

使用下一跳命令配置基於策略的路由

目錄

[簡介](#)

[必要條件](#)

[需求](#)

[採用元件](#)

[慣例](#)

[背景資訊](#)

[設定](#)

[網路圖表](#)

[案例分析1：使用set ip default next-hop命令和動態路由協定實現策略路由](#)

[驗證案例分析1](#)

[案例分析2：使用set ip next-hop命令和動態路由協定實現策略路由](#)

[驗證案例分析2](#)

[案例分析3：使用set ip default next-hop和預設路由進行策略路由](#)

[驗證案例分析3](#)

[相關資訊](#)

簡介

本文檔介紹如何使用set ip default next-hop 和set ip next-hop 命令配置基於策略的路由(PBR)。

必要條件

需求

本文件沒有特定需求。

採用元件

本文檔中的資訊基於支援基於策略的路由的軟體。

可以使用[Cisco Feature Navigator](#)確定此配置支援的硬體和軟體。



備註：只有註冊的思科使用者能夠存取內部工具與資訊。

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。

慣例

如需文件慣例的詳細資訊，請參閱思科技術提示慣例。

背景資訊

本檔案使用set ip default next-hop和set ip next-hop命令提供原則型路由(PBR)的範例組態。

set ip default next-hop 命令驗證目標IP地址在路由表中是否存在，以及：

- 如果存在目的IP地址，該命令不會根據策略路由資料包，而是根據路由表轉發資料包。
- 如果目標IP地址不存在，命令策略將路由資料包並將其傳送到指定的下一跳。

set ip next-hop 命令用於驗證指定的下一跳是否存在，以及：

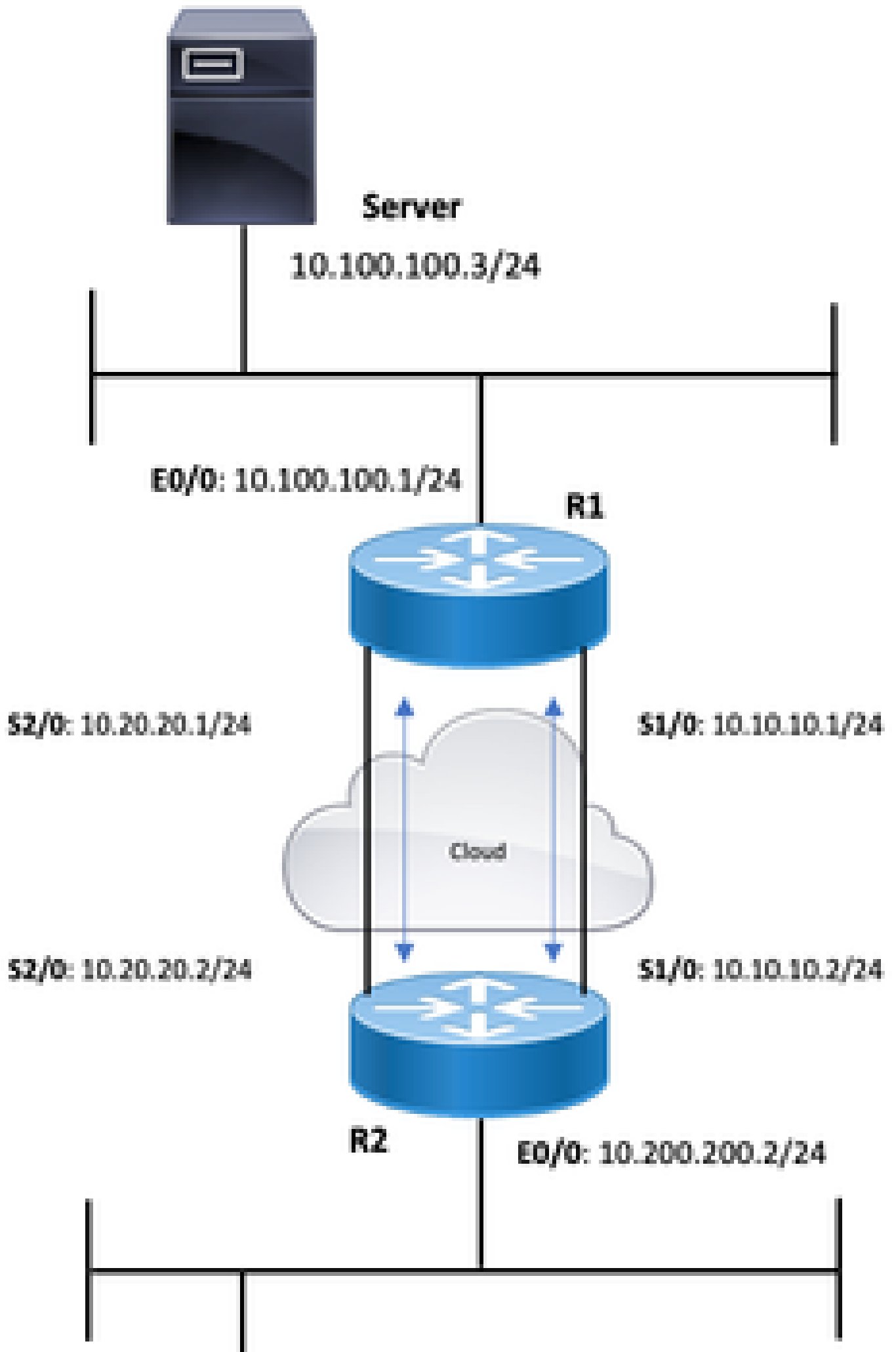
- 如果路由表中存在下一跳，則命令policy將資料包路由到下一跳。
- 如果路由表中不存在下一跳，該命令將使用普通路由表轉發資料包。

設定

本節提供設定本檔案所述功能的資訊。

網路圖表

此文件使用以下網路設定：



```
R1#show running-config
Building configuration...
!
!
interface Ethernet0/0
 ip address 10.100.100.1 255.255.255.0
 ip policy route-map blah
!
interface Serial1/0
 ip address 10.10.10.1 255.255.255.0
!
interface Serial2/0
 ip address 10.20.20.1 255.255.255.0
!
router ospf 1

!--- OSPF is not configured on Serial1/0.

log-adjacency-changes
 network 10.20.20.0 0.0.0.255 area 0
 network 10.100.100.0 0.0.0.255 area 0
!
ip classless
no ip http server
!
access-list 100 permit ip host 10.100.100.3 host 10.200.200.4
!
route-map blah permit 10
 match ip address 100
 set ip default next-hop 10.10.10.2
!
end
```

R2

```
R2#show running-config
Building configuration...
!
!
interface Ethernet0/0
 ip address 10.200.200.2 255.255.255.0
 ip policy route-map blah
!
interface Serial1/0
 ip address 10.10.10.2 255.255.255.0
 fair-queue
!
interface Serial2/0
 ip address 10.20.20.2 255.255.255.0
!
router ospf 1

!--- OSPF is not configured on Serial1/0.

log-adjacency-changes
 network 10.20.20.0 0.0.0.255 area 0
 network 10.200.200.0 0.0.0.255 area 0
!
```

```
ip classless
no ip http server
!
access-list 100 permit ip host 10.200.200.4 host 10.100.100.3
!
route-map blah permit 10
match ip address 100
set ip default next-hop 10.10.10.1
!
end
```

驗證案例分析1

使用命令set ip default next-hop時，當目標路由存在於路由表中時，使用正常轉發（請勿對資料包進行策略路由）。

<#root>

```
R1#show ip route 10.200.200.4
  Routing entry for 10.200.200.0/24
  Known via "ospf 1", distance 110, metric 74, type intra area
  Last update from 10.20.20.2 on Serial2/0, 00:11:48 ago
  Routing Descriptor Blocks:
  * 10.20.20.2, from 10.30.30.3, 00:11:48 ago, via Serial2/0
  Route metric is 74, traffic share count is 1

R1#debug ip policy
  Policy routing debugging is on
*Dec 4 12:50:57.363: IP: s=10.100.100.3 (Ethernet0/0),
  d=10.200.200.4, len 100, policy match
*Dec 4 12:50:57.363: IP: route map blah, item 10, permit
*Dec 4 12:50:57.363: IP: s=10.100.100.3 (Ethernet0/0),
  d=10.200.200.4 (Serial2/0), len 100, policy rejected -- normal forwarding
*Dec 4 12:50:57.431: IP: s=10.100.100.3 (Ethernet0/0),
  d=10.200.200.4, len 100, policy match
*Dec 4 12:50:57.431: IP: route map blah, item 10, permit
*Dec 4 12:50:57.431: IP: s=10.100.100.3 (Ethernet0/0),
  d=10.200.200.4 (Serial2/0), len 100, policy rejected -- normal forwarding
*Dec 4 12:50:57.491: IP: s=10.100.100.3 (Ethernet0/0),
  d=10.200.200.4, len 100, policy match
```

```
*Dec 4 12:50:57.491: IP: route map blah, item 10, permit
*Dec 4 12:50:57.491: IP: s=10.100.100.3 (Ethernet0/0),
  d=10.200.200.4 (Serial2/0), len 100, policy rejected -- normal forwarding
```

R2#

```
show ip route 10.100.100.3
```

```
Routing entry for 10.100.100.0/24
Known via "ospf 1", distance 110, metric 74, type intra area
Last update from 10.20.20.1 on Serial2/0, 00:11:42 ago
Routing Descriptor Blocks:
* 10.20.20.1, from 10.100.100.1, 00:11:42 ago, via Serial2/0
  Route metric is 74, traffic share count is 1
```

R2#

```
debug ip policy
```

```
Policy routing debugging is on
*Dec 4 12:50:57.779: IP: s=10.200.200.4 (Ethernet0/0),
  d=10.100.100.3, len 100, policy match
*Dec 4 12:50:57.779: IP: route map blah, item 10, permit
*Dec 4 12:50:57.779: IP: s=10.200.200.4 (Ethernet0/0),
  d=10.100.100.3 (Serial2/0), len 100, policy rejected -- normal forwarding
*Dec 4 12:50:57.839: IP: s=10.200.200.4 (Ethernet0/0),
  d=10.100.100.3, len 100, policy match
*Dec 4 12:50:57.839: IP: route map blah, item 10, permit
*Dec 4 12:50:57.839: IP: s=10.200.200.4 (Ethernet0/0),
  d=10.100.100.3 (Serial2/0), len 100, policy rejected -- normal forwarding
*Dec 4 12:50:57.911: IP: s=10.200.200.4 (Ethernet0/0),
  d=10.100.100.3, len 100, policy match
*Dec 4 12:50:57.911: IP: route map blah, item 10, permit
*Dec 4 12:50:57.911: IP: s=10.200.200.4 (Ethernet0/0),
  d=10.100.100.3 (Serial2/0), len 100, policy rejected -- normal forwarding
```

當Serial 2/0關閉並且目的地址從路由表中消失時，資料包將進行策略路由。

<#root>

R1#

```
show ip route 10.200.200.0
```

```
% Network not in table
```

R1#

```
*Dec 5 13:26:27.567: IP: s=10.100.100.3 (Ethernet0/0),
  d=10.200.200.4, len 100, policy match
*Dec 5 13:26:27.567: IP: route map blah, item 10, permit
*Dec 5 13:26:27.567: IP: s=10.100.100.3 (Ethernet0/0),
  d=10.200.200.4 (Serial1/0), len 100, policy routed
*Dec 5 13:26:27.567: IP: Ethernet0/0 to Serial1/0 10.10.10.2
*Dec 5 13:26:27.655: IP: s=10.100.100.3 (Ethernet0/0),
  d=10.200.200.4, len 100, policy match
*Dec 5 13:26:27.655: IP: route map blah, item 10, permit
*Dec 5 13:26:27.655: IP: s=10.100.100.3 (Ethernet0/0),
  d=10.200.200.4 (Serial1/0), len 100, policy routed
*Dec 5 13:26:27.655: IP: Ethernet0/0 to Serial1/0 10.10.10.2
*Dec 5 13:26:27.727: IP: s=10.100.100.3 (Ethernet0/0),
```

```
d=10.200.200.4, len 100, policy match
*Dec 5 13:26:27.727: IP: route map blah, item 10, permit
*Dec 5 13:26:27.727: IP: s=10.100.100.3 (Ethernet0/0),
  d=10.200.200.4 (Serial1/0),len 100, policy routed
*Dec 5 13:26:27.727: IP: Ethernet0/0 to Serial1/0 10.10.10.2
```

案例分析2：使用set ip next-hop命令和動態路由協定實現策略路由

本節使用以下配置：

R1
<pre>R1#show running-config Building configuration... ! ! interface Ethernet0/0 ip address 10.100.100.1 255.255.255.0 ip policy route-map blah ! interface Serial1/0 ip address 10.10.10.1 255.255.255.0 ! interface Serial2/0 ip address 10.20.20.1 255.255.255.0 ! router ospf 1 !--- OSPF is not configured on Serial1/0. log-adjacency-changes network 10.20.20.0 0.0.0.255 area 0 network 10.100.100.0 0.0.0.255 area 0 ! ip classless no ip http server ! access-list 100 permit ip host 10.100.100.3 host 10.200.200.4 ! route-map blah permit 10 match ip address 100 set ip next-hop 10.10.10.2 ! end</pre>
R2
<pre>R2#show running-config Building configuration... ! ! interface Ethernet0/0 ip address 10.200.200.2 255.255.255.0 ip policy route-map blah</pre>

```

!
interface Serial1/0
 ip address 10.10.10.2 255.255.255.0
 fair-queue
!
interface Serial2/0
 ip address 10.20.20.2 255.255.255.0
!
router ospf 1

!--- OSPF is not configured on Serial1/0.

 log-adjacency-changes
 network 10.20.20.0 0.0.0.255 area 0
 network 10.200.200.0 0.0.0.255 area 0
!
 ip classless
 no ip http server
!
!
!
 access-list 100 permit ip host 10.200.200.4 host 10.100.100.3
!
 route-map blah permit 10
  match ip address 100
  set ip next-hop 10.10.10.1
!
end

```

驗證案例分析2

使用命令set ip next-hop，路由器會驗證路由表中是否有下一跳10.10.10.2。如果路由表中存在目的路由，則當下一跳可到達時，策略路由資料包。

```
R1#show ip route 10.10.10.2
```

```
Routing entry for 10.10.10.0/24
```

```
Known via "connected", distance 0, metric 0 (connected, via interface)
```

```
Routing Descriptor Blocks:
```

```
* directly connected, via Serial1/0
```

```
Route metric is 0, traffic share count is 1
```

```
R1#show ip route 10.200.200.4
```

```
Routing entry for 10.200.200.0/24
```

```
Known via "ospf 1", distance 110, metric 74,
```

```
type intra area Last update from 10.20.20.2 on Serial2/0, 00:11:48 ago
```

```
Routing Descriptor Blocks: * 10.20.20.2, from 10.30.30.3, 00:11:48 ago,
```

```
via Serial2/0 Route metric is 74, traffic share count is 1
```

```
R1#debug ip policy Policy routing debugging is on
```

```
*Dec 4 12:53:38.271: IP: s=10.100.100.3 (Ethernet0/0), d=10.200.200.4, len 100, policy match
```

```
*Dec 4 12:53:38.271: IP: route map blah, item 10, permit
```

```
*Dec 4 12:53:38.271: IP: s=10.100.100.3 (Ethernet0/0),
```

```
d=10.200.200.4 (Serial1/0), len 100, policy routed *Dec 4 12:53:38.271:
```

```
IP: Ethernet0/0 to Serial1/0 10.10.10.2 *Dec 4 12:53:38.355:
```

```
IP: s=10.100.100.3 (Ethernet0/0), d=10.200.200.4, len 100, policy match *Dec 4 12:53:38.355:
```

```
IP: route map blah, item 10, permit *Dec 4 12:53:38.355:
```

```
IP: s=10.100.100.3 (Ethernet0/0), d=10.200.200.4 (Serial1/0), len 100, policy routed
```



```

*Dec 4 12:53:38.355: IP: Ethernet0/0 to Serial1/0 10.10.10.2
*Dec 4 12:53:38.483: IP: s=10.100.100.3 (Ethernet0/0), d=10.200.200.4, len 100, policy match
*Dec 4 12:53:38.483: IP: route map blah, item 10, permit
R2#show ip route 10.100.100.3 Routing entry for 10.100.100.0/24 Known via "ospf 1",
distance 110, metric 74, type intra area Last update from 10.20.20.1 on Serial2/0,
00:11:42 ago Routing Descriptor Blocks: * 10.20.20.1, from 10.100.100.1, 00:11:42 ago,
via Serial2/0 Route metric is 74, traffic share count is 1 R2#debug ip policy
Policy routing debugging is on *Dec 4 12:53:38.691:
IP: s=10.200.200.4 (Ethernet0/0), d=10.100.100.3, len 100, policy match *Dec 4 12:53:38.691:
IP: route map blah, item 10, permit *Dec 4 12:53:38.691: IP: s=10.200.200.4 (Ethernet0/0),
d=10.100.100.3 (Serial1/0), len 100, policy routed
*Dec 4 12:53:38.691: IP: Ethernet0/0 to Serial1/0 10.10.10.1 *Dec 4 12:53:38.799:
IP: s=10.200.200.4 (Ethernet0/0), d=10.100.100.3, len 100, policy match
*Dec 4 12:53:38.799: IP: route map blah, item 10, permit
*Dec 4 12:53:38.799: IP: s=10.200.200.4 (Ethernet0/0), d=10.100.100.3 (Serial1/0), len 100, policy routed
*Dec 4 12:53:38.799: IP: Ethernet0/0 to Serial1/0 10.10.10.1 *Dec 4 12:53:38.899:
IP: s=10.200.200.4 (Ethernet0/0),
d=10.100.100.3, len 100, policy match
*Dec 4 12:53:38.899: IP: route map blah, item 10, permit

```

當目的IP地址從路由中消失時，資料包將進行策略路由。

```

*Dec 5 13:33:23.607: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match
*Dec 5 13:33:23.607: IP: route map blah, item 10, permit
*Dec 5 13:33:23.607: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4 (Serial1/0), len 100, policy routed
*Dec 5 13:33:23.607: IP: Ethernet0/0 to Serial1/0 10.10.10.2
*Dec 5 13:33:23.707: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match
*Dec 5 13:33:23.707: IP: route map blah, item 10, permit
*Dec 5 13:33:23.707: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4 (Serial1/0), len 100, policy routed
*Dec 5 13:33:23.707: IP: Ethernet0/0 to Serial1/0 10.10.10.2
*Dec 5 13:33:23.847: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match
*Dec 5 13:33:23.847: IP: route map blah, item 10, permit

```

當Serial 1/0介面關閉時，路由表中下一跳10.10.10.2丟失，資料包將跟蹤正常的路由表。

```

*Dec 5 13:40:38.887: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match
*Dec 5 13:40:38.887: IP: route map blah, item 10, permit
*Dec 5 13:40:38.887: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4 (Serial2/0), len 100, policy rejected -- normal forwarding
*Dec 5 13:40:39.047: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match
*Dec 5 13:40:39.047: IP: route map blah, item 10, permit
*Dec 5 13:40:39.047: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4 (Serial2/0), len 100, policy rejected -- normal forwarding
*Dec 5 13:40:39.115: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match
*Dec 5 13:40:39.115: IP: route map blah, item 10, permit

```

```
*Dec 5 13:40:39.115: IP: s=10.100.100.3 (Ethernet0/0),  
d=10.200.200.4 (Serial2/0), len 100, policy rejected -- normal forwarding
```

案例分析3：使用set ip default next-hop和預設路由進行策略路由

本節使用以下配置：

R1
<pre>R1#show running-config Building configuration... ! ! interface Ethernet0/0 ip address 10.100.100.1 255.255.255.0 ip policy route-map blah ! interface Serial1/0 ip address 10.10.10.1 255.255.255.0 ! interface Serial2/0 ip address 10.20.20.1 255.255.255.0 ! ip route 0.0.0.0 0.0.0.0 10.20.20.2 ! ip classless no ip http server ! access-list 100 permit ip host 10.100.100.3 host 10.200.200.4 ! route-map blah permit 10 match ip address 100 set ip default next-hop 10.10.10.2 ! end</pre>
R2
<pre>R2#show running-config Building configuration... ! ! interface Ethernet0/0 ip address 10.200.200.2 255.255.255.0 ip policy route-map blah ! interface Serial1/0 ip address 10.10.10.2 255.255.255.0 fair-queue ! interface Serial2/0 ip address 10.20.20.2 255.255.255.0 ! ip route 0.0.0.0 0.0.0.0 10.20.20.1</pre>

```

!
ip classless
no ip http server
!
!
!
access-list 100 permit ip host 10.200.200.4 host 10.100.100.3
!
route-map blah permit 10
match ip address 100
set ip default next-hop 10.10.10.1
!
end

```

驗證案例分析3

使用命令set ip default next-hop時，如果到目標的唯一路由是預設路由（路由表中沒有該目標的特定路由），資料包將進行策略路由。

```

R1#show ip route 10.200.200.4
% Network not in table
R1#

```

```

R1#show ip route 0.0.0.0
Routing entry for 0.0.0.0/0, supernet
Known via "static", distance 1, metric 0, candidate default path
Routing Descriptor Blocks:
* 10.20.20.2
Route metric is 0, traffic share count is 1

```

```

R1#
*Dec 4 12:58:55.191: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match
*Dec 4 12:58:55.191: IP: route map blah, item 10, permit
*Dec 4 12:58:55.191: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4 (Serial1/0), len 100, policy routed
*Dec 4 12:58:55.191: IP: Ethernet0/0 to Serial1/0 10.10.10.2
*Dec 4 12:58:55.291: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match
*Dec 4 12:58:55.291: IP: route map blah, item 10, permit
*Dec 4 12:58:55.291: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4 (Serial1/0), len 100, policy routed
*Dec 4 12:58:55.291: IP: Ethernet0/0 to Serial1/0 10.10.10.2
*Dec 4 12:58:55.391: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match
*Dec 4 12:58:55.391: IP: route map blah, item 10, permit
*Dec 4 12:58:55.391: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4 (Serial1/0), len 100, policy routed
*Dec 4 12:58:55.391: IP: Ethernet0/0 to Serial1/0 10.10.10.2

```

```

R2#show ip route 10.100.100.3
% Network not in table

```

```

R2#show ip route 0.0.0.0
Routing entry for 0.0.0.0/0, supernet
Known via "static", distance 1, metric 0, candidate default path

```

Routing Descriptor Blocks:

* 10.20.20.1

Route metric is 0, traffic share count is 1

R2#

*Dec 4 12:58:20.819: %SYS-5-CONFIG_I: Configured from console by console

*Dec 4 12:58:55.611: IP: s=10.200.200.4 (Ethernet0/0),
d=10.100.100.3, len 100, policy match

*Dec 4 12:58:55.611: IP: route map blah, item 10, permit

*Dec 4 12:58:55.611: IP: s=10.200.200.4 (Ethernet0/0),
d=10.100.100.3 (Serial1/0), len 100, policy routed

*Dec 4 12:58:55.611: IP: Ethernet0/0 to Serial1/0 10.10.10.1

*Dec 4 12:58:55.739: IP: s=10.200.200.4 (Ethernet0/0),
d=10.100.100.3, len 100, policy match

*Dec 4 12:58:55.739: IP: route map blah, item 10, permit

*Dec 4 12:58:55.739: IP: s=10.200.200.4 (Ethernet0/0),
d=10.100.100.3 (Serial1/0), len 100, policy routed

*Dec 4 12:58:55.739: IP: Ethernet0/0 to Serial1/0 10.10.10.1

*Dec 4 12:58:55.799: IP: s=10.200.200.4 (Ethernet0/0),
d=10.100.100.3, len 100, policy match

*Dec 4 12:58:55.799: IP: route map blah, item 10, permit

*Dec 4 12:58:55.799: IP: s=10.200.200.4 (Ethernet0/0),
d=10.100.100.3 (Serial1/0), len 100, policy routed

*Dec 4 12:58:55.799: IP: Ethernet0/0 to Serial1/0 10.10.10.1

當由於Serial 2/0關閉而不存在預設路由時，資料包將進行策略路由。

<#root>

R1#

show ip route 0.0.0.0

% Network not in table

R1#

*Dec 5 13:02:31.283: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match

*Dec 5 13:02:31.283: IP: route map blah, item 10, permit

*Dec 5 13:02:31.283: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4 (Serial1/0),len 100, policy routed

*Dec 5 13:02:31.283: IP: Ethernet0/0 to Serial1/0 10.10.10.2

*Dec 5 13:02:31.375: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match

*Dec 5 13:02:31.375: IP: route map blah, item 10, permit

*Dec 5 13:02:31.375: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4 (Serial1/0),len 100, policy routed

*Dec 5 13:02:31.375: IP: Ethernet0/0 to Serial1/0 10.10.10.2

*Dec 5 13:02:31.435: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4, len 100, policy match

*Dec 5 13:02:31.435: IP: route map blah, item 10, permit

*Dec 5 13:02:31.435: IP: s=10.100.100.3 (Ethernet0/0),
d=10.200.200.4 (Serial1/0),len 100, policy routed

*Dec 5 13:02:31.435: IP: Ethernet0/0 to Serial1/0 10.10.10.2

在Serial2/0開啟而Serial 1/0關閉的情況下，您將丟失下一跳，資料包將跟蹤正常轉發（路由表）-策略被拒絕。

<#root>

R1#

debug ip policy

Policy routing debugging is on

R1#

```
*Dec 5 12:46:49.543: IP: s=10.100.100.3 (Ethernet0/0),  
  d=10.200.200.4, len 100, policy match  
*Dec 5 12:46:49.543: IP: route map blah, item 10, permit  
*Dec 5 12:46:49.543: IP: s=10.100.100.3 (Ethernet0/0),  
  d=10.200.200.4 (Serial2/0),len 100, policy rejected -- normal forwarding  
*Dec 5 12:46:49.623: IP: s=10.100.100.3 (Ethernet0/0),  
  d=10.200.200.4, len 100, policy match  
*Dec 5 12:46:49.623: IP: route map blah, item 10, permit  
*Dec 5 12:46:49.623: IP: s=10.100.100.3 (Ethernet0/0),  
  d=10.200.200.4 (Serial2/0),len 100, policy rejected -- normal forwarding  
*Dec 5 12:46:49.691: IP: s=10.100.100.3 (Ethernet0/0),  
  d=10.200.200.4, len 100, policy match  
*Dec 5 12:46:49.691: IP: route map blah, item 10, permit  
*Dec 5 12:46:49.691: IP: s=10.100.100.3 (Ethernet0/0),  
  d=10.200.200.4 (Serial2/0),len 100, policy rejected -- normal forwarding
```

相關資訊

- [IP 路由通訊協定](#)
- [思科技術支援與下載](#)

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）。