mirroring-status       ok
                                              disk-pool-allocation   ok
                       aggr0_a2
                                              mirroring-status       ok
                                              disk-pool-allocation   ok
clusB-01               b1_required_data_aggr
                                              mirroring-status       ok
                                              disk-pool-allocation   ok
                       aggr0_b1
                                              mirroring-status       ok
                                              disk-pool-allocation   ok
clusB-02               aggr0_b2
                                              mirroring-status       ok
                                              disk-pool-allocation   ok
                       b2_required_data_aggr
                                              mirroring-status       ok
                                              disk-pool-allocation   ok
16 entries were displayed.
```

The following example shows the execution of the command with -instance option:

```
clusA::> metrocluster check aggregate show -instance
Node Name: clusA-01
                Name of the Aggregate: a1_required_data_aggr_1
                        Type of Check: mirroring-status
                      Name of Cluster: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps: -
Node Name: clusA-01
                Name of the Aggregate: a1_required_data_aggr_1
                        Type of Check: disk-pool-allocation
                      Name of Cluster: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps: -
Node Name: clusA-01
                Name of the Aggregate: a1_required_data_aggr_2
                        Type of Check: mirroring-status
                      Name of Cluster: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps: -
Node Name: clusA-01
                Name of the Aggregate: a1_required_data_aggr_2
                        Type of Check: disk-pool-allocation
                      Name of Cluster: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps: -
Node Name: clusA-01
                Name of the Aggregate: aggr0_a1
                        Type of Check: mirroring-status
                      Name of Cluster: clusA
                  Result of the Check: warning
Additional Information/Recovery Steps: Root aggregate "aggr0_a1" is un-
mirrored. Root aggregates should be mirrored in a MetroCluster
configuration.
Node Name: clusA-01
                Name of the Aggregate: aggr0_a1
                        Type of Check: disk-pool-allocation
                      Name of Cluster: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps: -
Node Name: clusB-01
                Name of the Aggregate: aggr0_b1
                        Type of Check: mirroring-status
                      Name of Cluster: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps: -
```

```
Node Name: clusB-01
                Name of the Aggregate: aggr0_b1
                        Type of Check: disk-pool-allocation
                      Name of Cluster: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps: -
Node Name: clusB-01
                Name of the Aggregate: b1_required_data_aggr_1
                        Type of Check: mirroring-status
                      Name of Cluster: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps: -
Node Name: clusB-01
                Name of the Aggregate: b1_required_data_aggr_1
                        Type of Check: disk-pool-allocation
                      Name of Cluster: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps: -
Node Name: clusB-01
                Name of the Aggregate: b1_required_data_aggr_2
                        Type of Check: mirroring-status
                      Name of Cluster: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps: -
Node Name: clusB-01
                Name of the Aggregate: b1_required_data_aggr_2
                        Type of Check: disk-pool-allocation
                      Name of Cluster: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps: -
12 entries were displayed.
```

Related Links

- metrocluster check run

metrocluster check cluster show

Show results of MetroCluster check for the cluster components

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

Description

The `metrocluster check cluster show` command displays the results of cluster checks performed by the metrocluster check run command.

The command displays the results of the following cluster configuration checks:

- negotiated-switchover-ready: This check verifies that the cluster is ready for a negotiated switchover operation.
- switchback-ready: This check verifies that the cluster is ready for a switchback operation.
- job-schedules: This check verifies that the job schedules between the local and remote clusters are consistent.
- licenses: This check verifies that the licenses between the local and remote clusters are consistent.
- periodic-check-enabled: This check verifies that the periodic MetroCluster Check Job is enabled.
- onboard-key-management: This check verifies that the Onboard Key Management hierarchies are consistent.
- external-key-management: This check verifies that the External Key Management configurations are consistent.

Additional information about the warnings (if any) and recovery steps can be viewed by running the command with the `-instance` parameter.

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.

[-check {negotiated-switchover-ready|switchback-ready|job-schedules|licenses|periodic-check-enabled|onboard-key-management|external-key-management}] - Type of Check

This is the type of the check performed. If this parameter is specified, only rows with this check will be displayed.

[-cluster <Cluster name>] - Cluster Name

This is the name of the cluster the check results apply to. If this parameter is specified, only rows matching the specified cluster will be displayed.

[-result {ok|warning|not-run|not-applicable}] - Result of the Check

This is the result of the check. If this parameter is specified, only rows with this result will be displayed.

[-additional-info <text>] - Additional Information/Recovery Steps

This is additional information about the check. This field has more information and recovery steps for the warning. If this parameter is specified, only rows with this additional info will be displayed.

Examples

The following example shows the execution of the command in a MetroCluster configuration:

```
clusA::> metrocluster check cluster show

Last Checked On: 11/29/2018 17:15:00

Cluster                 Check                                   Result
--------------------- ------------------------------------- ---------
clusA
                        negotiated-switchover-ready           not-applicable
                        switchback-ready                      not-applicable
                        job-schedules                         ok
                        licenses                              ok
                        periodic-check-enabled                ok
                        onboard-key-management                ok
                        external-key-management               ok
clusB
                        negotiated-switchover-ready           not-applicable
                        switchback-ready                      not-applicable
                        job-schedules                         ok
                        licenses                              ok
                        periodic-check-enabled                ok
                        onboard-key-management                ok
                        external-key-management               ok
14 entries were displayed.
```

The following example shows the execution of the command with the `-instance` parameter:

```
clusA::> metrocluster check cluster show -instance
Type of Check: negotiated-switchover-ready
                         Cluster Name: clusA
                  Result of the Check: not-applicable
Additional Information/Recovery Steps: Disaster recovery readiness checks
are not performed as part of periodic metrocluster check. To run these
checks, use the "metrocluster check run" command.
Type of Check: switchback-ready
                         Cluster Name: clusA
                  Result of the Check: not-applicable
Additional Information/Recovery Steps: Disaster recovery readiness checks
are not performed as part of periodic metrocluster check. To run these
checks, use the "metrocluster check run" command.
Type of Check: job-schedules
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Type of Check: licenses
```

```
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Type of Check: periodic-check-enabled
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Type of Check: onboard-key-management
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Type of Check: external-key-management
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Type of Check: negotiated-switchover-ready
                         Cluster Name: clusB
                  Result of the Check: not-applicable
Additional Information/Recovery Steps: Disaster recovery readiness checks
are not performed as part of periodic metrocluster check. To run these
checks, use the "metrocluster check run" command.
Type of Check: switchback-ready
                         Cluster Name: clusB
                  Result of the Check: not-applicable
Additional Information/Recovery Steps: Disaster recovery readiness checks
are not performed as part of periodic metrocluster check. To run these
checks, use the "metrocluster check run" command.
Type of Check: job-schedules
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Type of Check: licenses
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Type of Check: periodic-check-enabled
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Type of Check: onboard-key-management
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Type of Check: external-key-management
                         Cluster Name: clusB
                  Result of the Check: ok
```

```
Additional Information/Recovery Steps:
14 entries were displayed.
```

Related Links

- metrocluster check run

metrocluster check config-replication show-aggregate-eligibility

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

Description

The `metrocluster check config-replication show-aggregate-eligibility` command displays the MetroCluster configuration replication aggregate eligibility.

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.

[-aggregate <aggregate name>] - Aggregate

This is the aggregate name. If this parameter is specified, only rows with this aggregate will be displayed.

[-hosted-configuration-replication-volumes <volume name>,…] - Currently Hosted Configuration Replication Volumes

This is the list of the configuration replication volumes hosted on this aggregate. If this parameter is specified, only rows with these configuration replication volumes will be displayed.

[-is-eligible-to-host-additional-volumes {true|false}] - Eligibility to Host Another Configuration Replication Volume

This is the eligibility of the aggregate to host additional configuration replication volumes. If this parameter is specified, only rows with this eligibility will be displayed.

[-comment <text>] - Comment for Eligibility Status

This is a comment regarding the eligibility of the aggregate to host configuration replication volumes. If this parameter is specified, only rows with this comment will be displayed.

Examples

The following example shows the execution of the command in a MetroCluster configuration with thirteen aggregates in the cluster:

```
clusA::metrocluster check config-replication> show-aggregate-eligibility
                                                        Eligible to
Aggregate    Hosted Config Replication Vols             Host Addl Vols
Comments
------------ ------------------------------------------ --------------
--------
a0           -                                          false
Root Aggregate
a1           MDV_CRS_1bc7134a5ddf11e3b63f123478563412_A true           -
a2           MDV_CRS_1bc7134a5ddf11e3b63f123478563412_B true           -
a3           -                                          false
Unable to determine available space of aggregate
a4           -                                          false
Non-Local Aggregate
a5           -                                          false
Non-Home Aggregate
a6           -                                          false
Unable to determine mirror configuration
a7           -                                          false
Mirror configuration does not match requirement
a8           -                                          false
Disallowed Aggregate
a9           -                                          false
Insufficient Space - 10GB required
a10          -                                          false
Aggregate Offline
a11          -                                          false
Inconsistent Aggregate
a12          -                                          false
Aggregate Full
13 entries were displayed.
```

metrocluster check config-replication show-capture-status

Display MetroCluster capture status information

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

Description

The `metrocluster check config-replication show-capture-status` command indicates whether or not a configuration change that would prevent a negotiated switchover is currently being captured for replication.

Examples

The following example shows the execution of the command in a MetroCluster configuration when capture is not in progress:

```
cluster1::*> metrocluster check config-replication show-capture-status
Is Capture in Progress: false
```

metrocluster check config-replication show

Display MetroCluster config-replication status information

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

Description

The `metrocluster check config-replication show` command displays the results of MetroCluster configuration replication.

The command verifies the following aspects of MetroCluster configuration replication :

- Enabled: Verifies that MetroCluster configuration replication is enabled on the cluster.
- Running: Verifies that MetroCluster configuration replication is running on the cluster.
- Remote Heartbeat: Verifies that the MetroCluster configuration replication heartbeat with the remote cluster is healthy.
- Last Heartbeat Sent: Prints the timestamp of the last MetroCluster configuration replication heartbeat sent to the remote cluster.
- Last Heartbeat Received: Prints the timestamp of the last MetroCluster configuration replication hearbeat received from the remote cluster.
- Storage Status: Verifies that MetroCluster configuration replication storage is healthy.
- Storage In Use: Prints the location of MetroCluster configuration replication storage.
- Storage Remarks: Prints the underlying root cause for non healthy MetroCluster configuration storage.
- Vserver Streams: Verifies that MetroCluster configuration replication Vserver streams are healthy.
- Cluster Streams: Verifies that MetroCluster configuration replication Cluster streams are healthy.

Additional information about the warnings (if any) and recovery steps can be viewed by running the command with the -instance option.

Parameters

`[-instance ]`

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

Examples

The following example shows the output of `metrocluster check config-replication show` :

```
clusA::metrocluster check config-replication> show
                       Enabled: true
                       Running: true
               Remote Heartbeat: ok
           Last Heartbeat Sent: 12/12/2013 14:24:59
       Last Heartbeat Received: 12/12/2013 14:25:00
                Storage Status: ok
                Storage In Use: Cluster-wide Volume:
MDV_CRS_1bc7134a5ddf11e3b63f123478563412_A
               Storage Remarks: -
               Vserver Streams: ok
               Cluster Streams: ok
```

metrocluster check connection show

Display the check results of connections for nodes in a MetroCluster over IP configuration

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

Description

The `metrocluster check connection show` command displays the check results of connections for nodes in a MetroCluster over IP configuration.

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.

[-check-result {ok|warning|not-run|not-applicable}] - Check Connection Result

If this parameter is specified, the command displays information for the matching check-result.

[-check-ping-error-info <text>] - Check Connection Ping Error Info

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

[-check-mtu-size-error-info <text>] - Check Connection MTU Size Error Info

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

[-check-storage-error-info <text>] - Check Connection Storage Error Info

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

Examples

The following example shows the output of the `metrocluster check connection show` command:

```
clusA::>  metrocluster check connection show
DR                     Source          Destination
Group Cluster Node    Network Address Network Address Partner Type Config
State
----- ------- ------- --------------- --------------- ------------
------------
1     cluster-A
              node-A1
                 Home Port: e0f
                      10.140.113.214  10.140.113.216  HA Partner
completed
              Check Result: ok
                 Home Port: e0f
                      10.140.113.214  10.140.113.218  DR Partner
completed
              Check Result: ok
                 Home Port: e0f
                      10.140.113.214  10.140.113.249  DR Auxiliary
completed
              Check Result: ok
                 Home Port: e0g
                      10.140.113.215  10.140.113.217  HA Partner
completed
              Check Result: ok
                 Home Port: e0g
                      10.140.113.215  10.140.113.248  DR Partner
completed
              Check Result: ok
                 Home Port: e0g
                      10.140.113.215  10.140.113.25   DR Auxiliary
completed
              Check Result: ok
              node-A2
                 Home Port: e0f
                      10.140.113.216  10.140.113.214  HA Partner
completed
              Check Result: ok
                 Home Port: e0f
                      10.140.113.216  10.140.113.249  DR Partner
completed
              Check Result: ok
                 Home Port: e0f
                      10.140.113.216  10.140.113.218  DR Auxiliary
completed
              Check Result: ok
                 Home Port: e0g
```

```
                     10.140.113.217  10.140.113.215  HA Partner
completed
              Check Result: ok
                 Home Port: e0g
                     10.140.113.217  10.140.113.25   DR Partner
completed
              Check Result: ok
                 Home Port: e0g
                     10.140.113.217  10.140.113.248  DR Auxiliary
completed
              Check Result: ok
      cluster-B
              node-B1
                 Home Port: e0f
                     10.140.113.218  10.140.113.249  HA Partner
completed
              Check Result: ok
                 Home Port: e0f
                     10.140.113.218  10.140.113.214  DR Partner
completed
              Check Result: ok
                 Home Port: e0f
                     10.140.113.218  10.140.113.216  DR Auxiliary
completed
              Check Result: ok
                 Home Port: e0g
                     10.140.113.248  10.140.113.25   HA Partner
completed
              Check Result: ok
                 Home Port: e0g
                     10.140.113.248  10.140.113.215  DR Partner
completed
              Check Result: ok
                 Home Port: e0g
                     10.140.113.248  10.140.113.217  DR Auxiliary
completed
              Check Result: ok
              node-B2
                 Home Port: e0f
                     10.140.113.249  10.140.113.218  HA Partner
completed
              Check Result: ok
                 Home Port: e0f
                     10.140.113.249  10.140.113.216  DR Partner
completed
              Check Result: ok
```

```
                 Home Port: e0f
                      10.140.113.249  10.140.113.214  DR Auxiliary
completed
              Check Result: ok
                 Home Port: e0g
                      10.140.113.25   10.140.113.248  HA Partner
completed
              Check Result: ok
                 Home Port: e0g
                      10.140.113.25   10.140.113.217  DR Partner
completed
              Check Result: ok
                 Home Port: e0g
                      10.140.113.25   10.140.113.215  DR Auxiliary
completed
              Check Result: ok
24 entries were displayed.
```

metrocluster check lif repair-placement

Repair LIF placement for the sync-source Vserver LIFs in the destination cluster

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

Description

The `metrocluster check lif repair-placement` command reruns LIF placement for those LIFs displayed by the metrocluster check lif show command. This command is expected to be run after the admin manually rectifies the LIF placement failures displayed in the metrocluster check lif show command output. The command is successful if the LIF placement rerun does not encounter any LIF placement failure. This is to be confirmed by subsequent running of the metrocluster check lif show .

Parameters

`-vserver <Vserver Name>` - sync-source Vserver Name

This is the name of the sync source Vserver that has LIF placement failures as reported by the metrocluster check lif show command. This input ensures that the command is run on the specified Vserver.

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

This is the Logical Interface name that belongs to the sync source Vserver that has a LIF placement failure in the destination cluster as reported by the metrocluster check lif show command. This input ensures that the command is run on the specified LIF only.

Examples

The following example shows the execution of the command with a sync source Vserver and a LIF specified:

```
clusA::> metrocluster check lif repair-placement -vserver vs1.example.com
-lif fcplif1
Command completed. Run the "metrocluster check lif show" command for
results.

clusA::> metrocluster check lif repair-placement -vserver vs1.example.com
-lif iscsilif1
Command completed. Run the "metrocluster check lif show" command for
results.
```

The following example shows the execution of the command with only a sync-source Vserver specified:

```
clusA::> metrocluster check lif repair-placement -vserver  vs1.example.com

Command completed. Run the "metrocluster check lif show" command for
results.

clusA::>
```

Related Links

- metrocluster check lif show

metrocluster check lif show

Show results of MetroCluster check results for the data LIFs

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

Description

The `metrocluster check lif show` command displays the LIF placement failures in the MetroCluster configuration.

The command verifies the following aspects of the LIF placements of all the data LIFs in Metrocluster:

- lif-placed-on-dr-node: This check verifies that the LIF is placed on DR partner node.
- port-selection: This check verifies that the LIF is placed on correct port.

The LIF placement failures are mostly fabric/network connectivity issues that require manual intervention. Once the connectivity issues are resolved manually, the admin is expected to run metrocluster check lif repair-placement command to resolve the LIF placement issues for the sync source Vserver.

Additional information about the warnings (if any) and recovery steps can be viewed by running the command with the -instance option.

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.

[-cluster <Cluster name>] - Name of the Cluster

This is the name of the cluster the LIF belongs to. If this parameter is specified, only rows with this cluster will be displayed.

[-vserver <text>] - Name of the Vserver

This is the name of the Vserver in the MetroCluster configuration

[-lif <lif-name>] - Name of the Lif

This is the name of the LIF.

[-check <MetroCluster LIF placement Check>] - Description

This is the type of the check performed. If this parameter is specified, only rows with this check will be displayed.

[-result {ok|warning|not-run|not-applicable}] - Result of the Check

This is the result of the check performed. If this parameter is specified, only rows with this result will be displayed.

[-additional-info <text>] - Additional Information/Recovery Steps

This is additional information about the check. This field has more information and recovery steps for the warning. If this parameter is specified, only rows with this additional info will be displayed.

Examples

The following example shows the execution of the command in a MetroCluster configuration with two nodes per cluster:

```
clusA::>metrocluster check  lif show
Cluster                 Vserver     LIF         Check                  Result
------------------- ----------- -----------  ----------------------- ------
ClusA                vs1         a_data1      lif-placed-on-dr-node  ok
                                              port-selection         ok
                                 a_data1_inet6
                                              lif-placed-on-dr-node  ok
                                              port-selection         ok
ClusA                vs2-mc      b_data1      lif-placed-on-dr-node  ok
                                              port-selection
warning
                                 b_data1_inet6
                                              lif-placed-on-dr-node  ok
                                              port-selection
warning
ClusB                vs1-mc      a_data1      lif-placed-on-dr-node
warning
                                              port-selection         ok
                                 a_data1_inet6
                                              lif-placed-on-dr-node
warning
                                              port-selection         ok
ClusB                vs2         b_data1      lif-placed-on-dr-node  ok
                                              port-selection         ok
                                 b_data1_inet6
                                              lif-placed-on-dr-node  ok
                                              port-selection         ok
16 entries were displayed.
```

Related Links

- metrocluster check lif repair-placement

metrocluster check node show

Show results of MetroCluster check for nodes

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

Description

The `metrocluster check node show` command displays the results of node checks performed by the metrocluster check run command.

The command displays the results of the following node configuration checks:

- node-reachable: This check verifies that the node is reachable.
- metrocluster-ready: This check verifies that the node is ready for MetroCluster configuration.
- local-ha-partner: This check verifies that the HA partner node is in the same cluster.
- ha-mirroring-on: This check verifies that HA mirroring for the node is configured.
- ha-mirroring-op-state: This check verifies that the HA mirroring operation is online.
- symmetric-ha-relationship: This check verifies that the relationship between the node and its HA partner is symmetric.
- remote-dr-partner: This check verifies that the DR partner node is in the remote cluster.
- dr-mirroring-on: This check verifies that DR mirroring for the node is configured.
- dr-mirroring-op-state: This check verifies that the DR mirroring operation is online.
- symmetric-dr-relationship: This check verifies that the relationship between the node and its DR partner is symmetric.
- remote-dr-auxiliary-partner: This check verifies that the DR auxiliary partner node is in the remote cluster.
- symmetric-dr-auxiliary-relationship: This check verifies that the relationship between the node and its DR auxiliary partner is symmetric.
- storage-failover-enabled: This check verifies that storage failover is enabled.
- has-intercluster-lif: This check verifies that the node has an intercluster LIF.
- node-object-limit: This check verifies that the node object limit option for the node is turned on.
- automatic-uso: This check verifies that the automatic USO option for the node is enabled.

Additional information about the warnings (if any) and recovery steps can be viewed by running the command with the `-instance` parameter.

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 <Node name>] - Node Name

This is the name of the node for which the check was run. If this parameter is specified, only rows with this node will be displayed.

[-check <MetroCluster Node Check>] - Type of Check

This is the type of the check performed. If this parameter is specified, only rows with this check will be displayed.

[-cluster <Cluster name>] - Cluster Name

This is the name of the cluster the node belongs to. If this parameter is specified, only rows with this cluster will be displayed.

[-result {ok|warning|not-run|not-applicable}] - Result of the Check

This is the result of the check. If this parameter is specified, only rows with this result will be displayed.

[-additional-info <text>] - Additional Information/Recovery Steps

This is additional information about the check. This field has more information and recovery steps for the warning. If this parameter is specified, only rows with this additional info will be displayed.

Examples

The following example shows the execution of the command in a MetroCluster configuration with two nodes per cluster:

```
clusA::> metrocluster check node show

Last Checked On: 9/12/2016 13:47:00

Node                   Check                                  Result
---------------------- -------------------------------------- ---------
clusA-01
                       node-reachable                         ok
                       metrocluster-ready                     ok
                       local-ha-partner                       ok
                       ha-mirroring-on                        warning
                       ha-mirroring-op-state                  ok
                       symmetric-ha-relationship              warning
                       remote-dr-partner                      ok
                       dr-mirroring-on                        ok
                       dr-mirroring-op-state                  ok
                       symmetric-dr-relationship              ok
                       remote-dr-auxiliary-partner            ok
                       symmetric-dr-auxiliary-relationship    warning
                       storage-failover-enabled               ok
                       has-intercluster-lif                   ok
                       node-object-limit                      ok
                       automatic-uso                          ok
clusA-02
                       node-reachable                         ok
                       metrocluster-ready                     ok
                       local-ha-partner                       ok
                       ha-mirroring-on                        warning
                       ha-mirroring-op-state                  ok
                       symmetric-ha-relationship              warning
                       remote-dr-partner                      ok
                       dr-mirroring-on                        ok
                       dr-mirroring-op-state                  ok
                       symmetric-dr-relationship              ok
                       remote-dr-auxiliary-partner            ok
```

```
                      symmetric-dr-auxiliary-relationship  warning
                      storage-failover-enabled             ok
                      has-intercluster-lif                 ok
                      node-object-limit                    ok
                      automatic-uso                        ok
clusB-01
                      node-reachable                       ok
                      metrocluster-ready                   ok
                      local-ha-partner                     ok
                      ha-mirroring-on                      warning
                      ha-mirroring-op-state                ok
                      symmetric-ha-relationship            warning
                      remote-dr-partner                    ok
                      dr-mirroring-on                      ok
                      dr-mirroring-op-state                ok
                      symmetric-dr-relationship            ok
                      remote-dr-auxiliary-partner          ok
                      symmetric-dr-auxiliary-relationship  warning
                      storage-failover-enabled             ok
                      has-intercluster-lif                 ok
                      node-object-limit                    ok
                      automatic-uso                        ok
clusB-02
                      node-reachable                       ok
                      metrocluster-ready                   ok
                      local-ha-partner                     ok
                      ha-mirroring-on                      warning
                      ha-mirroring-op-state                ok
                      symmetric-ha-relationship            warning
                      remote-dr-partner                    ok
                      dr-mirroring-on                      ok
                      dr-mirroring-op-state                ok
                      symmetric-dr-relationship            ok
                      remote-dr-auxiliary-partner          ok
                      symmetric-dr-auxiliary-relationship  warning
                      storage-failover-enabled             ok
                      has-intercluster-lif                 ok
                      node-object-limit                    ok
                      automatic-uso                        ok
64 entries were displayed.
```

The following example shows the execution of the command with the `-instance` parameter:

```
clusA::> metrocluster check node show -instance
Node Name: clusA-01
```

```
                        Type of Check: node-reachable
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusA-01
                        Type of Check: metrocluster-ready
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusA-01
                        Type of Check: local-ha-partner
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusA-01
                        Type of Check: ha-mirroring-on
                         Cluster Name: clusA
                  Result of the Check: warning
Additional Information/Recovery Steps: Node's HA mirroring is not active.
Enable it on using "storage failover" commands.
Node Name: clusA-01
                        Type of Check: ha-mirroring-op-state
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusA-01
                        Type of Check: symmetric-ha-relationship
                         Cluster Name: clusA
                  Result of the Check: warning
Additional Information/Recovery Steps: Partner not found. Check if node
"clusA-01's HA partner" is configured in MetroCluster.
Node Name: clusA-01
                        Type of Check: remote-dr-partner
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusA-01
                        Type of Check: dr-mirroring-on
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusA-01
                        Type of Check: dr-mirroring-op-state
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
```

```
Node Name: clusA-01
                        Type of Check: symmetric-dr-relationship
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusA-01
                        Type of Check: remote-dr-auxiliary-partner
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusA-01
                        Type of Check: symmetric-dr-auxiliary-relationship
                         Cluster Name: clusA
                  Result of the Check: warning
Additional Information/Recovery Steps: Partner not found. Check if node
"clusA-01's DR auxiliary partner" is configured in MetroCluster.
Node Name: clusA-01
                        Type of Check: storage-failover-enabled
                         Cluster Name: clusA
                  Result of the Check: warning
Additional Information/Recovery Steps: Node's storage failover is
disabled.  Enable using "storage failover" commands.
Node Name: clusA-01
                        Type of Check: has-intercluster-lif
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusA-01
                        Type of Check: node-object-limit
                         Cluster Name: clusA
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: node-reachable
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: metrocluster-ready
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: local-ha-partner
                         Cluster Name: clusB
                  Result of the Check: ok
```

```
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: ha-mirroring-on
                         Cluster Name: clusB
                  Result of the Check: warning
Additional Information/Recovery Steps: Node's HA mirroring is not active.
Enable it on using "storage failover" commands.
Node Name: clusB-01
                        Type of Check: ha-mirroring-op-state
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: symmetric-ha-relationship
                         Cluster Name: clusB
                  Result of the Check: warning
Additional Information/Recovery Steps: Partner not found. Check if node
"clusB-01's HA partner" is configured in MetroCluster.
Node Name: clusB-01
                        Type of Check: remote-dr-partner
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: dr-mirroring-on
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: dr-mirroring-op-state
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: symmetric-dr-relationship
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: remote-dr-auxiliary-partner
                         Cluster Name: clusB
                  Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: symmetric-dr-auxiliary-relationship
                         Cluster Name: clusB
```

```
                   Result of the Check: warning
Additional Information/Recovery Steps: Partner not found. Check if node
"clusB-01's DR auxiliary partner" is configured in MetroCluster.
Node Name: clusB-01
                        Type of Check: storage-failover-enabled
                         Cluster Name: clusB
                   Result of the Check: warning
Additional Information/Recovery Steps: Node's storage failover is
disabled.  Enable using "storage failover" commands.
Node Name: clusB-01
                        Type of Check: has-intercluster-lif
                         Cluster Name: clusB
                   Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: node-object-limit
                         Cluster Name: clusB
                   Result of the Check: ok
Additional Information/Recovery Steps:
Node Name: clusB-01
                        Type of Check: automatic-uso
                         Cluster Name: clusB
                   Result of the Check: ok
Additional Information/Recovery Steps:
32 entries were displayed.
```

Related Links

- metrocluster check run

metrocluster check volume show

Show results of the MetroCluster check for volumes

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

Description

The `metrocluster check volume show` command displays the results of volume checks performed by the metrocluster check run command.

The command displays the results of the following volume configuration checks:

- unmirrored-flexgroups: This check looks for flexgroups residing on unmirrored aggregates.
- mixed-flexgroups: This check looks for flexgroups residing on a mix of mirrored and unmirrored aggregates.

Additional information about the warnings, if any, and recovery steps can be viewed by running the command

with the `-instance` parameter.

Parameters

{ [-fields <fieldname>,…]

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

| [-instance] }

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

[-vserver <vserver name>] - Vserver Name

This is the name of the vserver that contains the volume that the check results apply to. If this parameter is specified, only rows matching the specified cluster will be displayed.

[-volume <volume name>] - Volume Name

This is the name of the volume that the check results apply to. If this parameter is specified, only rows matching the specified volume will be displayed.

[-check <MetroCluster Volume Check>] - Type of Check

This is the type of the check performed. If this parameter is specified, only rows with this check will be displayed.

[-result {ok|warning|not-run|not-applicable}] - Result of the Check

This is the result of the check. If this parameter is specified, only rows with this result will be displayed.

[-additional-info <text>,…] - Additional Information/Recovery Steps

This is additional information about the check. This field has more information and recovery steps for the warning. If this parameter is specified, only rows with this additional info will be displayed.

Examples

The following example shows the execution of the command in a MetroCluster configuration:

```
clusA::*> metrocluster check volume show

Last Checked On: 7/25/2018 10:04:07

Vserver                 Volume                    Check
Result
---------------------- ------------------------- ---------------------
-------
vs1                     unMirr
                                                  unmirrored-volumes
warning
vs2                     vs2UnMirrA
                                                  unmirrored-volumes
warning
2 entries were displayed.

clusA::*> metrocluster check volume show -instance
Vserver Name: vs1
                          Volume Name: unMirr
                        Type of Check: unmirrored-volumes
                   Result of the Check: warning
Additional Information/Recovery Steps: FlexGroup "unMirr" resides on
unmirrored aggregates. Parts of the FlexGroup may not be available after
an un-planned switchover.
Vserver Name: vs2
                          Volume Name: vs2UnMirrA
                        Type of Check: unmirrored-volumes
                   Result of the Check: warning
Additional Information/Recovery Steps: FlexGroup "vs2UnMirrA" resides on
unmirrored aggregates. Parts of the FlexGroup may not be available after
an un-planned switchover.
2 entries were displayed.
clusA::>
```

Related Links

- metrocluster check run