為vEdge或cEdge配置首選預設路由或字首路由

目錄

簡介

本文說明如何配置軟體定義廣域網(SD-WAN)控制策略，以優先使用預設路由或字首。

需求

思科建議您瞭解以下主題：

- Cisco SD-WAN重疊管理通訊協定(OMP)。
- SD-WAN集中控制策略。

採用元件

本文中的資訊係根據以下軟體和硬體版本：

- Cisco cEdge版本17.3.3
- Cisco vEdge版本20.3.2
- 思科vSmart控制器版本20.4.2

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設

）的組態來啟動。如果您的網路運作中，請確保您瞭解任何指令可能造成的影響。

背景資訊

為了進行本演示，本實驗在不同的端ID上設定5個cEdge/vEdge，其中Router01、Router02和Router03在VPN 1中配置了預設路由。

- vSmart system ip 10.1.1.7。
- cEdge Router01 system ip 10.70.70.1，站點ID 70。
- cEdge Router02 system ip 10.80.80.1，站點ID 80。
- cEdge Router03 system ip 10.80.80.2，站點ID 80。
- cEdge Router04系統ip 10.70.70.2，站點ID 40。
- vEdge Router05系統ip 10.20.20.1，站點ID 20。

Router04(10.70.70.2)和**Router05**(10.20.20.1)接收和安裝來自**Router01**(10.70.70.1)、**Router02**(10.80.80.1)和Router03**(10.80.80.1)的預設路由。** 沒有應用於裝置的活動集中策略或本地化策略，預設情況下為全網狀拓撲。

Router04和**Router05**從三個不同的裝置接收預設路由。

```
Router04# show sdwan omp routes
Generating output, this might take time, please wait ...
Code:
C   -> chosen
I   -> installed
Red -> redistributed
Rej -> rejected
L   -> looped
R   -> resolved
S   -> stale
Ext -> extranet
Inv -> invalid
Stg -> staged
IA  -> On-demand inactive
U   -> TLOC unresolved
                                        PATH                      ATTRIBUTE
VPN    PREFIX              FROM PEER    ID     LABEL    STATUS    TYPE       TLOC IP
COLOR            ENCAP  PREFERENCE
-----------------------------------------------------------------------------------------------
-------------------------------------
1      0.0.0.0/0           10.1.1.7      29     1002     C,I,R     installed  10.70.70.1
biz-internet     ipsec  -
                           10.1.1.7      30     1005     C,I,R     installed  10.80.80.1
mpls             ipsec  -
                           10.1.1.7      31     1003     C,I,R     installed  10.80.80.2
mpls             ipsec  -
```

> **提示：**其 **show sdwan omp routes** 如果路由器收到許多路由，則cEdge的輸出可能很大。您可以使用 show sdwan omp route vpn 要篩選輸出，或者 **show sdwan omp route vpn** 過濾cEdge中字首的所有扇區輸出。

```
Router05# show omp routes vpn 1
```

```
Code:
C   -> chosen
I   -> installed
Red -> redistributed
Rej -> rejected
L   -> looped
R   -> resolved
S   -> stale
Ext -> extranet
Inv -> invalid
Stg -> staged
IA  -> On-demand inactive
U   -> TLOC unresolved

                                          PATH                      ATTRIBUTE
VPN    PREFIX              FROM PEER      ID     LABEL    STATUS    TYPE       TLOC IP
COLOR            ENCAP  PREFERENCE
-----------------------------------------------------------------------------------------------
-------------------------------------
1      0.0.0.0/0           10.1.1.7        5      1002     C,I,R     installed  10.70.70.1
biz-internet     ipsec  -
                           10.1.1.7        6      1005     C,I,R     installed  10.80.80.1
mpls             ipsec  -
                           10.1.1.7        7      1003     C,I,R     installed  10.80.80.2
mpls             ipsec  -
```

提示：其 **show omp route** 如果路由器收到太多路由，vEdge的輸出可能會很大。您可以使用 **show omp routes vpn** 在vEdges中過濾輸出。您可以使用 | tab 命令旁邊的vEdges中格式表的輸出。

Router04(10.70.70.2)和**Router05**(10.20.20.1)安裝來自**Router01**(10.70.70.1)、**Router02**(10.80.80.1)和Router03**(10.80.80.1)的預設路由。**

```
Router04# show ip route vrf 1

Routing Table: 1
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, m - OMP
       n - NAT, Ni - NAT inside, No - NAT outside, Nd - NAT DIA
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       H - NHRP, G - NHRP registered, g - NHRP registration summary
       o - ODR, P - periodic downloaded static route, l - LISP
       a - application route
       + - replicated route, % - next hop override, p - overrides from PfR
       & - replicated local route overrides by connected

Gateway of last resort is 10.80.80.2 to network 0.0.0.0

m*    0.0.0.0/0 [251/0] via 10.80.80.2, 00:05:02, Sdwan-system-intf
                [251/0] via 10.80.80.1, 00:05:02, Sdwan-system-intf
                [251/0] via 10.70.70.1, 00:05:02, Sdwan-system-intf
```

提示：其 show ip route vrf 如果路由器收到太多路由，則cEdge的輸出可能會很大。您可以使用

show ip route vrf 要過濾輸出，或者，也可使用 show ip route vrf 過濾字首的所有扇區輸出。

```
Router05# show ip routes vpn 1 0.0.0.0/0
Codes Proto-sub-type:
  IA -> ospf-intra-area, IE -> ospf-inter-area,
  E1 -> ospf-external1, E2 -> ospf-external2,
  N1 -> ospf-nssa-external1, N2 -> ospf-nssa-external2,
  e -> bgp-external, i -> bgp-internal
Codes Status flags:
  F -> fib, S -> selected, I -> inactive,
  B -> blackhole, R -> recursive, L -> import

                                          PROTOCOL  NEXTHOP     NEXTHOP          NEXTHOP
VPN    PREFIX              PROTOCOL       SUB TYPE  IF NAME     ADDR             VPN      TLOC
IP          COLOR            ENCAP  STATUS
-----------------------------------------------------------------------------------------------
-----------------------------------------
1      0.0.0.0/0           omp              -         -           -                -
10.70.70.1       biz-internet     ipsec  F,S
1      0.0.0.0/0           omp              -         -           -                -
10.80.80.1       mpls             ipsec  F,S
1      0.0.0.0/0           omp              -         -           -                -
10.80.80.2       mpls             ipsec  F,S
```

提示：其 **show ip routes** 如果路由器收到太多路由，vEdge的輸出可能會很大。您可以使用 show ip routes vpn 在vEdges中過濾輸出。

組態

解決方案1:使用集中控制策略優先使用來自特定遠端路由器Router04上Router01的預設路由

使用拓撲自定義控制元件並在OMP中應用預設路由的首選項。

使用路由規則而不是傳輸位置(TLOC)規則。

匹配條件

- 將策略清單中預定義的**Router01** System-ip 10.70.70.1的建立者選項與字首清單進行匹配，字首為0.0.0.0/0。
- ip prefix-list 0.0.0.0/0僅匹配default-route並非所有路由，因此您可以將此字首用於字首清單。
- ip prefix-list 0.0.0.0/0 le 32匹配所有路由。

動作

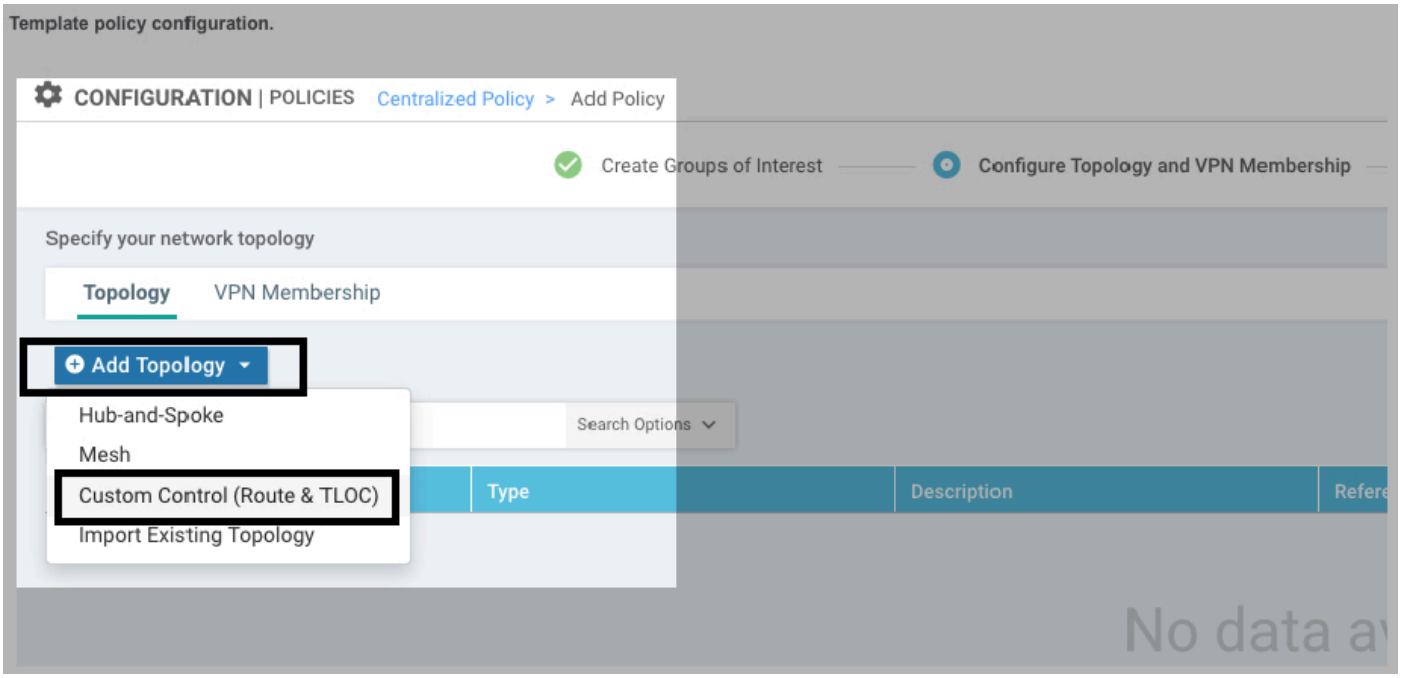
將此策略應用於出站方向**到Router04**站點ID 40。

模板策略配置

您可以使用vManage GUI配置 **Centralized Policy** 使用 **Control Policy**.

在中配置控制策略 **Topology**，您可以選擇 Hub-and-Spoke中， Mesh,或 Custom Control 策略。

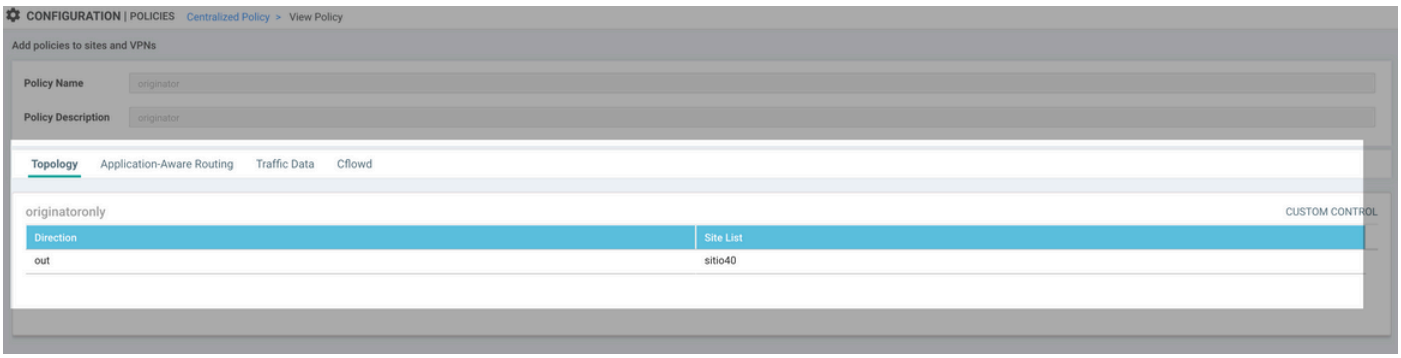
Custom Control(Route & TLOC) 用於此特定場景，如圖所示。



Sequence type 和Sequence Rule 新增了。
Originator system-ip和字首清單在匹配條件中設定。

Accept 和 Preference 為相同順序的操作設定，如圖所示。

Control Policy 應用於站點40的出站方向，如圖所示。



注意：啟用 Centralized Policy,vSmart需要附加裝置模板，或 **Centralized Policy** 傳送 Failed to activate policy 錯誤。vSmart必須處於vManage模式。

CLI策略配置

您可以手動配置vSmart，而不是vManage GUI。

```
control-policy originatoronly
    sequence 1
     match route
      originator 10.70.70.1
      prefix-list Default_Route
     !
     action accept
      set
       preference 200
      !
     !
    !
  default-action accept
 !
 lists
  prefix-list Default_Route
   ip-prefix 0.0.0.0/0
  !
  site-list sitio40
   site-id 40
  !
 !
!
apply-policy
 site-list sitio40
  control-policy originatoronly out <<<<<<<
 !
!
```

vSmart僅將來自發起方**Router01**(10.70.70.1)且優先順序為200的預設路由傳送到**Router04**。

注意：預設操作設定為拒絕。
預設操作可設定為接受或拒絕。

注意：如果序列不匹配，路由將採取預設操作。
這表示如果將預設操作設定為reject並且路由與任何序列都不匹配，則它會從vSmart中拒絕，並且不會向重疊通告。
如果預設操作設定為accept且路由與任何序列都不匹配，則從vsmart接受該路由並向重疊通告。

驗證

您可以使用 show running-config policy 命令，以驗證 **Control-Policy** 已正確應用。

```
vsmart# show running-config policy control-policy
policy
 control-policy originatoronly
  sequence 1
   match route
    originator  10.70.70.1
```

```
    prefix-list Default_Route
   !
   action accept
    set
     preference 200
    !
   !
  !
  default-action accept
 !
!
```

使用 **show running-config apply-policy** 檢查站點和方向， **Control-Policy** 已應用。

```
vsmart# show running-config apply-policy
apply-policy
 site-list sitio40
  control-policy originatoronly out
 !
!
```

> **提示：**您可以使用 **show running-config policy control-policy** 在vSmart具有多個控制策略時過濾輸出。

Router04(10.70.70.2)收到來自**Router01**(10.70.70.1)、**Router02**(10.80.80.1)和**Router03**(10.80.80.1)的所有預設路由，但來自Router01**的default-route具有更高的優先順序(200)。**

```
Router04# show sdwan omp routes
Generating output, this might take time, please wait ...
Code:
C   -> chosen
I   -> installed
Red -> redistributed
Rej -> rejected
L   -> looped
R   -> resolved
S   -> stale
Ext -> extranet
Inv -> invalid
Stg -> staged
IA  -> On-demand inactive
U   -> TLOC unresolved
                                          PATH                      ATTRIBUTE
VPN    PREFIX              FROM PEER      ID     LABEL    STATUS    TYPE       TLOC IP
COLOR            ENCAP  PREFERENCE
-----------------------------------------------------------------------------------------------
-------------------------------------
1      0.0.0.0/0           10.1.1.7        29     1002     C,I,R     installed  10.70.70.1
biz-internet     ipsec  200   <<<<<<<<<<<<
                           10.1.1.7        30     1005     R         installed  10.80.80.1
mpls             ipsec  -
                           10.1.1.7        31     1003     R         installed  10.80.80.2
mpls             ipsec  -
```

Router04(10.70.70.2)僅將來自**Router01**(10.70.70.1)的路由安裝在IP路由表中。

```
Router04# show ip route vrf 1

Routing Table: 1
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, m - OMP
       n - NAT, Ni - NAT inside, No - NAT outside, Nd - NAT DIA
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       H - NHRP, G - NHRP registered, g - NHRP registration summary
       o - ODR, P - periodic downloaded static route, l - LISP
       a - application route
       + - replicated route, % - next hop override, p - overrides from PfR
       & - replicated local route overrides by connected

Gateway of last resort is 10.70.70.1 to network 0.0.0.0

m*    0.0.0.0/0 [251/0] via 10.70.70.1, 00:13:25, Sdwan-system-intf
```

Router05(10.20.20.1)位於站點20，仍然接收和安裝來自Router01(10.70.70.1)、Router02(10.80.80.1)和Router03(10.80.80.1)的所有預設路由。

```
Router05# show omp routes vpn 1
Code:
C   -> chosen
I   -> installed
Red -> redistribute
Rej -> rejected
L   -> looped
R   -> resolved
S   -> stale
Ext -> extranet
Inv -> invalid
Stg -> staged
IA  -> On-demand inactive
U   -> TLOC unresolved

                                          PATH                      ATTRIBUTE
VPN    PREFIX              FROM PEER      ID     LABEL    STATUS    TYPE       TLOC IP
COLOR            ENCAP  PREFERENCE
-----------------------------------------------------------------------------------------------
-------------------------------------
1      0.0.0.0/0           10.1.1.7        5      1002     C,I,R     installed  10.70.70.1
biz-internet     ipsec  -     <<<<<< no preference
                           10.1.1.7        6      1005     C,I,R     installed  10.80.80.1
mpls             ipsec  -
                           10.1.1.7        7      1003     C,I,R     installed  10.80.80.2
mpls             ipsec  -


Router05# show ip routes vpn 1
Codes Proto-sub-type:
  IA -> ospf-intra-area, IE -> ospf-inter-area,
  E1 -> ospf-external1, E2 -> ospf-external2,
  N1 -> ospf-nssa-external1, N2 -> ospf-nssa-external2,
  e -> bgp-external, i -> bgp-internal
Codes Status flags:
  F -> fib, S -> selected, I -> inactive,
  B -> blackhole, R -> recursive, L -> import

                                          PROTOCOL  NEXTHOP     NEXTHOP          NEXTHOP
VPN    PREFIX              PROTOCOL       SUB TYPE  IF NAME     ADDR             VPN      TLOC
```

```
IP          COLOR            ENCAP  STATUS
------------------------------------------------------------------------------------------------------------
-----------------------------------------
1      0.0.0.0/0           omp              -         -           -                -
10.70.70.1       biz-internet     ipsec  F,S
1      0.0.0.0/0           omp              -         -           -                -
10.80.80.1       mpls             ipsec  F,S
1      0.0.0.0/0           omp              -         -           -                -
10.80.80.2       mpls             ipsec  F,S
```

解決方案2:使用集中控制策略優先使用從路由器01到全網狀所有路由器的預設路由

使用與 **Solution 1** 已使用，並將其應用於來自**Router01站點**ID 70的入站方向。

```
control-policy originatoronly
    sequence 1
     match route
      originator 10.70.70.1
      prefix-list Default_Route
     !
     action accept
      set
       preference 200
      !
     !
    !
  default-action accept
 !
 lists
  prefix-list Default_Route
   ip-prefix 0.0.0.0/0
  !
  site-list SiteList_70
   site-id 70
  !
 !
!
apply-policy
 site-list SiteList_70
  control-policy originatoronly in <<<<<<<<<
 !
!
```

驗證

如果您使用傳入方向，則**Router04**(10.70.70.2)和**Router05**(10.20.20.1)只會從**Router01**(10.70.70.1)接收和安裝預設路由。

```
Router04# show sdwan omp routes
Generating output, this might take time, please wait ...
Code:
C   -> chosen
I   -> installed
Red -> redistributed
Rej -> rejected
L   -> looped
R   -> resolved
S   -> stale
Ext -> extranet
```

```
Inv -> invalid
Stg -> staged
IA  -> On-demand inactive
U   -> TLOC unresolved
                                          PATH                      ATTRIBUTE
VPN    PREFIX              FROM PEER      ID     LABEL    STATUS    TYPE       TLOC IP
COLOR            ENCAP  PREFERENCE
-------------------------------------------------------------------------------------------------
-------------------------------------
1      0.0.0.0/0           10.1.1.7        29     1002     C,I,R     installed  10.70.70.1
biz-internet     ipsec  200        <<<<<<<

Router05# show omp routes vpn 1
Code:
C   -> chosen
I   -> installed
Red -> redistributed
Rej -> rejected
L   -> looped
R   -> resolved
S   -> stale
Ext -> extranet
Inv -> invalid
Stg -> staged
IA  -> On-demand inactive
U   -> TLOC unresolved

                                          PATH                      ATTRIBUTE
VPN    PREFIX              FROM PEER      ID     LABEL    STATUS    TYPE       TLOC IP
COLOR            ENCAP  PREFERENCE
-------------------------------------------------------------------------------------------------
-------------------------------------
1      0.0.0.0/0           10.1.1.7        5      1002     C,I,R     installed  10.70.70.1
biz-internet     ipsec  200         <<<<<<<
```

兩種方案的考慮因素：入站或出站方向

如果丟失Router01(10.70.70.1)，路由器會安裝所有沒有優先順序接收的預設路由。在此案例中，來自Router02(10.80.80.1)和Router03(10.80.80.2):

```
Router04# show sdwan omp routes
Generating output, this might take time, please wait ...
Code:
C   -> chosen
I   -> installed
Red -> redistributed
Rej -> rejected
L   -> looped
R   -> resolved
S   -> stale
Ext -> extranet
Inv -> invalid
Stg -> staged
IA  -> On-demand inactive
U   -> TLOC unresolved
                                          PATH                      ATTRIBUTE
VPN    PREFIX              FROM PEER      ID     LABEL    STATUS    TYPE       TLOC IP
COLOR            ENCAP  PREFERENCE
-------------------------------------------------------------------------------------------------
-------------------------------------
1      0.0.0.0/0           10.1.1.7        36     1005     C,I,R     installed  10.80.80.1
mpls             ipsec  -
```

```
                          10.1.1.7          37     1003     C,I,R     installed  10.80.80.2
mpls            ipsec  -

Router05# show omp routes vpn 1
Code:
C   -> chosen
I   -> installed
Red -> redistributed
Rej -> rejected
L   -> looped
R   -> resolved
S   -> stale
Ext -> extranet
Inv -> invalid
Stg -> staged
IA  -> On-demand inactive
U   -> TLOC unresolved

                                          PATH                      ATTRIBUTE
VPN    PREFIX              FROM PEER      ID     LABEL    STATUS    TYPE       TLOC IP
COLOR            ENCAP  PREFERENCE
-----------------------------------------------------------------------------------------------
--------------------------------------
1      0.0.0.0/0           10.1.1.7        14     1005     C,I,R     installed  10.80.80.1
mpls            ipsec  -
                          10.1.1.7        15     1003     C,I,R     installed  10.80.80.2
mpls            ipsec  -
```

解決方案3:使用集中式控制策略優先使用來自路由器01的Default-Route以及來自其他路由器的備份Default-Route

在此解決方案中，路由器僅從Router01(10.70.70.1)接收預設路由器，但如果您丟失預設路由器，則希望遠端路由器安裝的備份預設路由來自Router02(10.80.80.1)，而不是同時來自Router02(10.80.80.1)和Router03(10.80.80.1)，如所示 **Solution 1** 和 **Solution 2**.

在同一控制策略上新增一個序列，並應用您從Router01 preference 200的default-route設定的較低首選項，但此優先順序高於預設首選項(100)。

對於從Router02(10.80.80.1)通告的預設路由，您可以將首選項設定為150。

```
control-policy originator
    sequence 1
     match route
      originator 10.70.70.1
      prefix-list Default_Route
     !
     action accept
      set
       preference 200
      !
     !
    !
    sequence 11   <<<<< new sequence
     match route
      originator 10.80.80.1     <<<<< Router02 system ip as originator
      prefix-list Default_Route
```

```
     !
     action accept
      set
       preference 150   <<< lower preference of Router01
      !
     !
    !
  default-action accept
 !
 lists
  prefix-list Default_Route
   ip-prefix 0.0.0.0/0
  !
  site-list sitio40
   site-id 40
  !
 !
!
apply-policy
 site-list sitio40
  control-policy originator out
 !
!
```

驗證

路由器會收到首選項為200、150和預設首選項的預設路由。

```
Router04# show sdwa omp routes
Generating output, this might take time, please wait ...
Code:
C   -> chosen
I   -> installed
Red -> redistributed
Rej -> rejected
L   -> looped
R   -> resolved
S   -> stale
Ext -> extranet
Inv -> invalid
Stg -> staged
IA  -> On-demand inactive
U   -> TLOC unresolved
                                          PATH                      ATTRIBUTE
VPN    PREFIX              FROM PEER      ID     LABEL    STATUS    TYPE       TLOC IP
COLOR            ENCAP  PREFERENCE
-----------------------------------------------------------------------------------------------
-------------------------------------
1      0.0.0.0/0           10.1.1.7        36     1005     R         installed  10.80.80.1
mpls             ipsec  150   <<<<<<<<
                           10.1.1.7        37     1003     R         installed  10.80.80.2
mpls             ipsec  -
                           10.1.1.7        38     1002     C,I,R     installed  10.70.70.1
biz-internet     ipsec  200   <<<<<<<<
```

Router04(10.70.70.2)只會將來自Router01(10.70.70.1)的預設路由新增到路由表中，且優先順序更高：

```
Router04# show ip route vrf 1

Routing Table: 1
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, m - OMP
       n - NAT, Ni - NAT inside, No - NAT outside, Nd - NAT DIA
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       H - NHRP, G - NHRP registered, g - NHRP registration summary
       o - ODR, P - periodic downloaded static route, l - LISP
       a - application route
       + - replicated route, % - next hop override, p - overrides from PfR
       & - replicated local route overrides by connected

Gateway of last resort is 10.70.70.1 to network 0.0.0.0

m*    0.0.0.0/0 [251/0] via 10.70.70.1, 00:02:47, Sdwan-system-intf
```

如果遺失了Router01(10.70.70.1),Router04(10.70.70.2)只會安裝具有下一個較高優先順序的路由(來自Router02(10.80.80.1))。

```
Router04# show sdwa omp routes
Generating output, this might take time, please wait ...
Code:
C   -> chosen
I   -> installed
Red -> redistributed
Rej -> rejected
L   -> looped
R   -> resolved
S   -> stale
Ext -> extranet
Inv -> invalid
Stg -> staged
IA  -> On-demand inactive
U   -> TLOC unresolved
                                        PATH                    ATTRIBUTE
VPN    PREFIX              FROM PEER    ID     LABEL    STATUS    TYPE       TLOC IP
COLOR            ENCAP  PREFERENCE
-----------------------------------------------------------------------------------------------
--------------------------------------
1      0.0.0.0/0           10.1.1.7      36     1005     C,I,R     installed  10.80.80.1
mpls             ipsec  150      <<<<<<<
                           10.1.1.7      37     1003     R         installed  10.80.80.2
mpls             ipsec  -
Router04# show ip route vrf 1

Routing Table: 1
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, m - OMP
       n - NAT, Ni - NAT inside, No - NAT outside, Nd - NAT DIA
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       H - NHRP, G - NHRP registered, g - NHRP registration summary
       o - ODR, P - periodic downloaded static route, l - LISP
```

```
       a - application route
       + - replicated route, % - next hop override, p - overrides from PfR
       & - replicated local route overrides by connected

Gateway of last resort is 10.80.80.1 to network 0.0.0.0

m*    0.0.0.0/0 [251/0] via 10.80.80.1, 00:00:15, Sdwan-system-intf
```

如果丟失了Router02,Router04會安裝來自具有預設優先順序的路由器03(10.80.80.1)的預設路由。

提示：入站和出站方向在下一條路上工作，如果希望向全網狀網路中的所有遠端路由器通告首選項，則為入站方向；如果希望僅向特定遠端站點通告首選項，則為出站方向。

解決方案4:集中控制策略使用以優先使用某些字首路由

如果您使用任何其他字首而不是預設路由字首，前面的所有解決方案都完全相同。

從Router01(10.70.70.1)通告到Router04(10.70.70.2)的字首10.40.40.0/24的範例。

```
control-policy originator
    sequence 1
     match route
      originator 10.70.70.1
      prefix-list prefix40
     !
     action accept
      set
       preference 200
      !
     !
    !
default-action accept
 !
 lists
  prefix-list prefix40
   ip-prefix 10.40.40.0/24 <<<<<<<<<
  !
  site-list sitio40
   site-id 40
  !
 !
!
apply-policy
 site-list sitio40
  control-policy originator out
 !
!
```

驗證

```
Router04# show sdwan omp routes
Generating output, this might take time, please wait ...
Code:
C   -> chosen
```

```
I   -> installed
Red -> redistributed
Rej -> rejected
L   -> looped
R   -> resolved
S   -> stale
Ext -> extranet
Inv -> invalid
Stg -> staged
IA  -> On-demand inactive
U   -> TLOC unresolved
                                          PATH                      ATTRIBUTE
VPN    PREFIX              FROM PEER      ID     LABEL    STATUS    TYPE       TLOC IP
COLOR            ENCAP  PREFERENCE
-------------------------------------------------------------------------------------------------
-------------------------------------
1      0.0.0.0/0           10.1.1.7        36     1005     C,I,R     installed  10.80.80.1
mpls             ipsec  150
                           10.1.1.7        37     1003     R         installed  10.80.80.2
mpls             ipsec  -
1      10.40.40.0/24       10.1.1.7        13     1002     C,I,R     installed  10.70.70.1
biz-internet     ipsec  200      <<<<<<<<
                           10.1.1.7        15     1005     R         installed  10.80.80.1
mpls             ipsec  -
                           10.1.1.7        16     1003     R         installed  10.80.80.2
mpls             ipsec  -

Router04# show ip route vrf 1

Routing Table: 1
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, m - OMP
       n - NAT, Ni - NAT inside, No - NAT outside, Nd - NAT DIA
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       H - NHRP, G - NHRP registered, g - NHRP registration summary
       o - ODR, P - periodic downloaded static route, l - LISP
       a - application route
       + - replicated route, % - next hop override, p - overrides from PfR
       & - replicated local route overrides by connected

Gateway of last resort is 10.80.80.1 to network 0.0.0.0

m*    0.0.0.0/0 [251/0] via 10.80.80.1, 00:11:55, Sdwan-system-intf
      10.0.0.0/24 is subnetted, 1 subnets
m        10.40.40.0 [251/0] via 10.70.70.1, 00:02:17, Sdwan-system-intf  <<<<<<
Router04#
```

相關資訊

[適用於vEdge路由器、Cisco SD-WAN的策略配置指南]
[技術支援與文件 - Cisco Systems]

關於此翻譯

思科已使用電腦和人工技術翻譯本文件，讓全世界的使用者能夠以自己的語言理解支援內容。請注意，即使是最佳機器翻譯，也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準確度概不負責，並建議一律查看原始英文文件（提供連結）。