



监控 MetroCluster 配置

ONTAP MetroCluster

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控制 MetroCluster 配置

通过 MetroCluster Tiebreaker 软件，您可以控制 MetroCluster 配置状态，估计发送 NetApp 客户支持的 SNMP 事件和陷阱以及查看控制操作的状态，从而自行执行恢复过程。

正在配置 AutoSupport

默认情况下，AutoSupport 消息会在安装 Tiebreaker 软件后一周发送给 NetApp。触发 AutoSupport 通知的事件包括 Tiebreaker 软件崩溃，MetroCluster 配置上的任何情况或未知 MetroCluster 配置状态。

您必须具有配置 AutoSupport 消息的直接权限。

1. 使用具有以下任一选项的 Tiebreaker CLI AutoSupport 命令：

选项	说明
-invoke	向客户支持发送 AutoSupport 消息
配置向	向以配置代理服务器凭据
-delete 配置	删除代理服务器凭据
-enable	启用 AutoSupport 通知（是默认配置。）
-disable	禁用 AutoSupport 通知
-show	显示 AutoSupport 状态

以下示例显示已启用或禁用 AutoSupport 以及将 AutoSupport 内容分布到的目录：

```
NetApp MetroCluster Tiebreaker :> autosupport enable
AutoSupport already enabled.
```

```
NetApp MetroCluster Tiebreaker :> autosupport disable
AutoSupport status          : disabled
Proxy Server IP Address     : 10.234.168.79
Proxy Server Port Number    : 8090
Proxy Server Username       : admin
AutoSupport destination    :
https://support.netapp.com/asupprod/post/1.0/postAsup
```

```
NetApp MetroCluster Tiebreaker :> autosupport enable
AutoSupport status          : enabled
Proxy Server IP Address     : 10.234.168.79
Proxy Server Port Number    : 8090
Proxy Server Username       : admin
AutoSupport destination    :
https://support.netapp.com/asupprod/post/1.0/postAsup
```

```
NetApp MetroCluster Tiebreaker :> autosupport invoke
AutoSupport transmission    : success
Proxy Server IP Address     : 10.234.168.79
Proxy Server Port Number    : 8090
Proxy Server Username       : admin
AutoSupport destination    :
https://support.netapp.com/asupprod/post/1.0/postAsup
```

以下示例显示了使用 IP 地址和端口号通过 NetApp 代理服务器配置的 AutoSupport：

```
NetApp MetroCluster Tiebreaker :> autosupport configure wizard
Enter Proxy Server IP address : 10.234.168.79
Enter Proxy Server port number : 8090
Enter Proxy Server Username   : admin
Enter Proxy Server Password   : 123abc
Autosupport configuration updated successfully.
```

以下示例显示了 AutoSupport 配置的删除：

```
NetApp MetroCluster Tiebreaker :> autosupport delete configuration
Autosupport configuration deleted successfully.
```

SNMP 事件和陷阱

NetApp MetroCluster Tiebreaker 软件使用 SNMP 陷阱向通知重大事件。一些陷阱是 NetApp MIB 文件的一部分。每个陷阱都包含以下信息：陷阱名称，严重性，影响，和消息。

事件名称	事件信息	陷阱号
MetroCluster 断路器无法配置	警告管理软件无法连接到。如果个集群均无法，会生此事件。	25000
MetroCluster 断路器无法集群	警告管理软件无法其中一个集群。	25001
MetroCluster 断路器到集群生	通知管理软件到站点故障。此将送通知。	25002
配集群之的所有路均已切断。	件会到个集群均可，但个集群之的所有网路径均已，并且集群无法彼此通信。	25005
SNMP 陷阱	在，可以行 SNMP config test 命令来 SNMP 配置。	2506

示控操作的状态

可以示 MetroCluster 配置的控制操作的整体状态。

1. 使用 Tiebreaker CLI monitor show 命令使用以下任一示 MetroCluster 操作的状态：

选项	说明
-monitor-name	示指定控制器名称的状态
-operation-history	最多示上次在集群上行的 10 个控制操作
-stats	示与指定集群相关的信息
状态	示指定集群的状态 * 注意： * MetroCluster Tiebreaker 软件可能需要 10 分钟才能反映修复聚合，修复根或切回等操作完成状态。

以下示例示集群 cluster_A 和 cluster_B 已连接且运行状况良好：

```
NetApp MetroCluster Tiebreaker:> monitor show -status
MetroCluster: cluster_A
  Disaster: false
  Monitor State: Normal
  Observer Mode: true
  Silent Period: 15
  Override Vetoes: false
  Cluster: cluster_Ba(UUID:4d9ccf24-080f-11e4-9df2-00a098168e7c)
    Reachable: true
    All-Links-Severed: FALSE
      Node: mcc5-a1(UUID:78b44707-0809-11e4-9be1-e50dab9e83e1)
        Reachable: true
        All-Links-Severed: FALSE
        State: normal
      Node: mcc5-a2(UUID:9a8b1059-0809-11e4-9f5e-8d97cdec7102)
        Reachable: true
        All-Links-Severed: FALSE
        State: normal
  Cluster: cluster_B(UUID:70dacd3b-0823-11e4-a7b9-00a0981693c4)
    Reachable: true
    All-Links-Severed: FALSE
      Node: mcc5-b1(UUID:961fce7d-081d-11e4-9ebf-2f295df8fcb3)
        Reachable: true
        All-Links-Severed: FALSE
        State: normal
      Node: mcc5-b2(UUID:9393262d-081d-11e4-80d5-6b30884058dc)
        Reachable: true
        All-Links-Severed: FALSE
        State: normal
```

在以下示例中，将□示在 cluster_B 上□行的最后七个操作：

```

NetApp MetroCluster Tiebreaker:> monitor show -operation-history
MetroCluster: cluster_B
 [ 2014-09-15 04:48:32.274 ] MetroCluster Monitor is initialized
 [ 2014-09-15 04:48:32.278 ] Started Discovery and validation of
MetroCluster Setup
 [ 2014-09-15 04:48:35.078 ] Discovery and validation of MetroCluster
Setup succeeded. Started monitoring.
 [ 2014-09-15 04:48:35.246 ] NetApp MetroCluster Tiebreaker software is
able to reach cluster "mcc5a"
 [ 2014-09-15 04:48:35.256 ] NetApp MetroCluster Tiebreaker software is
able to reach cluster "mcc5b"
 [ 2014-09-15 04:48:35.298 ] Link to remote DR cluster is up for cluster
"mcc5a"
 [ 2014-09-15 04:48:35.308 ] Link to remote DR cluster is up for cluster
"mcc5b"

```

示 MetroCluster 配置信息

可以示 Tiebreaker 文件中所有 MetroCluster 配置例的控器名称和 IP 地址。

1. 使用 Tiebreaker CLI configuration show 命令示 MetroCluster 配置信息。

以下示例示了集群 cluster_A 和 cluster_B 的信息：

```

MetroCluster: North America
  Monitor Enabled: true
  ClusterA name: cluster_A
  ClusterA IPAddress: 10.222.196.130
  ClusterB name: cluster_B
  ClusterB IPAddress: 10.222.196.140

```

正在建文件

可以将 Tiebreaker 文件的整体状保存到文件中，以便行。

1. 使用 Tiebreaker CLI monitor dump -status 命令建一个包含所有 MetroCluster 配置的整体状的 XML 文件。

以下示例示了已成功建 /var/log/netapp/mcctb/metrocluster-tiebreaker-status.xml 文件：

```

NetApp MetroCluster Tiebreaker :> monitor dump -status
MetroCluster Tiebreaker status successfully dumped in file
/var/log/netapp/mcctb/metrocluster-tiebreaker-status.xml

```

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