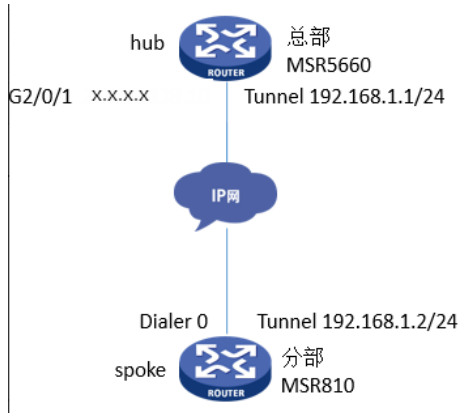


### 组网及说明

现场为advpn组网，总部为一台MSR5660路由器，充当hub和server角色，采用本地认证，分部为MSR810作为spoke



### 问题描述

现场关键配置如下：

#### 1.总部配置

```
# ospf 1
area 0.0.0.0
network 192.168.1.1 0.0.0.0
#
interface GigabitEthernet2/0/1
port link-mode route
combo enable copper
ip address x.x.x.x 255.255.255.252
nat outbound
#
interface Tunnel1 mode advpn udp
ip address 192.168.1.1 255.255.255.0
ospf network-type p2mp
source GigabitEthernet2/0/1
tunnel protection ipsec profile zongbu1
vam client hub1 compatible advpn0
#
radius scheme zongbu1
key authentication simple XXXX
key accounting simple XXXX
user-name-format without-domain
#
domain zongbu1
authentication advpn local
#
domain default enable zongbu1
#
local-user changfa class network
password simple XXXX
service-type advpn
authorization-attribute user-role network-operator
#
ipsec transform-set zongbu1
esp encryption-algorithm des-cbc
esp authentication-algorithm md5
#
ipsec profile zongbu1 isakmp
```

```

transform-set zongbu1
ike-profile zongbu1
#
ike profile zongbu1
keychain zongbu1
#
ike keychain zongbu1 pre-shared-key address 0.0.0.0 0.0.0.0 key simple XXXX
#
vam client name changfa
#
vam client name hub1
advpn-domain zongbu1
server primary ip-address x.x.x.x
pre-shared-key simple XXXX
user hub1 password simple XXXX
client enable
#
vam server advpn-domain zongbu1 id 1
pre-shared-key simple XXXX
authentication-method chap domain zongbu1
keepalive interval 10 retry 3
server enable
hub-group 0
hub private-address 192.168.1.1 public-address x.x.x.x
spoke private-address range 192.168.1.0 192.168.1.255

```

## 2.分部配置（采用pppoe拨号上网）

```

# ospf 1
area 0.0.0.0
network 192.168.1.2 0.0.0.0
#
interface Tunnel1 mode advpn udp
ip address 192.168.1.2 255.255.255.0
ospf network-type p2mp
source Dialer0
tunnel protection ipsec profile 1
vam client changfa
#
ipsec transform-set 1
esp encryption-algorithm des-cbc
esp authentication-algorithm md5
#
ipsec profile 1 isakmp
transform-set 1
ike-profile 1
#
ike profile 1
keychain 1
#
ike keychain 1
pre-shared-key address 0.0.0.0 0.0.0.0
key simple XXXX
#
vam client name changfa
advpn-domain zongbu1
server primary ip-address x.x.x.x
pre-shared-key simple XXXX
user changfa password simple XXXX
client enable

```

## 过程分析

检查设备配置，没有发现问题，确认过两端的密钥配置的也是一致的，公网也跟现场确认是通的，分部用户拨号上网一切正常，用MSR3620复现现场的配置，发现advpn隧道能够正常建立，但是现场的组网情况下vam client无法注册到server上，隧道建立不成功。

```
[SPOKE1]dis vam client fsm
Client name      : changfa
Status          : Enabled
ADVPN domain name: zongbu1
Primary server:  X.X.X.X
Private address: 192.168.1.2
Interface       : Tunnel1
Current state   : DUMB
Client type     : Unknown
Holding time    : 0H 1M 31S
Encryption-algorithm: Unknown
Authentication-algorithm: Unknown
Keepalive      : 0 seconds, 0 times
Hub number     : 0
```

[R1]display vam server address-map

```
ADVPN domain name: zongbu1
Total private address mappings: 0
```

[R1]display advpn session

```
Interface : Tunnel1
Number of sessions: 0
```

## 解决方法

经过排查，总部的MSR5660属于分布式设备，在配置advpn时需要指定处理流量的slot，通过service slot xx命令指定，现场指定slot后advpn恢复正常。

```
[spoke]dis vam client fsm
[spoke]dis vam client fsm
Client name      : changfa
Status          : Enabled
ADVPN domain name: zongbu1
Primary server:  X.X.X.X
Private address: 192.168.1.2
Interface       : Tunnel1
Current state   : ONLINE (active)
Client type     : Spoke
Holding time    : 2H 52M 38S
Encryption-algorithm: AES-CBC-256
Authentication-algorithm: HMAC-SHA1
Keepalive      : 180 seconds, 3 times
Hub number     : 0
```