

# STUN直接封装配置示例

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## 简介

本文为串行隧道(STUN)的直接封装提供一个配置示例。本文档的“验证”和“故障排除”部分中演示了 `show stun` 命令输出中的相关状态和 `debug` 命令输出中的状态更改。

虽然 `debug stun packet` 和 `debug stun event` 命令不应该导致CPU利用率过高，`logging buffered` 命令用于复制输出到日志文件。

## 先决条件

### 要求

本文档没有任何特定的要求。

### 使用的组件

本文档中的信息基于Cisco IOS®软件版本12.0(8)，该版本具有IBM STUN配置功能。

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。

### 规则

有关文档规则的详细信息，请参阅 [Cisco 技术提示规则](#)。

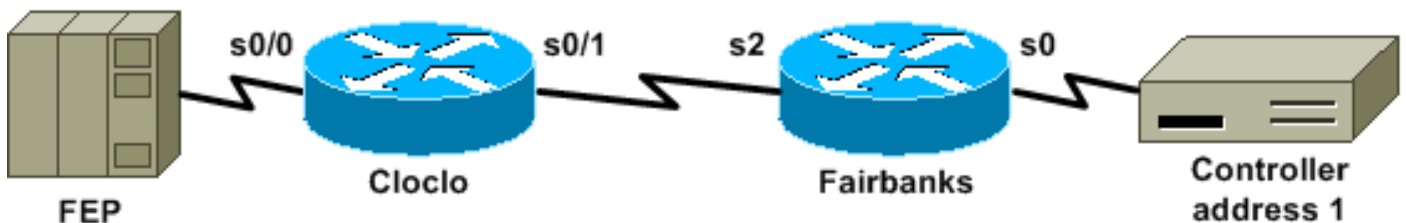
## 配置

本部分提供有关如何配置本文档所述功能的信息。

注：要查找有关本文档中使用的命令的其他信息，请使用命令[查找工具](#)([仅注册客户](#))。

## 网络图

本文档使用以下网络设置：



## 配置

本文档使用以下配置：

- [克洛克洛](#)
- [费尔班克斯](#)

### 克洛克洛

```
cloclo# show run

Building configuration...
Current configuration:
!
version 12.0
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname cloclo
!
boot system flash rsp-jsv-mz.120-8
logging buffered 64000 debugging
no logging console
enable password cisco
!
microcode CIP flash slot0:cip27-3
microcode reload
ip subnet-zero
no ip domain-lookup
ip cef
!
!
stun peer-name 10.10.10.10
stun protocol-group 2 sdlc
!
!
!
```

```

!
interface Loopback0
 ip address 10.10.10.10 255.255.255.0
 no ip directed-broadcast
!
interface Serial0/0
 no ip address
 no ip directed-broadcast
 encapsulation stun
 no ip mroute-cache
 clockrate 9600
 stun group 2
 stun route address 1 interface Serial0/1
!
interface Serial0/1
 ip address 10.2.1.1 255.255.255.0
 no ip directed-broadcast
 no ip mroute-cache
!
!--- Output suppressed. ! interface Ethernet1/0 ip
address 10.1.1.1 255.255.255.0 no ip directed-broadcast
no ip mroute-cache shutdown ! !--- Output suppressed. !
router eigrp 100 network 10.0.0.0 ! ip classless ! ! !
line con 0 exec-timeout 0 0 transport input none line
aux 0 line vty 0 4 password cisco login ! end cloclo#

```

## 费尔班克斯

```

fairbanks# show run

Building configuration...
Current configuration:
!
version 12.0
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname fairbanks
!
boot system flash
 logging buffered 64000 debugging
no logging console
enable password cisco
!
ip subnet-zero
!
!
stun peer-name 10.20.20.20
stun protocol-group 2 sdlc
!
!
!
!
interface Loopback0
 ip address 10.20.20.20 255.255.255.0
 no ip directed-broadcast
!
interface Ethernet0
 ip address 10.1.1.2 255.255.255.0
 no ip directed-broadcast
 shutdown
 media-type 10BaseT

```

```

!
interface Ethernet1
 ip address 172.17.240.12 255.255.255.0
 no ip directed-broadcast
 shutdown
 media-type 10BaseT
!
interface Serial0
 no ip address
 no ip directed-broadcast
 encapsulation stun
 no ip mroute-cache
 clockrate 9600
 stun group 2
 stun route address 1 interface Serial2
!
!--- Output suppressed. ! interface Serial2 ip address
10.2.1.2 255.255.255.0 no ip directed-broadcast
clockrate 19200 ! !--- Output suppressed. ! router eigrp
100 network 10.0.0.0 ! ip classless ! ! ! line con 0
exec-timeout 0 0 transport input none line aux 0 line
vty 0 4 login ! end fairbanks#

```

## 验证

此部分提供您能使用的，用以确认您的配置正常工作的信息。

[命令输出解释程序工具（仅限注册用户）支持某些 show 命令](#)，使用此工具可以查看对 show 命令输出的分析。

两个路由器的 show stun 命令输出在此部分显示。它显示每台路由器的 STUN 状态为。此外，每次您发出 show stun 命令，计数器收到的信息包的 (rx\_pkts) 和已传输数据包的 (tx\_pkts) 会增加。

```
cloclo# show stun
```

```
This peer: 10.10.10.10
```

```
*Serial0/0 (group 2 [sdlc])
```

	state	rx_pkts	tx_pkts	drops	poll
1 IF Serial0/1	open	4510	4513	0	

```
fairbanks# show stun
```

```
This peer: 10.20.20.20
```

```
*Serial0 (group 2 [sdlc])
```

	state	rx_pkts	tx_pkts	drops	poll
1 IF Serial2	open	2260	2257	0	

```
fairbanks# show stun
```

```
This peer: 10.20.20.20
```

```
*Serial0 (group 2 [sdlc])
```

	state	rx_pkts	tx_pkts	drops	poll
1 IF Serial2	open	2270	2267	0	

## 故障排除

此部分提供您能使用故障排除您的配置的信息。

## 故障排除命令

[命令输出解释程序工具 \( 仅限注册用户 \) 支持某些 show 命令](#)，使用此工具可以查看对 show 命令输出的分析。

注意：在发出debug命令之前，请[参阅有关Debug命令的重要信息](#)。

- [debug stun packet](#) — 显示有关通过STUN链路传输的数据包的信息。
- [debug stun event](#) — 显示STUN连接和活动。

## STUN激活期间的调试捕获

```
cloclo# show log
```

```
Syslog logging: enabled (0 messages dropped, 0 flushes, 0 overruns)
  Console logging: disabled
  Monitor logging: level debugging, 0 messages logged
  Buffer logging: level debugging, 232 messages logged
  Trap logging: level informational, 43 message lines logged
```

```
Log Buffer (64000 bytes):
```

```
!--- These timestamped lines each appear on one line in normal output: *Nov 3 11:35:06.191:
%LINK-3-UPDOWN: Interface Serial0/1, changed state to up *Nov 3 11:35:07.191: %LINEPROTO-5-
UPDOWN: Line protocol on Interface Serial0/1, changed state to up *Nov 3 11:35:31.819: %LINK-3-
UPDOWN: Interface Serial0/0, changed state to up *Nov 3 11:35:32.819: %LINEPROTO-5-UPDOWN: Line
protocol on Interface Serial0/0, changed state to up *Nov 3 11:35:36.631: STUN sdlc: 00:04:12
Serial0/0 SDI: (001/008) U: SNRM PF:1 *Nov 3 11:35:37.831: STUN sdlc: 00:00:01 Serial0/0 SDI:
(001/008) U: SNRM PF:1 *Nov 3 11:35:37.859: STUN sdlc: 00:00:00 Serial0/0 NDI: (001/008) U: UA
PF:1 *Nov 3 11:35:37.879: STUN sdlc: 00:00:00 Serial0/0 SDI: (001/008) S: RR PF:1 NR:000 *Nov 3
11:35:37.907: STUN sdlc: 00:00:00 Serial0/0 NDI: (001/008) S: RR PF:1 NR:000 *Nov 3
11:35:38.031: STUN sdlc: 00:00:00 Serial0/0 SDI: (001/008) S: RR PF:1 NR:000 *Nov 3
11:35:38.059: STUN sdlc: 00:00:00 Serial0/0 NDI: (001/008) S: RR PF:1 NR:000 *Nov 3
11:35:38.091: STUN sdlc: 00:00:00 Serial0/0 SDI: (001/008) I: PF:0 NR:000 NS:000 *Nov 3
11:35:38.231: STUN sdlc: 00:00:00 Serial0/0 SDI: (001/008) S: RR PF:1 NR:000 *Nov 3
11:35:38.295: STUN sdlc: 00:00:00 Serial0/0 NDI: (001/008) I: PF:1 NR:001 NS:000 *Nov 3
11:35:38.431: STUN sdlc: 00:00:00 Serial0/0 SDI: (001/008) S: RR PF:1 NR:001 *Nov 3
11:35:38.459: STUN sdlc: 00:00:00 Serial0/0 NDI: (001/008) S: RR PF:1 NR:001 *Nov 3
11:35:38.555: STUN sdlc: 00:00:00 Serial0/0 SDI: (001/008) I: PF:0 NR:001 NS:001 *Nov 3
11:35:38.631: STUN sdlc: 00:00:00 Serial0/0 SDI: (001/008) S: RR PF:1 NR:001 *Nov 3
11:35:38.691: STUN sdlc: 00:00:00 Serial0/0 NDI: (001/008) I: PF:1 NR:002 NS:001 *Nov 3
11:35:38.831: STUN sdlc: 00:00:00 Serial0/0 SDI: (001/008) S: RR PF:1 NR:002 *Nov 3
11:35:38.859: STUN sdlc: 00:00:00 Serial0/0 NDI: (001/008) S: RR PF:1 NR:002 *Nov 3
11:35:39.031: STUN sdlc: 00:00:00 Serial0/0 SDI: (001/008) S: RR PF:1 NR:002 *Nov 3
11:35:39.059: STUN sdlc: 00:00:00 Serial0/0 NDI: (001/008) S: RR PF:1 NR:002 *Nov 3
11:35:39.231: STUN sdlc: 00:00:00 Serial0/0 SDI: (001/008) S: RR PF:1 NR:002 *Nov 3
11:35:39.259: STUN sdlc: 00:00:00 Serial0/0 NDI: (001/008) S: RR PF:1 NR:002 *Nov 3
11:35:39.431: STUN sdlc: 00:00:00 Serial0/0 SDI: (001/008) S: RR PF:1 NR:002 *Nov 3
11:35:39.563: STUN sdlc: 00:00:00 Serial0/0 NDI: (001/008) S: RR PF:1 NR:002 cloclo#
```

```
fairbanks# show log
```

```
Syslog logging: enabled (0 messages dropped, 0 flushes, 0 overruns)
  Console logging: disabled
  Monitor logging: level debugging, 0 messages logged
  Buffer logging: level debugging, 203 messages logged
  Trap logging: level informational, 40 message lines logged
```

```
Log Buffer (64000 bytes):
```

```
!--- These timestamped lines each appear on one line in normal output: *Nov 3 09:38:12.759:
```

```
%SYS-5-CONFIG_I: Configured from console by console *Nov 3 09:38:14.231: %LINK-3-UPDOWN:
Interface Serial2, changed state to up *Nov 3 09:38:15.231: %LINEPROTO-5-UPDOWN: Line protocol
on Interface Serial2, changed state to up *Nov 3 09:38:44.687: STUN sdlc: 00:04:41 Serial0 NDI:
(001/008) U: SNRM PF:1 *Nov 3 09:38:45.887: STUN sdlc: 00:00:01 Serial0 NDI: (001/008) U: SNRM
PF:1 @ *Nov 3 09:38:45.899: STUN sdlc: 00:00:00 Serial0 SDI: (001/008) U: UA PF:1 *Nov 3
09:38:45.935: STUN sdlc: 00:00:00 Serial0 NDI: (001/008) S: RR PF:1 NR:000 *Nov 3 09:38:45.947:
STUN sdlc: 00:00:00 Serial0 SDI: (001/008) S: RR PF:1 NR:000 *Nov 3 09:38:46.087: STUN sdlc:
00:00:00 Serial0 NDI: (001/008) S: RR PF:1 NR:000 *Nov 3 09:38:46.099: STUN sdlc: 00:00:00
Serial0 SDI: (001/008) S: RR PF:1 NR:000 *Nov 3 09:38:46.155: STUN sdlc: 00:00:00 Serial0 NDI:
(001/008) I: PF:0 NR:000 NS:000 *Nov 3 09:38:46.287: STUN sdlc: 00:00:00 Serial0 NDI: (001/008)
S: RR PF:1 NR:000 *Nov 3 09:38:46.323: STUN sdlc: 00:00:00 Serial0 SDI: (001/008) I: PF:1 NR:001
NS:000 *Nov 3 09:38:46.487: STUN sdlc: 00:00:00 Serial0 NDI: (001/008) S: RR PF:1 NR:001 *Nov 3
09:38:46.499: STUN sdlc: 00:00:00 Serial0 SDI: (001/008) S: RR PF:1 NR:001 *Nov 3 09:38:46.615:
STUN sdlc: 00:00:00 Serial0 NDI: (001/008) I: PF:0 NR:001 NS:001 *Nov 3 09:38:46.687: STUN sdlc:
00:00:00 Serial0 NDI: (001/008) S: RR PF:1 NR:001 *Nov 3 09:38:46.719: STUN sdlc: 00:00:00
Serial0 SDI: (001/008) I: PF:1 NR:002 NS:001 *Nov 3 09:38:46.887: STUN sdlc: 00:00:00 Serial0
NDI: (001/008) S: RR PF:1 NR:002 *Nov 3 09:38:46.899: STUN sdlc: 00:00:00 Serial0 SDI: (001/008)
S: RR PF:1 NR:002 *Nov 3 09:38:47.087: STUN sdlc: 00:00:00 Serial0 NDI: (001/008) S: RR PF:1
NR:002 *Nov 3 09:38:47.099: STUN sdlc: 00:00:00 Serial0 SDI: (001/008) S: RR PF:1 NR:002 *Nov 3
09:38:47.287: STUN sdlc: 00:00:00 Serial0 NDI: (001/008) S: RR PF:1 NR:002 *Nov 3 09:38:47.299:
STUN sdlc: 00:00:00 Serial0 SDI: (001/008) S: RR PF:1 NR:002 fairbanks#
```

## [相关信息](#)

- [STUN \( 串行隧道 \) 和BSTUN \( 块串行隧道 \) 支持页](#)
- [工具与资源](#)
- [技术支持 - Cisco Systems](#)