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metrocluster check 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.

> ℹ️ 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.
```

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