

# 配置IPv6的mVPN配置文件在Cisco IOS内

## 目录

[简介](#)

[先决条件](#)

[要求](#)

[使用的组件](#)

[背景信息](#)

[配置](#)

[VPN ID](#)

[为mVPN和IPv6启用的IPv4](#)

[mVPN配置文件](#)

[配置文件0默认MDT - GRE - PIM C mcast发信号](#)

[配置文件1默认MDT - MLDP MP2MP - PIM C mcast发信号](#)

[配置文件2分成的MDT - MLDP MP2MP - PIM C mcast发信号](#)

[配置文件3默认MDT - GRE - BGP-AD - PIM C mcast发信号](#)

[配置文件4分成的MDT - MLDP MP2MP - BGP-AD - PIM C mcast发信号](#)

[配置文件5分成的MDT - MLDP P2MP - BGP-AD - PIM C mcast发信号](#)

[配置文件6 VRF MLDP -带内信令](#)

[配置文件7全局MLDP带内信令](#)

[配置文件8全局静态- P2MP-TE](#)

[配置文件9默认MDT - MLDP - MP2MP - BGP-AD - PIM C mcast发信号](#)

[配置文件10 VRF静态- P2MP TE - BGP-AD](#)

[配置文件11默认MDT - GRE - BGP-AD - BGP C mcast发信号](#)

[配置文件12默认MDT - MLDP - P2MP - BGP-AD - BGP C mcast发信号](#)

[配置文件13默认MDT - MLDP - MP2MP - BGP-AD - BGP C mcast发信号](#)

[配置文件14分成的MDT - MLDP P2MP - BGP-AD - BGP C帆柱信令](#)

[配置文件15分成的MDT - MLDP MP2MP - BGP-AD - BGP C帆柱信令](#)

[配置文件16默认MDT静态- P2MP TE - BGP-AD - BGP C mcast发信号](#)

[配置文件17默认MDT - MLDP - P2MP - BGP-AD - PIM C mcast发信号](#)

[配置文件18默认MDT静态- P2MP TE - BGP-AD - PIM C mcast发信号](#)

[配置文件19默认MDT - IR - BGP-AD - PIM C mcast发信号](#)

[配置文件20默认MDT - P2MP-TE - BGP-AD - PIM - C mcast发信号](#)

[配置文件21默认MDT - IR - BGP-AD - BGP - C mcast发信号](#)

[配置文件22默认MDT - P2MP-TE - BGP-AD BGP - C mcast发信号](#)

[配置文件23分成的MDT - IR - BGP-AD - PIM C mcast发信号](#)

[配置文件24分成的MDT - P2MP-TE - BGP-AD - PIM C mcast发信号](#)

[配置文件25分成的MDT - IR - BGP-AD - BGP C mcast发信号](#)

[配置文件26分成的MDT - P2MP TE - BGP-AD - BGP C mcast发信号](#)

[验证](#)

## 简介

本文描述如何配置在Cisco IOS内的每组播VPN (mVPN)配置文件仅IPv6的。

**Note:**在本文描述的配置应用对服务商边缘路由器。

## 先决条件

### 要求

在您继续进行在本文描述的配置前，请验证是否有一mVPN配置文件的支持在运行Cisco IOS的特定平台。

### 使用的组件

本文档中的信息根据Cisco IOS所有版本。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

## 背景信息

**Note:**VRF使用在的本文中是VRF一。

mVPN配置文件配置为全局上下文或每虚拟路由/转发(VRF)。仅更新的方式定义VRF (Vrf definition)可以用于为了启用mVPN配置文件的IPv6。示例如下：

```
vrf definition one
 rd 1:1
  vpn id 1000:2000
  !
  address-family ipv4
  mdt auto-discovery mldp
  mdt default mpls mldp 10.100.1.3
  route-target export 123:456
  route-target import 123:456
  exit-address-family
  !
  address-family ipv6
  mdt default mpls mldp 10.100.1.3
  route-target export 123:456
  route-target import 123:456
```

```
exit-address-family
```

必须为配置文件启用IPv6的组播路由在全局上下文。另外，在全局回环接口必须启用独立于协议的组播版本6 (PIMv6)。这是真的，如果routing命令的IPv6组播启用，并且，如果回环接口有IPv6的地址或enable命令的IPv6在回环接口配置。

```
vrf definition one
```

```
rd 1:1
vpn id 1000:2000
!
address-family ipv4
mdt auto-discovery mldp
mdt default mpls mldp 10.100.1.3
route-target export 123:456
route-target import 123:456
exit-address-family
!
address-family ipv6
mdt default mpls mldp 10.100.1.3
route-target export 123:456
route-target import 123:456
exit-address-family
```

在配置文件的VRF必须启用IPv6的组播路由在Vrf context。

```
vrf definition one
```

```
rd 1:1
vpn id 1000:2000
!
address-family ipv4
mdt auto-discovery mldp
mdt default mpls mldp 10.100.1.3
route-target export 123:456
route-target import 123:456
exit-address-family
!
address-family ipv6
mdt default mpls mldp 10.100.1.3
route-target export 123:456
route-target import 123:456
exit-address-family
```

它是良好的做法启用记录日志多点标签转发协议(MLDP)用配置文件的此global命令与MLDP：

```
vrf definition one
```

```
rd 1:1
vpn id 1000:2000
!
address-family ipv4
mdt auto-discovery mldp
mdt default mpls mldp 10.100.1.3
route-target export 123:456
route-target import 123:456
exit-address-family
!
address-family ipv6
mdt default mpls mldp 10.100.1.3
route-target export 123:456
route-target import 123:456
exit-address-family
```

如果路由各自路由VRF的IPv6组播或IPv6组播一命令配置，IPv6的默认情况下PIM在接口启用在全

局或Vrf context。

```
vrf definition one
 rd 1:1
  vpn id 1000:2000
  !
  address-family ipv4
  mdt auto-discovery mldp
  mdt default mpls mldp 10.100.1.3
  route-target export 123:456
  route-target import 123:456
  exit-address-family
  !
  address-family ipv6
  mdt default mpls mldp 10.100.1.3
  route-target export 123:456
  route-target import 123:456
  exit-address-family
```

这意味着默认情况下pim命令的IPv6在接口启用。对于与VRF的配置文件，6虚拟运营商边缘(6VPE)一定是完全能操作的为单播流量。对于配置文件7，6运营商边缘(6PE)一定是完全能操作的为单播流量。

**Note:**为了组播能工作，单播一定是完全能操作的。

## 配置

此部分描述如何配置在Cisco IOS内的mVPN配置文件。

**Note:**使用[命令查找工具](#) ( [仅限注册用户](#) ) 可获取有关本部分所使用命令的详细信息。

## VPN ID

为VRF配置的VPN ID为使用MLDP作为核心树协议并且默认组播分配树的配置文件只要求(MDT)。

```
vrf definition one
 rd 1:1
  vpn id 1000:2000
  !
```

## 为mVPN和IPv6启用的IPv4

对于与默认MDT和通用路由封装(GRE)的配置文件，如果mVPN为IPv4和IPv6启用，然后必须用于同样默认MDT两个地址家族(AFs)。

您不能混合另外AFs的不同的配置文件。

对于与分成的MDT的配置文件与MLDP，如果mVPN为IPv4和IPv6启用，一不同的分成的MDT为同样根PE路由器的每个AF发信号。MLDP树将有一个不同的全局标识符(GID)按不透明值。同一个标

签交换路径虚拟接口(LSPVIF)接口使用两AFs。

这是配置文件14使用AFs IPv4和IPv6的示例：

```
vrf definition one
rd 1:1
vpn id 1000:2000
!
address-family ipv4
  mdt auto-discovery mldp
  mdt partitioned mldp p2mp
  mdt overlay use-bgp
route-target export 123:456
route-target import 123:456
exit-address-family
!
address-family ipv6
  mdt auto-discovery mldp
  mdt partitioned mldp p2mp
  mdt overlay use-bgp
route-target export 123:456
route-target import 123:456
exit-address-family
```

来源10.100.1.6和2001:DB8:2::6是在同样来源PE路由器PE2后。IPv4组播组和IPv6组播组的组播路由由工艺路线信息数据库(MRIB)条目在入口PE路由器的数据库使用一个另外标签交换的组播(LSM)条目或MLDP条目，因此两组在不同的MLDP树转发。

```
PE2#show mpls mldp database opaque_type gid
LSM ID : 5   Type: P2MP   Uptime : 02:18:54
  FEC Root      : 10.100.1.2 (we are the root)
  Opaque decoded : [gid 65536 (0x00010000)]
  Opaque length  : 4 bytes
  Opaque value   : 01 0004 00010000
  Upstream client(s) :
    None
    Expires      : N/A           Path Set ID : 5
  Replication client(s):
    MDT (VRF one)
      Uptime      : 02:18:54     Path Set ID : None
      Interface   : Lspvif1
    10.100.1.4:0
      Uptime      : 00:32:50     Path Set ID : None
      Out label (D) : 20         Interface   : Ethernet2/0*
      Local label (U) : None      Next Hop    : 10.1.2.4

LSM ID : 6   Type: P2MP   Uptime : 00:37:06
  FEC Root      : 10.100.1.2 (we are the root)
  Opaque decoded : [gid 131072 (0x00020000)]
  Opaque length  : 4 bytes
  Opaque value   : 01 0004 00020000
  Upstream client(s) :
    None
    Expires      : N/A           Path Set ID : 6
  Replication client(s):
    MDT (VRF one)
      Uptime      : 00:37:06     Path Set ID : None
      Interface   : Lspvif1
    10.100.1.4:0
      Uptime      : 00:18:38     Path Set ID : None
      Out label (D) : 22         Interface   : Ethernet2/0*
```

Local label (U): None                      Next Hop                      : 10.1.2.4

PE2#show ip mfib vrf one 232.1.1.1

Entry Flags:        C - Directly Connected, S - Signal, IA - Inherit A flag,  
                  ET - Data Rate Exceeds Threshold, K - Keepalive  
                  DDE - Data Driven Event, HW - Hardware Installed  
                  ME - MoFRR ECMP entry, MNE - MoFRR Non-ECMP entry, MP - MFIB  
                  MoFRR Primary, RP - MRIB MoFRR Primary, P - MoFRR Primary  
                  MS - MoFRR Entry in Sync, MC - MoFRR entry in MoFRR Client.  
I/O Item Flags: IC - Internal Copy, NP - Not platform switched,  
                  NS - Negate Signalling, SP - Signal Present,  
                  A - Accept, F - Forward, RA - MRIB Accept, RF - MRIB Forward,  
                  MA - MFIB Accept, A2 - Accept backup,  
                  RA2 - MRIB Accept backup, MA2 - MFIB Accept backup

Forwarding Counts: Pkt Count/Pkts per second/Avg Pkt Size/Kbits per second

Other counts:        Total/RPF failed/Other drops

I/O Item Counts:    FS Pkt Count/PS Pkt Count

VRF one

(10.100.1.6,232.1.1.1) Flags:

SW Forwarding: 374/0/100/0, Other: 122/0/122

Ethernet0/0 Flags: A

Lspvif1, LSM/6 Flags: F

Pkts: 374/0

PE2#show ipv6 mfib vrf one route FF3E::4000:1

Entry Flags:        C - Directly Connected, S - Signal, IA - Inherit A flag,  
                  ET - Data Rate Exceeds Threshold, K - Keepalive  
                  DDE - Data Driven Event, HW - Hardware Installed  
                  ME - MoFRR ECMP entry, MNE - MoFRR Non-ECMP entry, MP - MFIB  
                  MoFRR Primary, RP - MRIB MoFRR Primary, P - MoFRR Primary  
                  MS - MoFRR Entry in Sync, MC - MoFRR entry in MoFRR Client.  
I/O Item Flags: IC - Internal Copy, NP - Not platform switched,  
                  NS - Negate Signalling, SP - Signal Present,  
                  A - Accept, F - Forward, RA - MRIB Accept, RF - MRIB Forward,  
                  MA - MFIB Accept, A2 - Accept backup,  
                  RA2 - MRIB Accept backup, MA2 - MFIB Accept backup

Forwarding Counts: Pkt Count/Pkts per second/Avg Pkt Size/Kbits per second

Other counts:        Total/RPF failed/Other drops

I/O Item Counts:    FS Pkt Count/PS Pkt Count

VRF one

(2001:DB8:2::6,FF3E::4000:1)

Ethernet0/0 A

Lspvif1, LSM/5 F

## mVPN配置文件

此部分描述每配置文件的必需的配置。

### 配置文件0默认MDT - GRE - PIM C mcast发信号

请使用此配置配置文件0 :

```
interface Loopback0
  ipv6 address 2001:DB8:100::2/128
!
```

```

vrf definition one
 rd 1:1
!
 address-family ipv6
 mdt default 232.1.1.1
 route-target export 123:456
 route-target import 123:456
 exit-address-family

!
interface Ethernet0/0
 vrf forwarding one
 ipv6 address 2001:DB8:2::2/64
!

router bgp 1
 bgp log-neighbor-changes
 neighbor 10.2.2.6 remote-as 65002
 neighbor 10.100.1.4 remote-as 1
 neighbor 10.100.1.4 update-source Loopback0
 neighbor 10.100.1.4 next-hop-self
!
!
 address-family ipv4 mdt
 neighbor 10.100.1.4 activate
 neighbor 10.100.1.4 send-community both
 exit-address-family
!
address-family vpnv6
 neighbor 10.100.1.4 activate
 neighbor 10.100.1.4 send-community both
 exit-address-family
!
address-family ipv6 vrf one
 redistribute connected
 neighbor 2001:DB8:2::6 remote-as 65002
 neighbor 2001:DB8:2::6 activate
 exit-address-family
!

```

**Note:** **address-family ipv4 mdt**为为IPv6 PIM/IP组播被构件的默认MDT要求。您必须有在回环接口启用的IPv6，因此意味着一定有一IPv6地址或**IPv6 enable**命令已配置的在回环接口。如果组播为在VRF的IPv4启用，则IPv6和IPv4使用同样默认MDT (同样组播组在全局上下文)和在PE路由器的同一个隧道接口。

## 配置文件1默认MDT - MLDP MP2MP - PIM C mcast发信号

请使用此配置配置文件1：

```

vrf definition one
 rd 1:1
 vpn id 1000:2000
!
 address-family ipv6
 mdt default mpls mldp 10.100.1.3
 route-target export 123:456
 route-target import 123:456
 exit-address-family

```

```

ipv6 multicast-routing vrf one

!
interface Ethernet0/0
 vrf forwarding one
 ipv6 address 2001:DB8:2::2/64
!

router bgp 1
 bgp log-neighbor-changes
 neighbor 10.2.2.6 remote-as 65002
 neighbor 10.100.1.4 remote-as 1
 neighbor 10.100.1.4 update-source Loopback0
 neighbor 10.100.1.4 next-hop-self
!
address-family vpnv6
 neighbor 10.100.1.4 activate
 neighbor 10.100.1.4 send-community both
 exit-address-family
!
address-family ipv6 vrf one
 redistribute connected
 neighbor 2001:DB8:2::6 remote-as 65002
 neighbor 2001:DB8:2::6 activate
 exit-address-family
!

```

## 配置文件2分成的MDT - MLDP MP2MP - PIM C mcast发信号

Cisco IOS当前不支持配置文件2，并且MLDP不支持与多点对多点的分成的MDT (MP2MP)。

## 配置文件3默认MDT - GRE - BGP-AD - PIM C mcast发信号

请使用此配置配置文件3：

```

interface Loopback0
 ipv6 address 2001:DB8:100::2/128
!

vrf definition one
 rd 1:1
!
 address-family ipv6
  mdt auto-discovery pim
  mdt default 232.1.1.1
 route-target export 123:456
 route-target import 123:456
 exit-address-family

interface Ethernet0/0
 vrf forwarding one
 ipv6 address 2001:DB8:2::2/64

router bgp 1
 bgp log-neighbor-changes
 neighbor 10.2.2.6 remote-as 65002
 neighbor 10.100.1.4 remote-as 1
 neighbor 10.100.1.4 update-source Loopback0

```



```

neighbor 10.100.1.4 next-hop-self
!
!
address-family ipv6 mvpn
neighbor 10.100.1.4 activate
neighbor 10.100.1.4 send-community both
exit-address-family
!
address-family vpnv6
neighbor 10.100.1.4 activate
neighbor 10.100.1.4 send-community both
exit-address-family
!
address-family ipv6 vrf one
redistribute connected
neighbor 2001:DB8:2::6 remote-as 65002
neighbor 2001:DB8:2::6 activate
exit-address-family
!

```

**Note:**由于使用PIM的边界网关协议自动发现号(BGP-AD)，不再有对AF IPv4 MDT的需要，为配置文件0是需要的。您必须有在回环接口启用的IPv6，因此意味着一定有一IPv6地址或**IPv6 enable命令**已配置的在回环接口。如果组播为在VRF的IPv6启用，则IPv6和IPv4使用同样默认MDT (同样组播组在全局上下文)和在PE路由器的同一个隧道接口。

#### 配置文件4分成的MDT - MLDP MP2MP - BGP-AD - PIM C mcast发信号

Cisco IOS当前不支持配置文件4，并且MLDP不支持与MP2MP的分成的MDT。

#### 配置文件5分成的MDT - MLDP P2MP - BGP-AD - PIM C mcast发信号

Cisco IOS当前不支持配置文件5，并且PIM信令不在分成的MDT支持。

#### 配置文件6 VRF MLDP -带内信令

请使用此配置配置文件6：

```

vrf definition one
rd 1:1
!
address-family ipv6
route-target export 123:456
route-target import 123:456
exit-address-family
!

interface Ethernet0/0
vrf forwarding one
ipv6 address 2001:DB8:2::2/64

ipv6 multicast-routing vrf one
ipv6 multicast vrf one mpls source Loopback0
ipv6 multicast vrf one mpls mldp

```

```

router bgp 1
  bgp log-neighbor-changes
  neighbor 10.2.2.6 remote-as 65002
  neighbor 10.100.1.4 remote-as 1
  neighbor 10.100.1.4 update-source Loopback0
!
  address-family vpnv6
  neighbor 10.100.1.4 activate
  neighbor 10.100.1.4 send-community both
  exit-address-family
!
  address-family ipv6 vrf one
  redistribute connected
  neighbor 2001:DB8:2::6 remote-as 65002
  neighbor 2001:DB8:2::6 activate
  exit-address-family
!

```

## 描出7个全局MLDP带内信令

请使用此配置配置文件7：

```

ipv6 multicast-routing
ipv6 multicast mpls source Loopback0
ipv6 multicast mpls mldp

```

```

interface Ethernet0/0
  ip address 10.2.2.2 255.255.255.0
  ipv6 address 2001:DB8:2::2/64
!

```

```

router bgp 1
  bgp log-neighbor-changes
  neighbor 10.2.2.6 remote-as 65002
  neighbor 10.100.1.4 remote-as 1
  neighbor 10.100.1.4 update-source Loopback0
  neighbor 2001:DB8:2::6 remote-as 65002
!
!
  address-family ipv6
  redistribute connected
  neighbor 10.100.1.4 activate
  neighbor 10.100.1.4 send-label
  neighbor 2001:DB8:2::6 activate
  exit-address-family
!

```

## 配置文件8全局静态- P2MP-TE

Cisco IOS当前不支持配置文件8。

## 配置文件9默认MDT - MLDP - MP2MP - BGP-AD - PIM C mcast发信号

请使用此配置配置文件9：

```

vrf definition one

```

```

rd 1:1
vpn id 1000:2000
!
address-family ipv6
  mdt auto-discovery mldp
  mdt default mpls mldp 10.100.1.3
route-target export 123:456
route-target import 123:456
exit-address-family

ipv6 multicast-routing vrf one

!
interface Ethernet0/0
  vrf forwarding one
  ipv6 address 2001:DB8:2::2/64
!

router bgp 1
  bgp log-neighbor-changes
  neighbor 10.2.2.6 remote-as 65002
  neighbor 10.100.1.4 remote-as 1
  neighbor 10.100.1.4 update-source Loopback0
  neighbor 10.100.1.4 next-hop-self
  !
  address-family ipv6 mvpn
  neighbor 10.100.1.4 activate
  neighbor 10.100.1.4 send-community both
  exit-address-family
  !
  address-family vpnv6
  neighbor 10.100.1.4 activate
  neighbor 10.100.1.4 send-community both
  exit-address-family
  !
  address-family ipv6 vrf one
  redistribute connected
  neighbor 2001:DB8:2::6 remote-as 65002
  neighbor 2001:DB8:2::6 activate
  exit-address-family
!

```

## 配置文件10 VRF静态- P2MP TE - BGP-AD

Cisco IOS当前不支持配置文件10，并且BGP-AD不为点对多点流量工程(P2MP TE)支持。

## 配置文件11默认MDT - GRE - BGP-AD - BGP C mcast发信号

请使用此配置配置文件11：

```

interface Loopback0
  ipv6 address 2001:DB8:100::2/128
!

vrf definition one
  rd 1:1
!
  address-family ipv6

```

```

mdt auto-discovery pim
mdt default 232.1.1.1
mdt overlay use-bgp
route-target export 123:456
route-target import 123:456
exit-address-family

!
interface Ethernet0/0
 vrf forwarding one
 ipv6 address 2001:DB8:2::2/64
!

router bgp 1
 bgp log-neighbor-changes
 neighbor 10.2.2.6 remote-as 65002
 neighbor 10.100.1.4 remote-as 1
 neighbor 10.100.1.4 update-source Loopback0
 neighbor 10.100.1.4 next-hop-self
!
!
 address-family ipv6 mvpn
 neighbor 10.100.1.4 activate
 neighbor 10.100.1.4 send-community both
 exit-address-family
!
 address-family vpnv6
 neighbor 10.100.1.4 activate
 neighbor 10.100.1.4 send-community both
 exit-address-family
!
 address-family ipv6 vrf one
 redistribute connected
 neighbor 2001:DB8:2::6 remote-as 65002
 neighbor 2001:DB8:2::6 activate
 exit-address-family
!

```

**Note:**由于使用PIM的BGP-AD，不再有对AF IPv4 MDT的需要，为配置文件0是需要的。您必须有在回环接口启用的IPv6，因此意味着一定有一IPv6地址或IPv6 enable命令已配置的在回环接口。如果组播为在VRF的IPv6启用，则IPv6和IPv4使用同样默认MDT (同样组播组在全局上下文)和在PE路由器的同一个隧道接口。

## 配置文件12默认MDT - MLDP - P2MP - BGP-AD - BGP C mcast发信号

请使用此配置配置文件12：

```

vrf definition one
 rd 1:1
 vpn id 1000:2000
!
 address-family ipv6
  mdt auto-discovery mldp
  mdt default mpls mldp p2mp
  mdt overlay use-bgp
 route-target export 123:456
 route-target import 123:456
 exit-address-family

```

```

!
interface Ethernet0/0
  vrf forwarding one
  ipv6 address 2001:DB8:2::2/64
!

router bgp 1
  bgp log-neighbor-changes
  neighbor 10.2.2.6 remote-as 65002
  neighbor 10.100.1.4 remote-as 1
  neighbor 10.100.1.4 update-source Loopback0
  neighbor 10.100.1.4 next-hop-self
  !
  address-family ipv6 mvpn
  neighbor 10.100.1.4 activate
  neighbor 10.100.1.4 send-community both
  exit-address-family
  !
  address-family vpnv6
  neighbor 10.100.1.4 activate
  neighbor 10.100.1.4 send-community both
  exit-address-family
!
  address-family ipv6 vrf one
  redistribute connected
  neighbor 2001:DB8:2::6 remote-as 65002
  neighbor 2001:DB8:2::6 activate
  exit-address-family

```

## 配置文件13默认MDT - MLDP - MP2MP - BGP-AD - BGP C mcast发信号

请使用此配置配置文件13：

```

vrf definition one
  rd 1:1
  vpn id 1000:2000
!
  address-family ipv6
    mdt auto-discovery mldp
    mdt default mpls mldp 10.100.1.3
    mdt overlay use-bgp
  route-target export 123:456
  route-target import 123:456
  exit-address-family

ipv6 multicast-routing vrf one

!
interface Ethernet0/0
  vrf forwarding one
  ipv6 address 2001:DB8:2::2/64
!

router bgp 1
  bgp log-neighbor-changes
  neighbor 10.2.2.6 remote-as 65002
  neighbor 10.100.1.4 remote-as 1
  neighbor 10.100.1.4 update-source Loopback0
  neighbor 10.100.1.4 next-hop-self
  !
  address-family ipv6 mvpn

```

```

neighbor 10.100.1.4 activate
neighbor 10.100.1.4 send-community both
exit-address-family
!
address-family vpnv6
neighbor 10.100.1.4 activate
neighbor 10.100.1.4 send-community both
exit-address-family
!
address-family ipv6 vrf one
redistribute connected
neighbor 2001:DB8:2::6 remote-as 65002
neighbor 2001:DB8:2::6 activate
exit-address-family
!

```

## 配置文件14分成的MDT - MLDP P2MP - BGP-AD - BGP C帆柱信令

请使用此配置配置文件14：

```

vrf definition one
rd 1:1
!
address-family ipv6
  mdt auto-discovery mldp
  mdt strict-rpf interface
  mdt partitioned mldp p2mp
  mdt overlay use-bgp
route-target export 123:456
route-target import 123:456
exit-address-family

!
interface Ethernet0/0
vrf forwarding one
ipv6 address 2001:DB8:2::2/64
!

router bgp 1
bgp log-neighbor-changes
neighbor 10.2.2.6 remote-as 65002
neighbor 10.100.1.4 remote-as 1
neighbor 10.100.1.4 update-source Loopback0
neighbor 2001:DB8:2::6 remote-as 65002
!
!
address-family ipv6 mvpn
neighbor 10.100.1.4 activate
neighbor 10.100.1.4 send-community both
exit-address-family
!
address-family vpnv6
neighbor 10.100.1.4 activate
neighbor 10.100.1.4 send-community both
exit-address-family
!
address-family ipv6 vrf one
redistribute connected
neighbor 2001:DB8:2::6 remote-as 65002
neighbor 2001:DB8:2::6 activate exit-address-family

```

## 配置文件15分成的MDT - MLDP MP2MP - BGP-AD - BGP C帆柱信令

Cisco IOS当前不支持配置文件15，并且MLDP不支持与MP2MP的分成的MDT。

## 配置文件16默认MDT静态- P2MP TE - BGP-AD - BGP C mcast发信号

Cisco IOS当前不支持配置文件16。

## 配置文件17默认MDT - MLDP - P2MP - BGP-AD - PIM C mcast发信号

请使用此配置配置文件17：

```
vrf definition one
 rd 1:1
  vpn id 1000:2000
  !
  address-family ipv6
   mdt auto-discovery mldp
   mdt default mpls mldp p2mp
  route-target export 123:456
  route-target import 123:456
  exit-address-family

!
interface Ethernet0/0
 vrf forwarding one
 ipv6 address 2001:DB8:2::2/64
!

router bgp 1
 bgp log-neighbor-changes
 neighbor 10.2.2.6 remote-as 65002
 neighbor 10.100.1.4 remote-as 1
 neighbor 10.100.1.4 update-source Loopback0
 neighbor 10.100.1.4 next-hop-self
 !
 address-family ipv6 mvpn
  neighbor 10.100.1.4 activate
  neighbor 10.100.1.4 send-community both
  exit-address-family
 !
 address-family vpnv6
  neighbor 10.100.1.4 activate
  neighbor 10.100.1.4 send-community both
  exit-address-family
 !
 address-family ipv6 vrf one
  redistribute connected
  neighbor 2001:DB8:2::6 remote-as 65002
  neighbor 2001:DB8:2::6 activate
  exit-address-family
```

## 配置文件18默认MDT静态- P2MP TE - BGP-AD - PIM C mcast发信号

Cisco IOS当前不支持配置文件18。

### **配置文件19默认MDT - IR - BGP-AD - PIM C mcast发信号**

Cisco IOS当前不支持配置文件19和入口复制(IR)。

### **配置文件20默认MDT - P2MP-TE - BGP-AD - PIM - C mcast发信号**

TE Cisco IOS当前不支持配置文件20和P2MP自动隧道。

### **配置文件21默认MDT - IR - BGP-AD - BGP - C mcast发信号**

Cisco IOS当前不支持配置文件21和IR。

### **配置文件22默认MDT - P2MP-TE - BGP-AD BGP - C mcast发信号**

TE Cisco IOS当前不支持配置文件22和P2MP自动隧道。

### **配置文件23分成的MDT - IR - BGP-AD - PIM C mcast发信号**

Cisco IOS当前不支持配置文件23和IR。

### **配置文件24分成的MDT - P2MP-TE - BGP-AD - PIM C mcast发信号**

TE Cisco IOS当前不支持配置文件24和P2MP自动隧道。

### **配置文件25分成的MDT - IR - BGP-AD - BGP C mcast发信号**

Cisco IOS当前不支持配置文件25和IR。

### **配置文件26分成的MDT - P2MP TE - BGP-AD - BGP C mcast发信号**

TE Cisco IOS当前不支持配置文件26和P2MP自动隧道。

## **验证**

当前没有这些配置的验证程序联机。

## **故障排除**



当前没有这些配置的特定故障排除信息联机。