

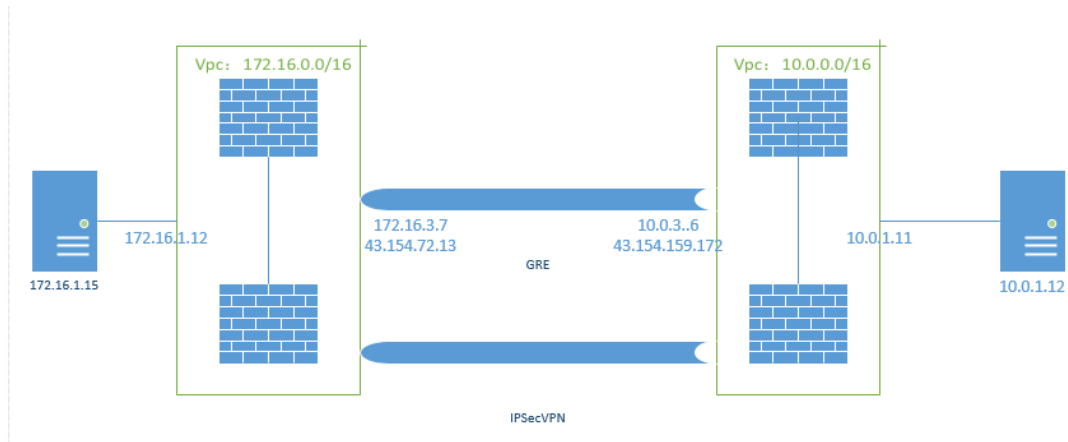
5.5R9P6 版本腾讯云环境验证

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服务热线：400 828 6655



组网拓扑和环境:



两个 VPC

ID名称	VPC CIDR @	子网	路由器	NAT 网关	VPN 网关	云服务器	专有网络	默认路由策略	创建时间	标签	操作
vpc-orkt5f8 Hill2-net	10.0.0.0/16	4	1	0	0	2	0	否	2023-04-12 11:23:25		删除 更多
vpc-4wzs7f2y Hill_net	172.16.0.0/16	4	1	0	0	1	0	否	2023-04-11 10:19:49		删除 更多

8 个子网

ID名称	所属网络	CIDR	可用区	关联路由表	云服务器	可用IP	默认子网	创建时间	标签	操作
subnet-s1jnb7 trust2	vpc-orkt5f8 Hill2-net	10.0.1.0/24	香港二区	rtb-ijrke445	0	252	否	2023-04-12 11:24:15		删除 更多
subnet-8mjn7xs1 ha2	vpc-orkt5f8 Hill2-net	10.0.2.0/24	香港二区	rtb-ijrke445	0	253	否	2023-04-12 11:24:15		删除 更多
subnet-c0db9k77 untrust2	vpc-orkt5f8 Hill2-net	10.0.3.0/24	香港二区	rtb-ijrke445	0	252	否	2023-04-12 11:24:15		删除 更多
subnet-ncabwv5 mgmt	vpc-orkt5f8 Hill2-net	10.0.0.0/24	香港二区	rtb-ijrke445	2	251	否	2023-04-12 11:23:27		删除 更多
subnet-kfq31mkv trust	vpc-4wzs7f2y Hill_net	172.16.1.0/24	香港二区	rtb-kxref0gt	1	248	否	2023-04-11 10:20:42		删除 更多
subnet-m3ykjel ha	vpc-4wzs7f2y Hill_net	172.16.2.0/24	香港二区	rtb-kxref0gt	0	250	否	2023-04-11 10:20:42		删除 更多
subnet-onfuwll3 untrust	vpc-4wzs7f2y Hill_net	172.16.3.0/24	香港二区	rtb-kxref0gt	0	249	否	2023-04-11 10:20:42		删除 更多
subnet-e8b2gyp mgmt	vpc-4wzs7f2y Hill_net	172.16.0.0/24	香港二区	rtb-kxref0gt	2	251	否	2023-04-11 10:19:51		删除 更多

4 组实例+2 组 PC

ID名称	地区	状态	可用区	实例类型	实例规格	公网IP地址	实例计费模式	网络计费模式	所属项目	标签(key-value)	操作
ins-8y1c2k34E PC2	山	运行中	香港三区	标准型55	2核 2GB 96Mbps 系统盘: 通用型SSD云盘 数据盘: HBD-net	10.0.1.12 (内)	按量计费 2023-04-12 16:33:00创建	-	默认项目		查看详情
ins-1w6th8g PC1	山	运行中	香港三区	标准型55	2核 4GB 96Mbps 系统盘: 通用型SSD云盘 数据盘: Hill-net	172.16.1.15 (内)	按量计费 2023-04-12 14:14:26创建	-	默认项目		查看详情
ins-1u9b0vm FW4	山	运行中	香港三区	标准型55	2核 2GB 96Mbps 系统盘: 通用型SSD云盘 数据盘: Hill-net	10.0.0.8 (内)	按量计费 2023-04-12 11:26:45创建	-	默认项目		查看详情
ins-1vomy142 FW3	山	运行中	香港三区	标准型55	2核 2GB 96Mbps 系统盘: 通用型SSD云盘 数据盘: Hill-net	10.0.0.2 (内)	按量计费 2023-04-12 11:26:49创建	-	默认项目		查看详情
ins-ajc68ts FW2	山	运行中	香港三区	标准型55	2核 2GB 96Mbps 系统盘: 通用型SSD云盘 数据盘: Hill-net	172.16.0.9 (内)	按量计费 2023-04-11 17:40:51创建	-	默认项目		查看详情
ins-3u6h8ke FW1	山	运行中	香港三区	标准型55	2核 2GB 96Mbps 系统盘: 通用型SSD云盘 数据盘: Hill-net	172.16.8.15 (内)	按量计费 2023-04-11 16:45:13创建	-	默认项目		查看详情

高可用 IP 和弹性公网 ip

ID名称	状态	地址	后端网卡	所属主机	弹性公网IP	所属网络	所属子网	申请时间	操作
havis-6m14a2mf trust2-vip	已绑定云服务器	10.0.1.11	eni-dhezvpyq trust2	ins-1vomy142 -	-	vpc-orkt5f8 Hill2-net	subnet-s1jmbb7 trust2	2023-04-12 11:30:19	绑定弹性IP 释放弹性IP
havis-5tg06djl untrust2-vip	已绑定云服务器	10.0.3.6	eni-me9fc2u0 untrust2	ins-1vomy142 -	43.154.159.172	vpc-orkt5f8 Hill2-net	subnet-c0db9k77 untrust2	2023-04-12 11:30:36	绑定弹性IP 解绑弹性IP
havis-3vhdnuir trust-vip	已绑定云服务器	172.16.1.12	eni-fskebyc6 trust	ins-ajc68ts -	-	vpc-4wz57f2y Hill-net	subnet-kkq31mkv trust	2023-04-11 17:49:09	绑定弹性IP 解绑弹性IP
havis-6w0o0gkl untrust-vip	已绑定云服务器	172.16.3.7	eni-7gmpxnl2 untrust	ins-ajc68ts -	43.154.72.13	vpc-4wz57f2y Hill-net	subnet-onfuwl3 untrust	2023-04-11 17:49:35	绑定弹性IP 解绑弹性IP

共 4 条

10 条 / 页

ID名称	地区	类型	状态	公网IP地址	计费模式	带宽上限	网络策略	绑定资源类型	所属项目	创建时间	操作
ebp-4wz57f2y 弹性公网IP	山	弹性公网IP	已生效	43.154.159.172 (内)	按流量计费	1 Mbps	havis-5tg06djl	EIP	默认项目	2023-04-12 12:38:35	查看详情
ebp-4wz57f2y 弹性公网IP	山	弹性公网IP	已生效	43.154.72.13	按流量计费	1 Mbps	havis-6w0o0gkl	EIP	默认项目	2023-04-11 16:48:08	查看详情

安装部署验证

配置参考: <https://kb.hillstonenet.com/cn/cloud-deployment-case-tencent-public/>

主设备资源



tac@hillstonenet.com 运行中

服务器初始登录名为root, 可在[站内信](#)和[邮件](#)查看初始登录密码, 忘记密码可[重置密码](#)

基本信息 弹性网卡 公网IP 监控 安全组 操作日志 执行命令 文件上传

实例信息

名称	tac@hillstonenet.com	所属项目	默认项目
实例ID	ins-3n08q8le	标签	无
UUID	f5df826d-28ee-403c-9654-892c5cc29381	密钥	无
实例规格	标准型S5 S5 MEDIUM2	置放群组	无
实例规格保护	已关闭	地域	中国香港
角色	无	可用区	香港二区

网络信息

所属网段	vpc-4wzs7f2y(Hill_net 172.16.0.0/16)	主IPv4内网IP	172.16.0.15
所属子网	subnet-e8b2gyjx(mgmt)	用作公网网关	否
主IPv4公网IP	无		

配置信息

操作系统	linux-64位	内存	2GB
CPU	2核	公网带宽	0Mbps

镜像信息

镜像名称	5.5R9P6	镜像类型	自定义镜像
镜像ID	img-hasml8vc		

计费信息

实例计费模式	按量计费	创建时间	2023-04-11 16:45:13
网络计费模式	-		



tac@hillstonenet.com 运行中

服务器初始登录名为root, 可在[站内信](#)和[邮件](#)查看初始登录密码, 忘记密码可[重置密码](#)

首页 实例 弹性网卡 公网IP 监控 安全组 操作日志 执行命令 文件上传

基本信息 弹性网卡 公网IP 监控 安全组 操作日志 执行命令 文件上传

网卡名称	网卡ID	网卡类型	网卡子网	网卡IP	网卡状态
弹性网卡 1					
- ins-3n08q8le Primary ENI eni-7z8b9g4k(主网卡)					
网卡ID	eni-7z8b9g4k	弹性网卡	vpc-4wzs7f2y	172.16.0.15	可用
弹性网卡 2					
- ins-3n08q8le Secondary ENI eni-c8b2gyjx(副网卡)					
网卡ID	eni-c8b2gyjx	弹性网卡	vpc-4wzs7f2y	172.16.0.17	可用
弹性网卡 3					
- ins-3n08q8le Tertiary ENI eni-8a2182yq(副网卡)					
网卡ID	eni-8a2182yq	弹性网卡	vpc-4wzs7f2y	172.16.0.23	可用
弹性网卡 4					
- ins-3n08q8le Quaternary ENI eni-8k2182yq(副网卡)					
网卡ID	eni-8k2182yq	弹性网卡	vpc-4wzs7f2y	172.16.0.32	可用

备设备资源



tac@hillstonenet.com 运行中

服务器初始登录名为root，可在[站内信](#)和[邮箱](#)查看初始登录密码，忘记密码可[重置密码](#)

基本信息 弹性网卡 公网IP 监控 安全组 操作日志 执行命令 文件上传

实例信息

名称	tac@hillstonenet.com	所属项目	默认项目
实例ID	ins-ajcp8zs	标签	无
UUID	4f478bc-2f04-444c-8a93-a27887243cb5	密钥	无
实例规格	标准型S5 S5.MEDIUM2	置数数组	无
实例释放保护	已关闭	地域	中国香港
角色	无	可用区	香港二区

网络信息

所属网络	vpc-4wz372y(Hill_net172.16.0.0/16)	主IPv4内网IP	172.16.0.3
所属子网	subnet-e8b2y9r(mgmt)	用作公网网关	否
主IPv4公网IP	无		

配置信息

操作系统	linux-64位	内存	2GB
CPU	2核	公网带宽	0Mbps

镜像信息

镜像名称	5.SR9P6	镜像类型	自定义镜像
镜像ID	img-hasm8vc		

计费信息

实例计费模式	按量计费	创建时间	2023-04-11 17:40:01
网络计费模式	-		



tac@hillstonenet.com 运行中

服务器初始登录名为root，可在[站内信](#)和[邮箱](#)查看初始登录密码，忘记密码可[重置密码](#)

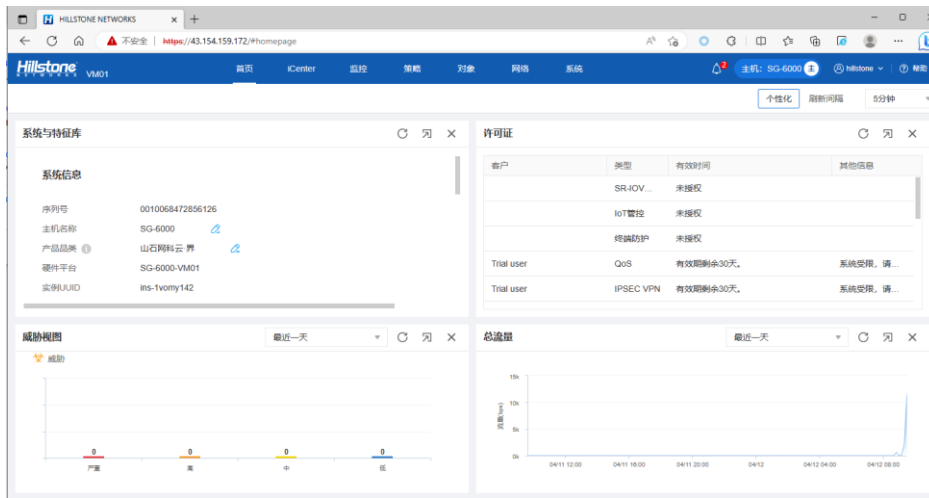
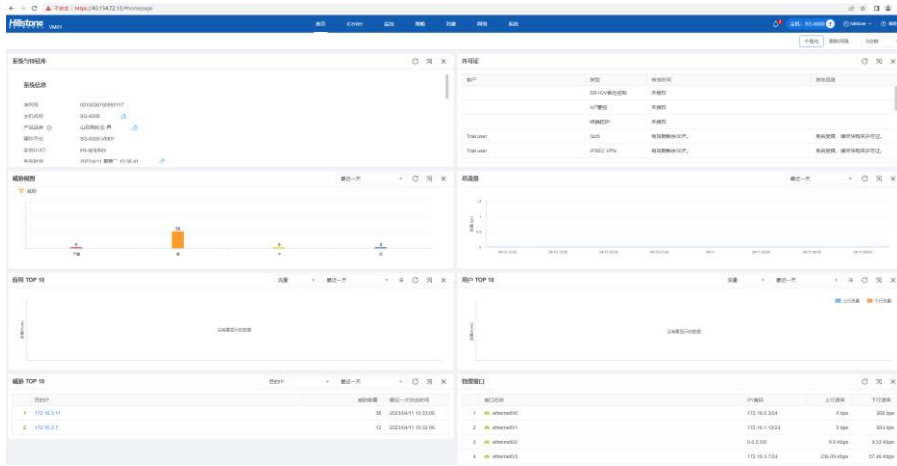
帮助 内网 账单 资源监控 网络日志 更多操作 查看账单

基本信息 弹性网卡 公网IP 监控 安全组 操作日志 执行命令 文件上传

实例网络子网信息

子网ID	名称	所属VPC	备注	操作
ins-ajcp8zs Primary ENI eni-q4ytrhw (1 IP)				
172.16.0.3	主IP	无绑定	-	解绑主IP
ins-ajcp8zs Secondary ENI eni-q4ytrhw (1 IP)				
172.16.0.4	从IP	无绑定	-	解绑从IP
ins-ajcp8zs Tertiary ENI eni-q4ytrhw (1 IP)				
172.16.0.5	从IP	无绑定	-	解绑从IP
ins-ajcp8zs Quaternary ENI eni-q4ytrhw (1 IP)				
172.16.0.6	从IP	无绑定	-	解绑从IP

Web 界面状态



HA 配置验证

配置参考：

https://docs.hillstonenet.com/docs/202303/d_202303201105270327/%E5%B1%B1%E7%9F%B3%E4%BA%91%C2%B7%E7%95%8C%E9%83%A8%E7%BD%B2%E6%89%8B%E5%86%8Cv5.5R10/Default.htm#TencentCloud-HA.htm%3FTocPath%3D____24

主设备版本信息，HA 状态

```
Hillstone Networks StoneOS software, Version 5.5
Copyright (c) 2009-2023 by Hillstone Networks

Product name: SG-6000-UM01 S/N: 0010036195993117 Assembly number: 000
Boot file is SG6000-CloudEdge-5.5R9P6
Storage UUID is 95320d6a-9119-42bd-acf7-850ad58e62fc
Instance UUID is ins-ajclp8zs
Update magic: 00230013013c0202cb
Built by buildmaster8 2023/01/13 20:51:01

Uptime is 0 day 0 hour 33 minutes 9 seconds
System language is "en"

URouter feature: disabled

IPS feature: enabled
IPS magic: e4c4750c1c8f539a2681e9c74a0c6d2160c0

AV feature: enabled
AV magic: 0768596056464f5b99387698b09f2aacb96a

IP reputation feature: enabled
IP reputation magic: 0768596056464f5b99387698b09f2aacb96a

--More--
```

```
SG-6000(M)# show ha group 0
HA Group id=0
state Master
priority 100
preempt N/A
monitor
HA total peer number 1
HA peer information:
device id 0010023814946605
ip 172.16.2.8
state Backup
priority 150
SG-6000(M)#
```

备设备版本信息， HA 状态

```
Hillstone Networks StoneOS software, Version 5.5
Copyright (c) 2009-2023 by Hillstone Networks

Product name: SG-6000-UM01 S/N: 0010023814946605 Assembly number: 0000
Boot file is SG6000-CloudEdge-5.5R9P6
Storage UUID is 95320d6a-9119-42bd-acf7-850ad58e62fc
Instance UUID is ins-3n08q8le
Update magic: 00230013013c0202cb
Built by buildmaster8 2023/01/13 20:51:01

Uptime is 0 day 1 hour 24 minutes 37 seconds
System language is "en"

URouter feature: disabled

IPS feature: enabled
IPS magic: fe16b1320bd0e50d1924ca173a3ea272debd

AV feature: enabled
AV magic: 0232e45a36ed8ddfff8425c5fc34771c7244

IP reputation feature: enabled
IP reputation magic: 0232e45a36ed8ddfff8425c5fc34771c7244

More
```

```

SG-6000(B)(config)# show ha group 0
HA Group id=0
state Backup
priority 150
preempt N/A
monitor
HA total peer number 1
HA peer information:
device id 0010036195993117
ip 172.16.2.6
state Master
priority 100
SG-6000(B)(config)# _

```

GRE 隧道验证

配置参考: <https://kb.hillstonenet.com/cn/gre-vpn-clconfig-case/>

```

SG-6000(M)# show tunnel gre
Total GRE tunnel:1
GRE tunnel name:Hill-1
source interface: NULL
source ip: 172.16.3.7
destination ip: 43.154.159.172
outgoing interface: ethernet0/3
next tunnel: NULL
bind scpu: auto
assign scpu: 0
key check:disable
SG-6000(M)#

```

```

SG-6000(M)# show configuration interface tunnel1

interface tunnel1
zone "UPNHub"
ip address 100.1.1.1 255.255.255.0
tunnel gre "Hill-1" gw 100.1.1.2
exit
SG-6000(M)#

```

```

Routing Table for Virtual Router <trust-vr>
=====
S*> 0.0.0.0/0 [1/0/1] via 172.16.3.1, ethernet0/3
S*> 10.0.0.0/16 [1/0/1] via 100.1.1.2, tunnel1
C*> 100.1.1.0/24 is directly connected, tunnel1
H*> 100.1.1.1/32 [0/0/1] is local address, tunnel1
C*> 172.16.0.0/24 is directly connected, ethernet0/0
H*> 172.16.0.3/32 [0/0/1] is local address, ethernet0/0
C*> 172.16.1.0/24 is directly connected, ethernet0/1
H*> 172.16.1.12/32 [0/0/1] is local address, ethernet0/1
K*> 172.16.2.0/24 is directly connected, ha-interface
K*> 172.16.2.6/32 [0/0/1] is local address, ha-interface
C*> 172.16.3.0/24 is directly connected, ethernet0/3
H*> 172.16.3.7/32 [0/0/1] is local address, ethernet0/3
=====

Routing Table for Virtual Router <mgt-vr>
=====
=====
SG-6000(M)#

```



```
SG-6000(M)(config)# show tunnel gre
SG-6000(M)(config)# show tunnel gre
Total GRE tunnel:1
GRE tunnel name:Hill-2
source interface: NULL
source ip: 10.0.3.6
destination ip: 43.154.72.13
outgoing interface: ethernet0/3
next tunnel: NULL
bind scpu: auto
assign scpu: 0
key check:disable
```

```
SG-6000(M)(config)#
```

```
SG-6000(M)(config)# show configuration interface tunnel1
SG-6000(M)(config)# show configuration interface tunnel1
```

```
interface tunnel1
zone "UPNHub"
ip address 100.1.1.2 255.255.255.0
tunnel gre "Hill-2" gw 100.1.1.1
exit
SG-6000(M)(config)#
```

```
Routing Table for Virtual Router <trust-vr>
=====
S>* 0.0.0.0/0 [1/0/1] via 10.0.3.1, ethernet0/3
C>* 10.0.0.0/24 is directly connected, ethernet0/0
H>* 10.0.0.2/32 [0/0/1] is local address, ethernet0/0
C>* 10.0.1.0/24 is directly connected, ethernet0/1
H>* 10.0.1.11/32 [0/0/1] is local address, ethernet0/1
K>* 10.0.2.0/24 is directly connected, ha-interface
K>* 10.0.2.14/32 is local address, ha-interface
C>* 10.0.3.0/24 is directly connected, ethernet0/3
H>* 10.0.3.6/32 [0/0/1] is local address, ethernet0/3
C>* 100.1.1.0/24 is directly connected, tunnel1
H>* 100.1.1.2/32 [0/0/1] is local address, tunnel1
S>* 172.16.0.0/16 [1/0/1] via 100.1.1.1, tunnel1
=====

Routing Table for Virtual Router <mgt-vr>
=====
=====
SG-6000(M)(config)#
```

两端 PC 互访

```

root@UM-1-15-centos network-scripts]# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.16.1.15 netmask 255.255.255.0 broadcast 172.16.1.255
    inet6 fe80::5054:ff:fed7:bf1f prefixlen 64 scopeid 0x20<link>
    ether 52:54:00:d7:bf:1f txqueuelen 1000 (Ethernet)
    RX packets 19961 bytes 10948097 (10.4 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 14571 bytes 2191524 (2.0 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 90 bytes 7760 (7.5 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 90 bytes 7760 (7.5 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@UM-1-15-centos network-scripts]# ping 10.0.1.12
PING 10.0.1.12 (10.0.1.12) 56(84) bytes of data.
64 bytes from 10.0.1.12: icmp_seq=1 ttl=62 time=2.12 ms
64 bytes from 10.0.1.12: icmp_seq=2 ttl=62 time=1.95 ms
64 bytes from 10.0.1.12: icmp_seq=3 ttl=62 time=2.12 ms
64 bytes from 10.0.1.12: icmp_seq=4 ttl=62 time=2.13 ms
64 bytes from 10.0.1.12: icmp_seq=5 ttl=62 time=2.08 ms
^C
--- 10.0.1.12 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4006ms
rtt min/avg/max/mdev = 1.958/2.083/2.130/0.064 ms
root@UM-1-15-centos network-scripts]# traceroute 10.0.1.12
traceroute to 10.0.1.12 (10.0.1.12), 30 hops max, 60 byte packets
 1 172.16.1.12 (172.16.1.12) 1.060 ms 1.048 ms 1.032 ms
 2 pool-100-1-1-2.nwrknj.fios.verizon.net (100.1.1.2) 3.320 ms 3.310 ms 3.293 ms
 3 10.0.1.12 (10.0.1.12) 3.776 ms 3.771 ms 3.747 ms
root@UM-1-15-centos network-scripts]# _

```

```

root@UM-1-12-centos ~]# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.1.12 netmask 255.255.255.0 broadcast 10.0.1.255
    inet6 fe80::5054:ff:fec3e8c prefixlen 64 scopeid 0x20<link>
    ether 52:54:00:fc:3e:8c txqueuelen 1000 (Ethernet)
    RX packets 66132 bytes 85834059 (81.8 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 15594 bytes 1670642 (1.5 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 7 bytes 808 (808.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 7 bytes 808 (808.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@UM-1-12-centos ~]# ping 172.16.1.15
PING 172.16.1.15 (172.16.1.15) 56(84) bytes of data.
64 bytes from 172.16.1.15: icmp_seq=1 ttl=62 time=1.87 ms
64 bytes from 172.16.1.15: icmp_seq=2 ttl=62 time=1.84 ms
64 bytes from 172.16.1.15: icmp_seq=3 ttl=62 time=1.99 ms
64 bytes from 172.16.1.15: icmp_seq=4 ttl=62 time=1.85 ms
^C
--- 172.16.1.15 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3004ms
rtt min/avg/max/mdev = 1.841/1.890/1.999/0.070 ms
root@UM-1-12-centos ~]# traceroute 172.16.1.15
traceroute to 172.16.1.15 (172.16.1.15), 30 hops max, 60 byte packets
 1 10.0.1.11 (10.0.1.11) 0.329 ms 0.309 ms 0.297 ms
 2 lo0-100.NWRKNJ-UFTTP-316.verizon-gni.net (100.1.1.1) 1.813 ms 1.796 ms 1.793 ms
 3 172.16.1.15 (172.16.1.15) 2.081 ms 2.051 ms *
root@UM-1-12-centos ~]#

```

Iperf 打流验证

iperf3 -c 10.0.1.12 -P 10

```
[ 8] 8.00-9.00 sec 18.7 KBytes 153 Kbits/sec 8 4.01 KBytes
[10] 8.00-9.00 sec 0.00 Bytes 0.00 bits/sec 4 1.34 KBytes
[12] 8.00-9.00 sec 0.00 Bytes 0.00 bits/sec 2 1.34 KBytes
[14] 8.00-9.00 sec 0.00 Bytes 0.00 bits/sec 10 2.67 KBytes
[16] 8.00-9.00 sec 18.7 KBytes 153 Kbits/sec 12 1.34 KBytes
[18] 8.00-9.00 sec 21.4 KBytes 175 Kbits/sec 6 1.34 KBytes
[20] 8.00-9.00 sec 16.0 KBytes 131 Kbits/sec 8 1.34 KBytes
[22] 8.00-9.00 sec 9.35 KBytes 76.6 Kbits/sec 12 4.01 KBytes
[SUM] 8.00-9.00 sec 103 KBytes 843 Kbits/sec 77

[ 4] 9.00-10.00 sec 21.4 KBytes 175 Kbits/sec 13 4.01 KBytes
[ 6] 9.00-10.00 sec 0.00 Bytes 0.00 bits/sec 1 1.34 KBytes
[ 8] 9.00-10.00 sec 0.00 Bytes 0.00 bits/sec 2 1.34 KBytes
[10] 9.00-10.00 sec 38.7 KBytes 317 Kbits/sec 11 2.67 KBytes
[12] 9.00-10.00 sec 44.1 KBytes 361 Kbits/sec 8 1.34 KBytes
[14] 9.00-10.00 sec 20.0 KBytes 164 Kbits/sec 5 1.34 KBytes
[16] 9.00-10.00 sec 0.00 Bytes 0.00 bits/sec 1 1.34 KBytes
[18] 9.00-10.00 sec 0.00 Bytes 0.00 bits/sec 5 1.34 KBytes
[20] 9.00-10.00 sec 0.00 Bytes 0.00 bits/sec 1 1.34 KBytes
[22] 9.00-10.00 sec 9.35 KBytes 76.6 Kbits/sec 8 2.67 KBytes
[SUM] 9.00-10.00 sec 134 KBytes 1.09 Mbits/sec 55

[ ID] Interval Transfer Bandwidth Retr
[ 4] 0.00-10.00 sec 200 KBytes 164 Kbits/sec 98 sender
[ 4] 0.00-10.00 sec 155 KBytes 127 Kbits/sec receiver
[ 6] 0.00-10.00 sec 186 KBytes 152 Kbits/sec 89 sender
[ 6] 0.00-10.00 sec 150 KBytes 123 Kbits/sec receiver
[ 8] 0.00-10.00 sec 167 KBytes 137 Kbits/sec 96 sender
[ 8] 0.00-10.00 sec 128 KBytes 105 Kbits/sec receiver
[10] 0.00-10.00 sec 202 KBytes 165 Kbits/sec 92 sender
[10] 0.00-10.00 sec 150 KBytes 123 Kbits/sec receiver
[12] 0.00-10.00 sec 186 KBytes 152 Kbits/sec 90 sender
[12] 0.00-10.00 sec 132 KBytes 108 Kbits/sec receiver
[14] 0.00-10.00 sec 184 KBytes 151 Kbits/sec 83 sender
[14] 0.00-10.00 sec 140 KBytes 115 Kbits/sec receiver
[16] 0.00-10.00 sec 151 KBytes 124 Kbits/sec 96 sender
[16] 0.00-10.00 sec 106 KBytes 86.5 Kbits/sec receiver
[18] 0.00-10.00 sec 184 KBytes 151 Kbits/sec 96 sender
[18] 0.00-10.00 sec 148 KBytes 121 Kbits/sec receiver
[20] 0.00-10.00 sec 159 KBytes 130 Kbits/sec 84 sender
[20] 0.00-10.00 sec 119 KBytes 97.4 Kbits/sec receiver
[22] 0.00-10.00 sec 94.9 KBytes 77.7 Kbits/sec 67 sender
[22] 0.00-10.00 sec 76.1 KBytes 62.4 Kbits/sec receiver
[SUM] 0.00-10.00 sec 1.67 MBytes 1.40 Mbits/sec 891 sender
[SUM] 0.00-10.00 sec 1.27 MBytes 1.07 Mbits/sec receiver

iperf Done.
[root@UM-1-15-centos ~]#
```

```

[ 11]  9.00-10.00  sec  24.0 KBytes  197 Kbits/sec
[ 13]  9.00-10.00  sec  32.1 KBytes  263 Kbits/sec
[ 15]  9.00-10.00  sec  12.0 KBytes  98.5 Kbits/sec
[ 17]  9.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[ 19]  9.00-10.00  sec  13.4 KBytes  109 Kbits/sec
[ 21]  9.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[ 23]  9.00-10.00  sec  10.7 KBytes  87.6 Kbits/sec
[SUM]  9.00-10.00  sec   122 KBytes  996 Kbits/sec
-----
[  5] 10.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[  7] 10.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[  9] 10.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[ 11] 10.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[ 13] 10.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[ 15] 10.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[ 17] 10.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[ 19] 10.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[ 21] 10.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[ 23] 10.00-10.00  sec   0.00 Bytes  0.00 bits/sec
[SUM] 10.00-10.00  sec   0.00 Bytes  0.00 bits/sec
-----
[ ID] Interval            Transfer      Bandwidth
[  5]  0.00-10.00  sec   0.00 Bytes  0.00 bits/sec      sender
[  5]  0.00-10.00  sec  155 KBytes  127 Kbits/sec      receiver
[  7]  0.00-10.00  sec   0.00 Bytes  0.00 bits/sec      sender
[  7]  0.00-10.00  sec  150 KBytes  123 Kbits/sec      receiver
[  9]  0.00-10.00  sec   0.00 Bytes  0.00 bits/sec      sender
[  9]  0.00-10.00  sec  128 KBytes  105 Kbits/sec      receiver
[ 11]  0.00-10.00  sec   0.00 Bytes  0.00 bits/sec      sender
[ 11]  0.00-10.00  sec  150 KBytes  123 Kbits/sec      receiver
[ 13]  0.00-10.00  sec   0.00 Bytes  0.00 bits/sec      sender
[ 13]  0.00-10.00  sec  132 KBytes  108 Kbits/sec      receiver
[ 15]  0.00-10.00  sec   0.00 Bytes  0.00 bits/sec      sender
[ 15]  0.00-10.00  sec  140 KBytes  115 Kbits/sec      receiver
[ 17]  0.00-10.00  sec   0.00 Bytes  0.00 bits/sec      sender
[ 17]  0.00-10.00  sec  106 KBytes  86.4 Kbits/sec     receiver
[ 19]  0.00-10.00  sec   0.00 Bytes  0.00 bits/sec      sender
[ 19]  0.00-10.00  sec  148 KBytes  121 Kbits/sec     receiver
[ 21]  0.00-10.00  sec   0.00 Bytes  0.00 bits/sec      sender
[ 21]  0.00-10.00  sec  119 KBytes  97.4 Kbits/sec     receiver
[ 23]  0.00-10.00  sec   0.00 Bytes  0.00 bits/sec      sender
[ 23]  0.00-10.00  sec  76.1 KBytes  62.4 Kbits/sec     receiver
[SUM]  0.00-10.00  sec   0.00 Bytes  0.00 bits/sec      sender
[SUM]  0.00-10.00  sec  1.27 MBytes  1.07 Mbits/sec     receiver
-----
Server listening on 5201
-----

```

iperf3 -u -c 10.0.1.12 -P 10 -b 200M

```

[ 61] 8.00-9.00 sec 23.7 MBytes 199 Mbits/sec 18183
[ 81] 8.00-9.00 sec 23.7 MBytes 199 Mbits/sec 18183
[ 101] 8.00-9.00 sec 23.7 MBytes 199 Mbits/sec 18183
[ 121] 8.00-9.00 sec 23.7 MBytes 199 Mbits/sec 18183
[ 141] 8.00-9.00 sec 23.7 MBytes 199 Mbits/sec 18183
[ 161] 8.00-9.00 sec 23.7 MBytes 199 Mbits/sec 18183
[ 181] 8.00-9.00 sec 23.7 MBytes 199 Mbits/sec 18183
[ 201] 8.00-9.00 sec 23.7 MBytes 199 Mbits/sec 18183
[ 221] 8.00-9.00 sec 23.7 MBytes 199 Mbits/sec 18183
[SUM] 8.00-9.00 sec 237 MBytes 1.99 Gbits/sec 181830

```

```

[ 41] 9.00-10.00 sec 23.7 MBytes 198 Mbits/sec 18133
[ 61] 9.00-10.00 sec 23.7 MBytes 198 Mbits/sec 18133
[ 81] 9.00-10.00 sec 23.7 MBytes 198 Mbits/sec 18133
[ 101] 9.00-10.00 sec 23.7 MBytes 198 Mbits/sec 18133
[ 121] 9.00-10.00 sec 23.7 MBytes 198 Mbits/sec 18133
[ 141] 9.00-10.00 sec 23.7 MBytes 198 Mbits/sec 18133
[ 161] 9.00-10.00 sec 23.7 MBytes 198 Mbits/sec 18133
[ 181] 9.00-10.00 sec 23.7 MBytes 198 Mbits/sec 18133
[ 201] 9.00-10.00 sec 23.7 MBytes 198 Mbits/sec 18133
[ 221] 9.00-10.00 sec 23.7 MBytes 198 Mbits/sec 18133
[SUM] 9.00-10.00 sec 237 MBytes 1.98 Gbits/sec 181330

```

```

[ ID] Interval          Transfer          Bandwidth          Jitter          Lost/Total Datagrams
[ 41] 0.00-10.00 sec 238 MBytes 200 Mbits/sec 16.365 ms 179717/179805 (1e+02%)
[ 41] Sent 179805 datagrams
[ 61] 0.00-10.00 sec 238 MBytes 200 Mbits/sec 21.677 ms 181222/181328 (1e+02%)
[ 61] Sent 181328 datagrams
[ 81] 0.00-10.00 sec 238 MBytes 200 Mbits/sec 17.723 ms 178333/178431 (1e+02%)
[ 81] Sent 178431 datagrams
[ 101] 0.00-10.00 sec 238 MBytes 200 Mbits/sec 24.363 ms 177192/177278 (1e+02%)
[ 101] Sent 177278 datagrams
[ 121] 0.00-10.00 sec 238 MBytes 200 Mbits/sec 24.609 ms 181554/181656 (1e+02%)
[ 121] Sent 181656 datagrams
[ 141] 0.00-10.00 sec 238 MBytes 200 Mbits/sec 29.349 ms 180623/180723 (1e+02%)
[ 141] Sent 180723 datagrams
[ 161] 0.00-10.00 sec 238 MBytes 200 Mbits/sec 21.663 ms 181804/181916 (1e+02%)
[ 161] Sent 181916 datagrams
[ 181] 0.00-10.00 sec 238 MBytes 200 Mbits/sec 14.118 ms 182069/182172 (1e+02%)
[ 181] Sent 182172 datagrams
[ 201] 0.00-10.00 sec 238 MBytes 200 Mbits/sec 19.704 ms 179514/179625 (1e+02%)
[ 201] Sent 179625 datagrams
[ 221] 0.00-10.00 sec 238 MBytes 200 Mbits/sec 24.433 ms 179647/179759 (1e+02%)
[ 221] Sent 179759 datagrams
[SUM] 0.00-10.00 sec 2.32 GBytes 2.00 Gbits/sec 21.400 ms 1801675/1802693 (1e+02%)

```

```

iperf Done.
[root@UM-1-15-centos ~]#

```

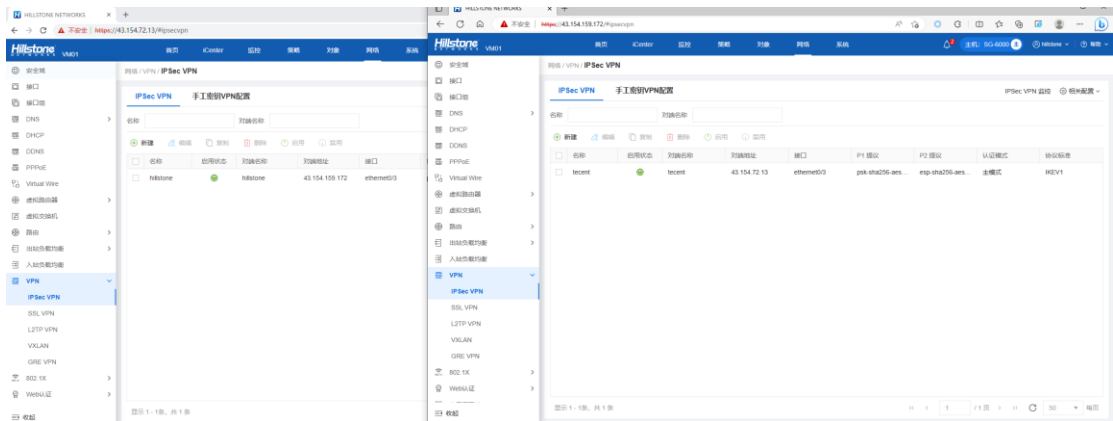
```

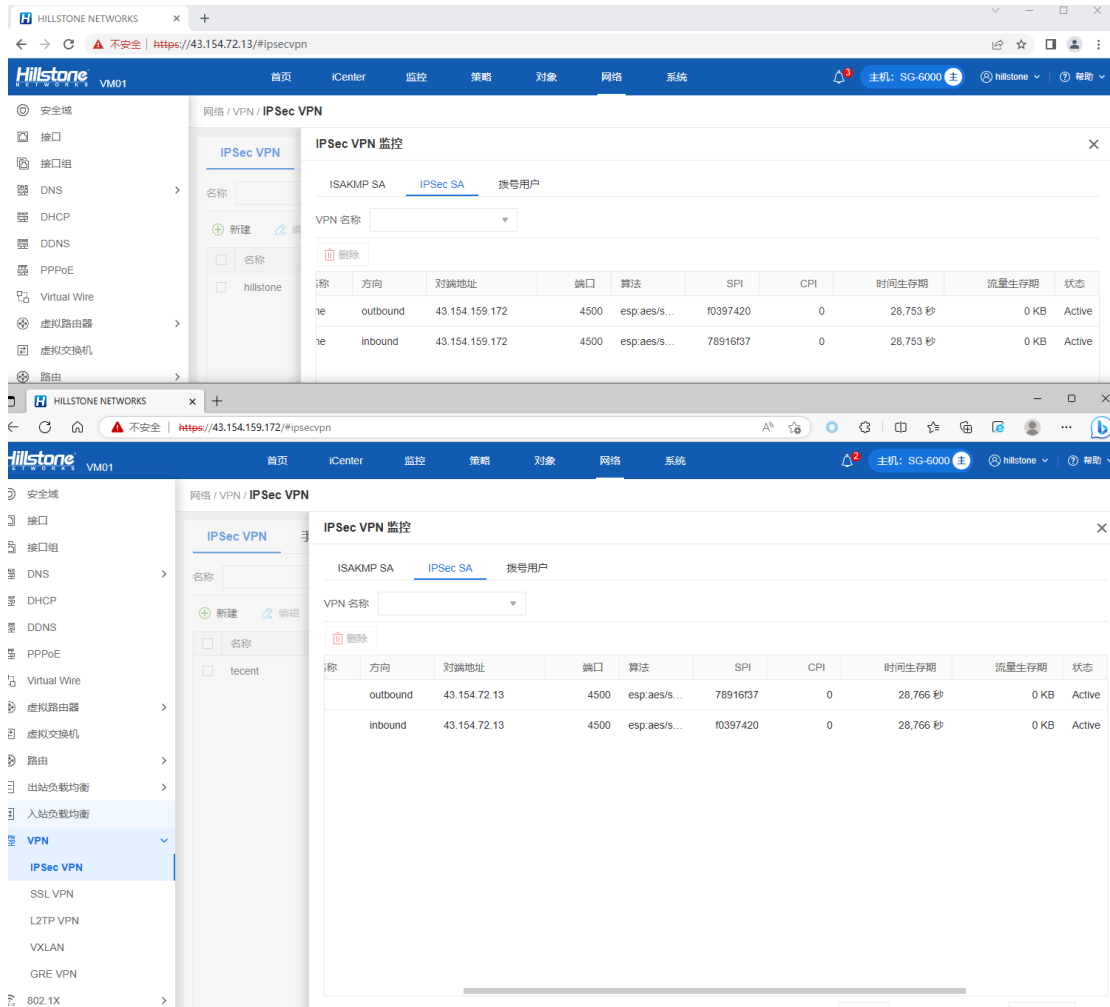
[ 12] 8.00-9.00 sec 12.0 KBytes 98.5 Kbits/sec 21.258 ms 19597/19606 (1e+02%)
[ 14] 8.00-9.00 sec 9.35 KBytes 76.6 Kbits/sec 27.711 ms 16094/16101 (1e+02%)
[ 16] 8.00-9.00 sec 9.35 KBytes 76.6 Kbits/sec 22.714 ms 20426/20433 (1e+02%)
[ 18] 8.00-9.00 sec 16.0 KBytes 131 Kbits/sec 13.882 ms 20169/20181 (1e+02%)
[ 20] 8.00-9.00 sec 13.4 KBytes 109 Kbits/sec 24.982 ms 16027/16037 (1e+02%)
[ 22] 8.00-9.00 sec 16.0 KBytes 131 Kbits/sec 16.073 ms 24253/24265 (1e+02%)
[SUM] 8.00-9.00 sec 123 KBytes 1.01 Mbits/sec 20.040 ms 193864/193956 (1e+02%)
-----
[ 5] 9.00-10.00 sec 9.35 KBytes 76.6 Kbits/sec 15.858 ms 20022/20029 (1e+02%)
[ 6] 9.00-10.00 sec 13.4 KBytes 109 Kbits/sec 22.091 ms 17882/17892 (1e+02%)
[ 8] 9.00-10.00 sec 10.7 KBytes 87.6 Kbits/sec 17.723 ms 18860/18868 (1e+02%)
[ 10] 9.00-10.00 sec 14.7 KBytes 120 Kbits/sec 24.363 ms 16902/16913 (1e+02%)
[ 12] 9.00-10.00 sec 9.35 KBytes 76.6 Kbits/sec 25.216 ms 11511/11518 (1e+02%)
[ 14] 9.00-10.00 sec 14.7 KBytes 120 Kbits/sec 26.700 ms 21144/21155 (1e+02%)
[ 16] 9.00-10.00 sec 16.0 KBytes 131 Kbits/sec 24.581 ms 17963/17975 (1e+02%)
[ 18] 9.00-10.00 sec 4.01 KBytes 32.8 Kbits/sec 11.595 ms 17978/17981 (1e+02%)
[ 20] 9.00-10.00 sec 16.0 KBytes 131 Kbits/sec 17.567 ms 18872/18884 (1e+02%)
[ 22] 9.00-10.00 sec 13.4 KBytes 109 Kbits/sec 22.679 ms 19068/19078 (1e+02%)
[SUM] 9.00-10.00 sec 122 KBytes 996 Kbits/sec 20.837 ms 180202/180293 (1e+02%)
-----
[ 5] 10.00-10.23 sec 1.34 KBytes 48.7 Kbits/sec 16.365 ms 3669/3670 (1e+02%)
[ 6] 10.00-10.23 sec 4.01 KBytes 146 Kbits/sec 21.677 ms 5011/5014 (1e+02%)
[ 8] 10.00-10.23 sec 0.00 Bytes 0.00 bits/sec 17.723 ms 0/0 (0%)
[ 10] 10.00-10.23 sec 0.00 Bytes 0.00 bits/sec 24.363 ms 0/0 (0%)
[ 12] 10.00-10.23 sec 1.34 KBytes 48.7 Kbits/sec 24.609 ms 9097/9098 (1e+02%)
[ 14] 10.00-10.23 sec 1.34 KBytes 48.7 Kbits/sec 29.349 ms 1190/1191 (1e+02%)
[ 16] 10.00-10.23 sec 2.67 KBytes 97.3 Kbits/sec 21.663 ms 3220/3222 (1e+02%)
[ 18] 10.00-10.23 sec 6.68 KBytes 243 Kbits/sec 14.118 ms 2896/2901 (1e+02%)
[ 20] 10.00-10.23 sec 1.34 KBytes 48.7 Kbits/sec 19.704 ms 1514/1515 (1e+02%)
[ 22] 10.00-10.23 sec 1.34 KBytes 48.7 Kbits/sec 24.433 ms 271/272 (1e+02%)
[SUM] 10.00-10.23 sec 20.0 KBytes 730 Kbits/sec 21.400 ms 26868/26883 (1e+02%)
-----
[ ID] Interval Transfer Bandwidth Jitter Lost/Total Datagrams
[ 5] 0.00-10.23 sec 0.00 Bytes 0.00 bits/sec 16.365 ms 179717/179805 (1e+02%)
[ 6] 0.00-10.23 sec 0.00 Bytes 0.00 bits/sec 21.677 ms 181222/181328 (1e+02%)
[ 8] 0.00-10.23 sec 0.00 Bytes 0.00 bits/sec 17.723 ms 178333/178431 (1e+02%)
[ 10] 0.00-10.23 sec 0.00 Bytes 0.00 bits/sec 24.363 ms 177192/177278 (1e+02%)
[ 12] 0.00-10.23 sec 0.00 Bytes 0.00 bits/sec 24.609 ms 181554/181656 (1e+02%)
[ 14] 0.00-10.23 sec 0.00 Bytes 0.00 bits/sec 29.349 ms 180623/180723 (1e+02%)
[ 16] 0.00-10.23 sec 0.00 Bytes 0.00 bits/sec 21.663 ms 181804/181916 (1e+02%)
[ 18] 0.00-10.23 sec 0.00 Bytes 0.00 bits/sec 14.118 ms 182069/182172 (1e+02%)
[ 20] 0.00-10.23 sec 0.00 Bytes 0.00 bits/sec 19.704 ms 179514/179625 (1e+02%)
[ 22] 0.00-10.23 sec 0.00 Bytes 0.00 bits/sec 24.433 ms 179647/179759 (1e+02%)
[SUM] 0.00-10.23 sec 0.00 Bytes 0.00 bits/sec 21.400 ms 1801675/1802693 (1e+02%)
-----
Server listening on 5201
-----

```

IPSec VPN 验证

配置参考: <https://kb.hillstonenet.com/cn/ipsecvpn-configuration-collection/>





测试数据连通性

```

=====
Interface name      IP address/mask    Zone name          H A L P MAC address
Description
-----
loopback1           22.22.22.22/32    trust              U U U U -----
vswitchif1          0.0.0.0/0         NULL               D U D D 001c.5414.ff13
-----
ethernet0/0         10.0.0.2/24       mgmt               U U U U 5254.0009.b54a
-----
ethernet0/1         10.0.1.11/24      trust              U U U U 2090.6f81.6256
-----
ethernet0/2         0.0.0.0/0         HA                 U U U D 2090.6f6f.75af
-----
ethernet0/3         10.0.3.6/24       untrust            U U U U 2090.6fb7.b1f8
-----
tunnel1             100.1.1.2/24      UPNHub             U U U U 001c.5414.ff42
-----
tunnel2             0.0.0.0/0         UPNHub             U U U D 001c.5414.ff43
-----
=====
SG-6000(M)#

```

```
SG-6000(M)# ping 11.11.11.11 source loopback1
Sending ICMP packets to 11.11.11.11
From loopback1
  Seq    ttl    time(ms)
  1      128    1.74
  2      128    1.62
  3      128    1.76
  4      128    1.70
  5      128    1.64

statistics:
5 packets sent, 5 received, 0% packet loss, time 4004ms
rtt min/avg/max/mdev = 1.627/1.696/1.761/0.065 ms
SG-6000(M)#
```

```
=====
Interface name      IP address/mask    Zone name          H A L P MAC address
Description
-----
loopback1           11.11.11.11/32    trust              U U U U -----
vswitchif1          0.0.0.0/0         NULL               D U D D 001c.54d7.8613
ethernet0/0         172.16.0.3/24     mgmt               U U U U 5254.009e.144a
ethernet0/1         172.16.1.12/24    trust              U U U U 2090.6f7d.7732
ethernet0/2         0.0.0.0/0         HA                 U U U D 2090.6faa.72b9
ethernet0/3         172.16.3.7/24     untrust            U U U U 2090.6f21.6db8
tunnel1             100.1.1.1/24      VPNHub             U U U U 001c.54d7.8642
tunnel2             0.0.0.0/0         VPNHub             U U U D 001c.54d7.8643
=====
SG-6000(M)#
```

```
SG-6000(M)# ping 22.22.22.22 source 10
SG-6000(M)# ping 22.22.22.22 source loopback1
Sending ICMP packets to 22.22.22.22
From loopback1
  Seq    ttl    time(ms)
  1      128    1.78
  2      128    1.68
  3      128    1.67
  4      128    1.72
  5      128    1.73

statistics:
5 packets sent, 5 received, 0% packet loss, time 4005ms
rtt min/avg/max/mdev = 1.677/1.721/1.782/0.058 ms
SG-6000(M)#
```


IPS 功能验证

The image shows two screenshots of the Hillstone network management interface. The top screenshot displays the '策略配置' (Policy Configuration) page for a policy named '策略 / 安全策略 / 策略'. The '防护状态' (Protection Status) section shows '入侵防御' (Intrusion Prevention) is enabled with a dropdown menu set to 'ips'. The bottom screenshot shows the '对象 / 入侵防御 / 模板' (Object / Intrusion Prevention / Template) page, listing various predefined templates. The 'ips' template is highlighted with a red box.

策略配置

服务: Any (最大选中数为1,024)

应用: (最大选中数为1,024)

动作: 允许 | 拒绝 | 安全连接

启用Web重定向:

防护状态

病毒过滤:

入侵防御: ips

僵尸网络防御:

URL过滤:

沙箱防护:

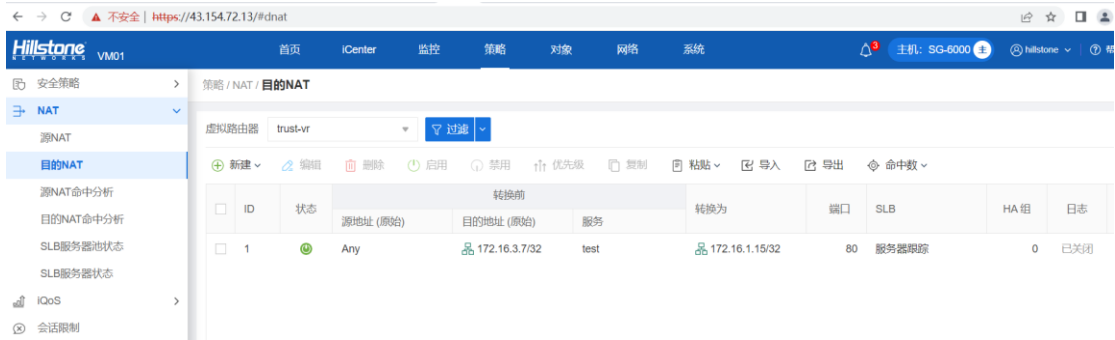
数据安全

选项

对象 / 入侵防御 / 模板

名称	类型	策略ID	描述
no-ips	预定义		不进行入侵防御检测。
predef_default	预定义		通用严格模板。配置了可信度为中和高的攻击检测，对威胁进行检测并执行规则默认动作。适...
predef_loose	预定义		通用宽松模板。配置了所有类型的攻击检测，对威胁进行检测和记录。适用于常规部署场景。
DMZ-server	预定义		针对DMZ服务器的模板。配置了除TFTP和NETBIOS协议之外的所有攻击检测，对威胁进行检测。
web-server	预定义		针对Web服务器的模板。配置了所有Web攻击类检测，同时开启了对SQL注入和XSS注入的通用...
Windows-server	预定义		针对Windows操作系统服务器的模板。配置了针对Windows系统攻击的检测规则，对威胁进行检...
General-server	预定义		针对常规类服务器的模板。配置了针对漏洞扫描、拒绝服务攻击和后门木马类的攻击检测规则，...
Unix-like-server	预定义		针对类Unix系统服务器的模板。配置了针对Linux、Solaris系统攻击的检测规则，对威胁进行检...
predef_critical	预定义		通用超严格模板，配置了最新时段高危类型的攻击检测，对威胁进行检测和记录。适用于常规或...
ips	自定义	1	

配置 DNAT 映射表：外网访问内网服务器 80 端口



验证 sql 注入攻击

