Catalyst 9K平台上的GuestShell故障排除

目录

简介

本文档介绍如何对Cat9K交换机上的访客外壳问题进行故障排除。

先决条件

要求

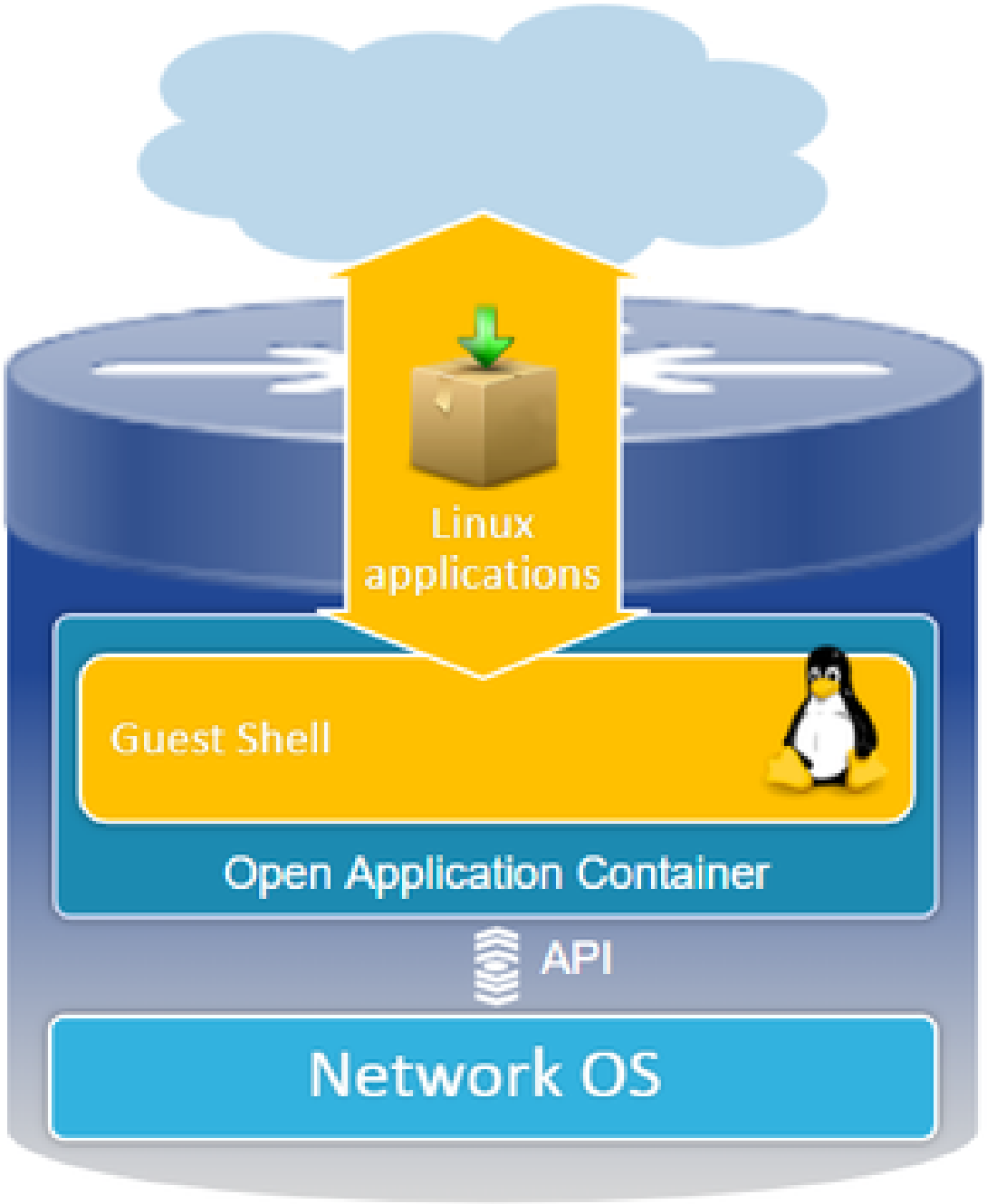
- 基本了解Cisco IOS® XE软件
- Linux文件系统
- Linux命令

使用的组件

本文档中的信息基于以下软件和硬件版本：

- Catalyst 9200
- Catalyst 9300

- Catalyst 9400
- Catalyst 9500
- Catalyst 9600
- Cisco IOS XE 17.9.1及更高版本



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。如果您的网络处于活动状态，请确保您了解所有命令的潜在影响。

背景信息

Guest Shell概述

- Guest Shell提供在Linux容器(LXC)内运行的隔离执行环境。
- 网络接入:管理员可以通过Linux网络接口连接到网络，从而实现强大的连接和管理。
- Bootflash访问：可以直接访问Bootflash存储，有助于高效的文件管理和系统操作。
- Cisco IOS CLI访问：管理员能够直接与Cisco IOS命令行界面交互，从而实现无缝集成和控制。
- 脚本执行：该环境支持安装和执行Python脚本，从而实现自动化和自定义。
- 应用支持：32位和64位Linux应用程序均可安装和运行，提供灵活性和各种功能可能性。

故障排除

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配置

1.启用IOX。

<#root>

```
Switch#
conf terminal
Switch(config)#
iox

Switch(config)#
```

等待1-5分钟，使IOX初始化。确保IOX正常运行。您可以检查CLI会话期间显示的消息，也可以查看show命令的输出。

<#root>

```
*Mar 10 15:35:40.206: %UICFGEXP-6-SERVER_NOTIFIED_START: Switch 1 R0/0: psd: Server iox has been notifi
*Mar 10 15:35:51.186: %IOX-3-PD_PARTITION_CREATE: Switch 1 R0/0: run_ioxn_caf: IOX may take upto 5 mins
*Mar 10 15:37:56.643: %IOX-3-IOX_RESTARTABITLITY: Switch 1 R0/0: run_ioxn_caf: Stack is in N+1 mode, di
*Mar 10 15:38:05.835: %IM-6-IOX_ENABLEMENT: Switch 1 R0/0: ioxman: IOX is ready

.
Switch#show iox-service

IOx Infrastructure Summary:
---------------------------
IOx service (CAF)              :
Running
IOx service (HA)               :
Running
```

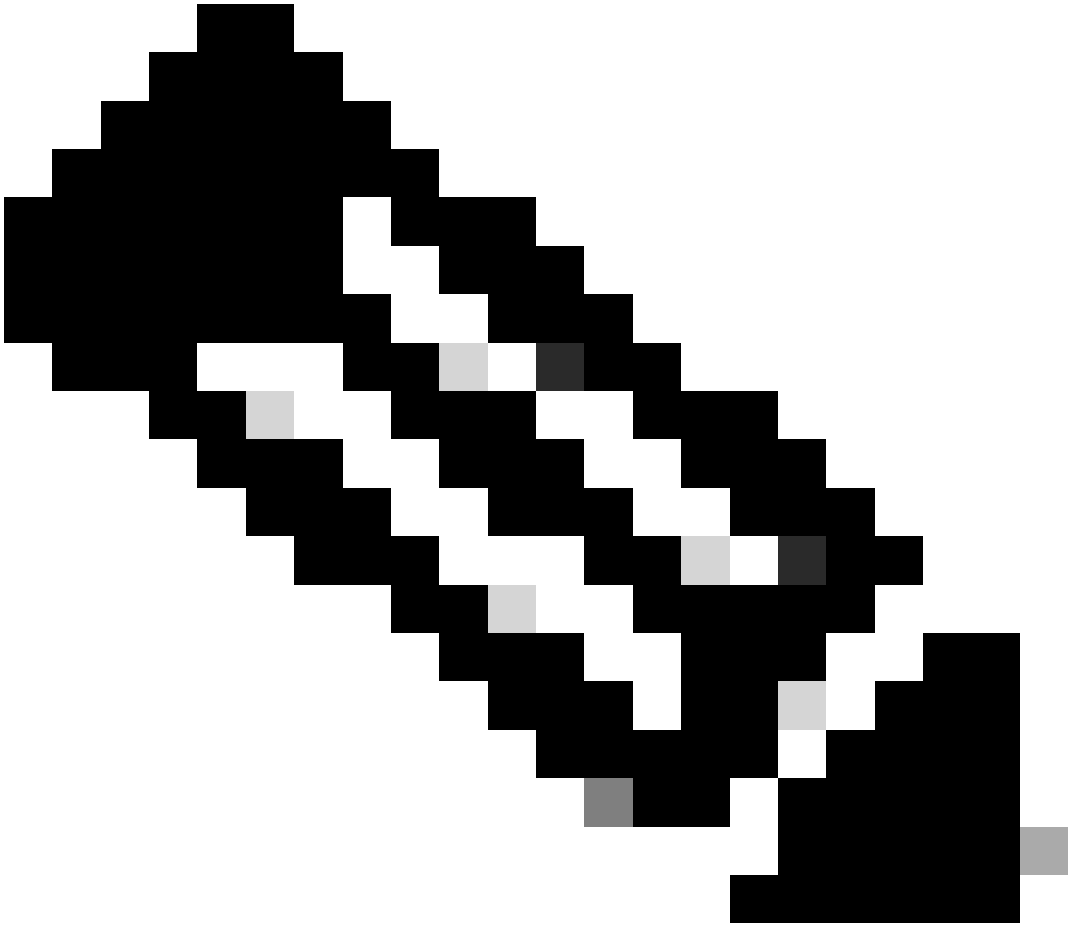
```
IOx service (IOxman)           :
Running

IOx service (Sec storage)      :
Running

Libvirtd 5.5.0                 :
Running

Dockerd v19.03.13-ce           :
Running

Sync Status                    : Disabled
```

2.网络配置。

本示例使用AppGigabitEthernet接口提供网络访问。

<#root>

```
!
interface AppGigabitEthernet1/0/1
 switchport trunk allowed vlan 50
 switchport mode trunk
!
app-hosting appid guestshell
 app-vnic AppGigabitEthernet trunk
  vlan 50 guest-interface 0
guest-ipaddress 192.168.10.10 netmask 255.255.255.0
 name-server0 192.168.10.254
end
!
```

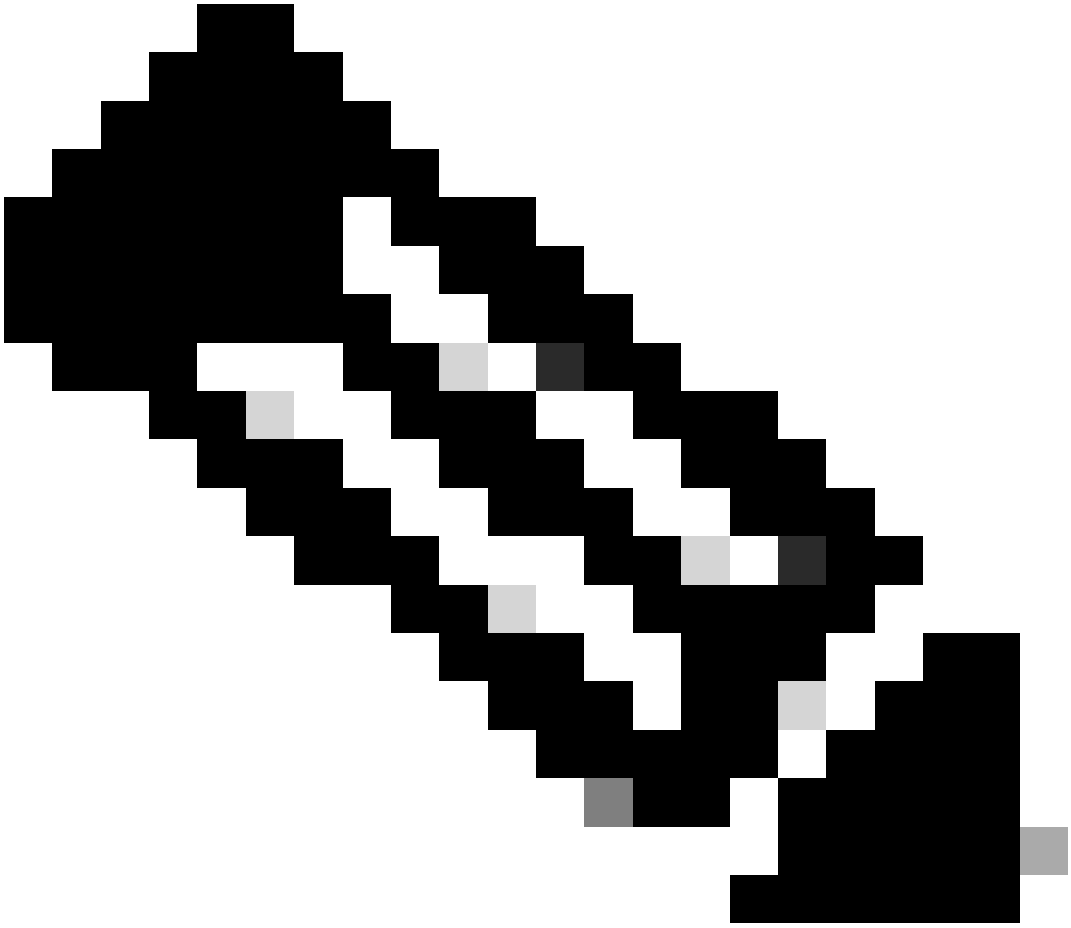


注意：GuestShell使用静态IP地址，因为默认情况下它不包括DHCP客户端服务。您可以安装DHCP客户端服务以动态获取IP地址。

本示例使用管理接口(Gi0/0)提供网络访问。在管理模式中，Guestshell使用网络管理端口将Cisco IOS配置的管理端口IP地址用作网关。

<#root>

```
!
app-hosting appid guestshell


app-vnic management guest-interface 0

 name-server0 8.8.8.8
!
```



注意：使用管理接口时，Guestshell eth0接口的默认配置硬编码为IP地址192.168.30.2。

您可以配置虚拟端口组接口：

- 虚拟端口组配置：使用静态IP地址建立虚拟端口组。
- Internet 连接:确保前端口接口连接到Internet以允许外部访问。
- NAT 配置:在虚拟端口组和前端口之间设置NAT，以促进网络地址转换。
- GuestShell IP分配：将IP地址分配给与虚拟端口组接口位于同一子网内的GuestShell。

```
!
interface VirtualPortGroup0
 ip address 192.168.35.1 255.255.255.0
 ip nat inside
!
interface GigabitEthernet1/0/3
 no switchport
 ip address 192.168.100.10 255.255.255.0
 ip nat outside
!
```

```
ip route 0.0.0.0 0.0.0.0 192.168.100.254
ip route vrf Mgmt-vrf 0.0.0.0 0.0.0.0 192.168.10.254
ip nat inside source static tcp 192.168.35.2 7023 192.168.100.10 7023 extendable
!
!
ip access-list standard NAT_ACL
 10 permit 192.168.0.0 0.0.255.255
!
app-hosting appid guestshell
 app-vnic gateway1 virtualportgroup 0 guest-interface 0
  guest-ipaddress 192.168.35.2 netmask 255.255.255.0
 app-default-gateway 192.168.35.1 guest-interface 0
 name-server0 8.8.8.8
end
```

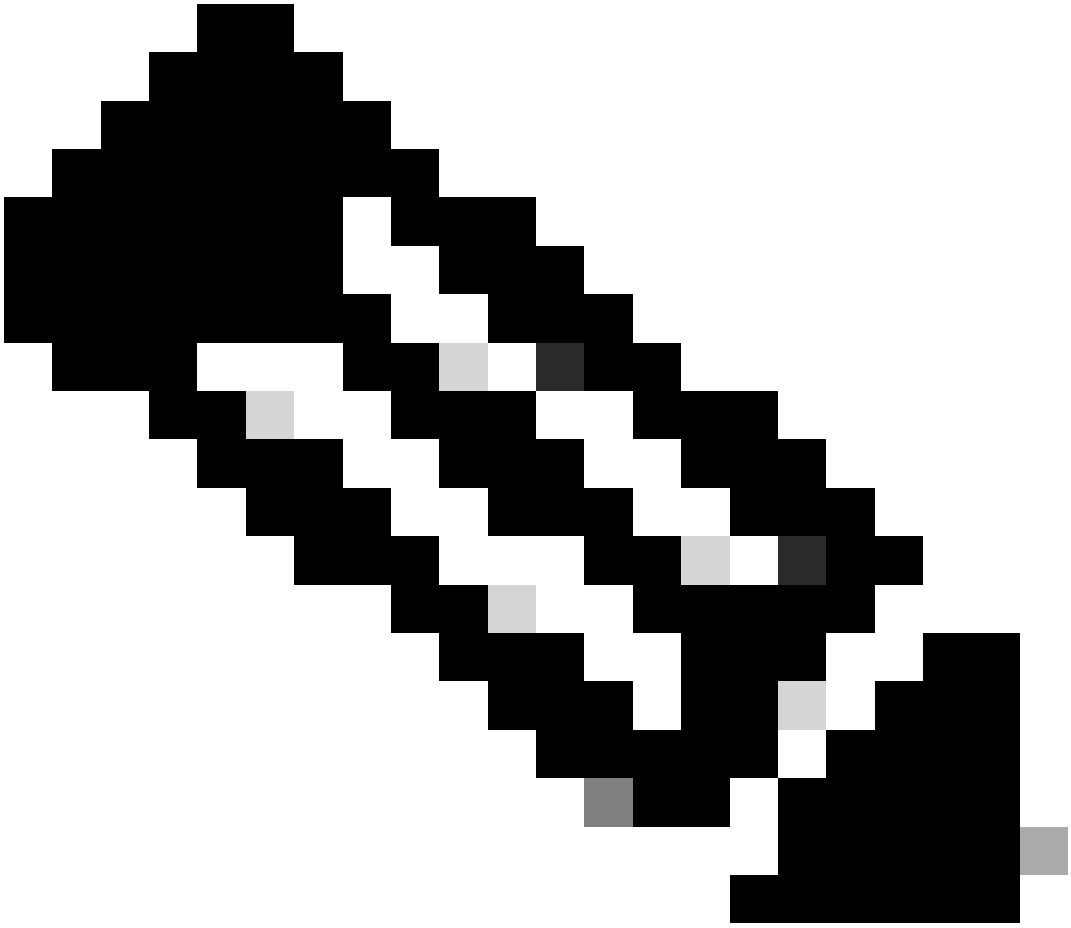
3.启用guestshell。

<#root>

```
Switch#
```

guestshell enable

```
Interface will be selected if configured in app-hosting
Please wait for completion
guestshell installed successfully
Current state is: DEPLOYED
guestshell activated successfully
Current state is: ACTIVATED
guestshell started successfully
Current state is: RUNNING
Guestshell enabled successfully
```



注意：guestshell enable命令是安装guestshell的唯一方法。使用应用托管CLI激活/连接/停用可用于控制guestshell。建议您改用guestshell exec CLI。

Guestshell生命周期

Guestshell disable:Disable guesthell会删除对guestshell的访问并终止当前会话。保留文件/数据，您可以使用guestshell enable恢复访问。

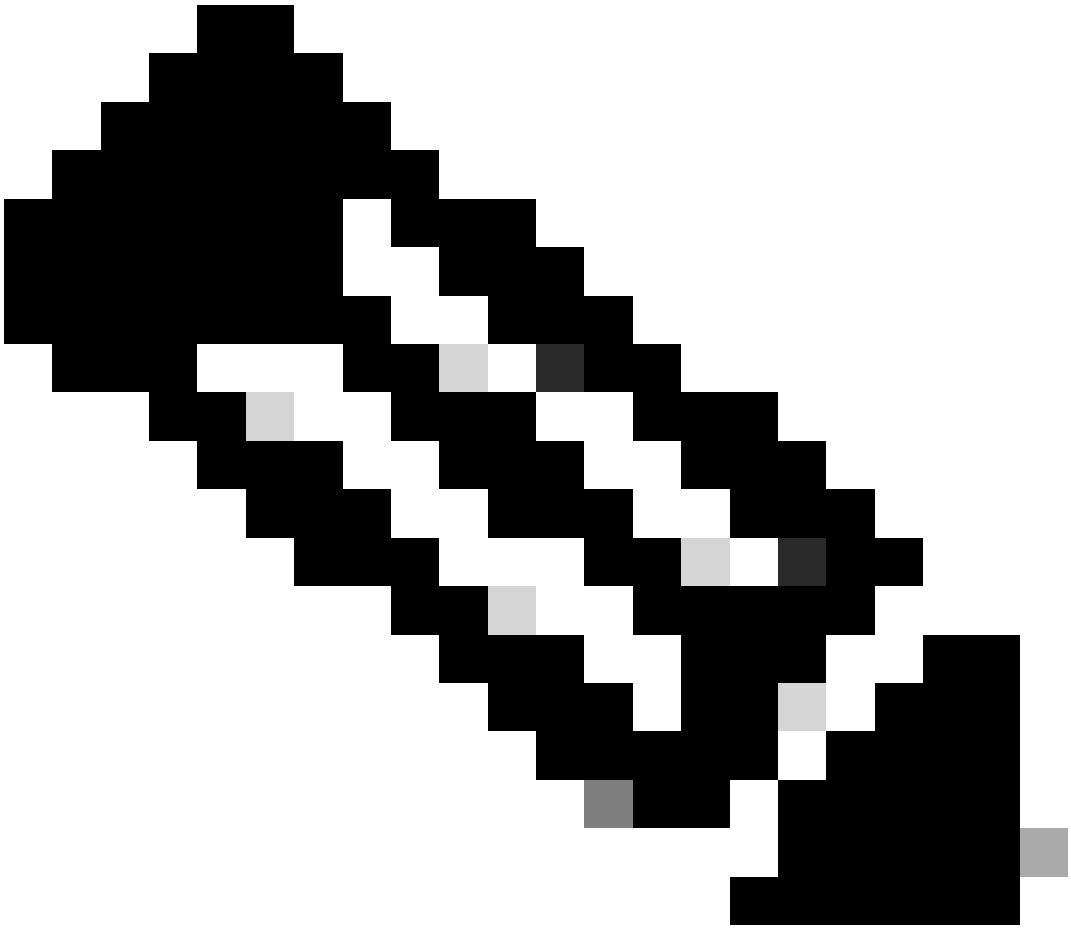
```
<#root>

Switch#

guestshell disable

Guestshell disabled successfully
```

Guestshell destroy:这将以不可逆的方式删除访客shell文件系统。所有文件/数据/脚本/设置外壳/已

安装的软件包和模块。

<#root>

```
Switch#
guestshell destroy

Guestshell destroyed successfully
```



注意：运行此命令时，所有数据都会不可逆地丢失。

Guestshell运行：Guestshell运行命令guestshell run bash在Guest Shell中创建一个shell，允许您在/bin和/sbin下使用任何Linux二进制文件。

<#root>

```
Switch#
```

guestshell run bash

```
[guestshell@guestshell ~]$ ping 192.168.10.1
PING 192.168.10.1 (192.168.10.1) 56(84) bytes of data.
64 bytes from 192.168.10.1: icmp_seq=2 ttl=254 time=0.517 ms
64 bytes from 192.168.10.1: icmp_seq=3 ttl=254 time=0.552 ms
64 bytes from 192.168.10.1: icmp_seq=4 ttl=254 time=0.447 ms
64 bytes from 192.168.10.1: icmp_seq=5 ttl=254 time=0.549 ms
```

Guestshell运行python:使用此命令启动交互式python解释程序。

<#root>

```
Switch#
```

guestshell run python3

```
Python 3.6.8 (default, Dec 22 2020, 19:04:08)
[GCC 8.4.1 20200928 (Red Hat 8.4.1-1)] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

验证

您可以使用以下命令验证Guestshell:

<#root>

```
Switch#
```

show app-hosting detail appid guestshell

```
App id                 : guestshell
Owner                  : iox
State                  :
```

RUNNING

```
Application
  Type                 : lxc
  Name                 : GuestShell
  Version              : 3.3.0
  Description          : Cisco Systems Guest Shell XE for x86_64
  Author               : Cisco Systems
  Path                 : /guestshell/:guestshell.tar
  URL Path             :
  Multicast            : yes
Activated profile name : custom

Resource reservation
  Memory               : 256 MB
  Disk                 : 1 MB
  CPU                  : 800 units
  CPU-percent          : 11 %
```

```
  VCPU                : 1

Platform resource profiles
  Profile Name                  CPU(unit)  Memory(MB)  Disk(MB)
  ----------------------------------------------------------------

Attached devices
  Type              Name               Alias
  ---------------------------------------------
  serial/shell     iox_console_shell   serial0
  serial/aux       iox_console_aux     serial1
  serial/syslog    iox_syslog          serial2
  serial/trace     iox_trace           serial3

Network interfaces
   ---------------------------------------
eth0:
   MAC address         : 52:54:dd:5b:c4:b8
   IPv4 address        : 192.168.30.2
   IPv6 address        : ::
   Network name        : mgmt-bridge200

Port forwarding
  Table-entry  Service  Source-port  Destination-port
  ------------------------------------------------
  Switch#show app-hosting list
App id                                   State
---------------------------------------------------------
guestshell
```

RUNNING

```
Switch#
```

guestshell run sudo ifconfig

```
eth0: flaguestshell=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.10.10  netmask 255.255.255.0  broadcast 192.168.10.255
        inet6 fe80::5054:ddff:fece:a7c9  prefixlen 64  scopeid 0x20
        ether 52:54:dd:ce:a7:c9  txqueuelen 1000  (Ethernet)
        RX packets 3  bytes 266 (266.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 9  bytes 726 (726.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flaguestshell=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 338  bytes 74910 (73.1 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 338  bytes 74910 (73.1 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

调整资源大小

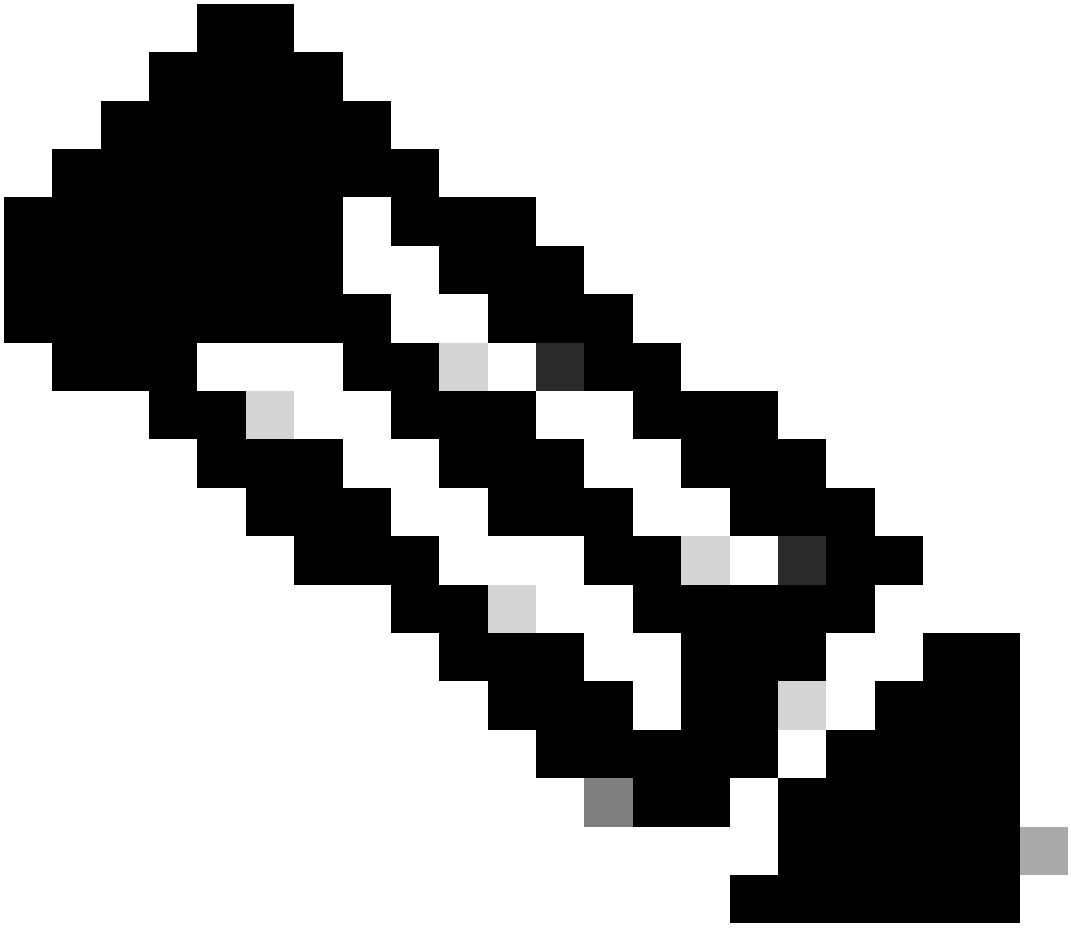
<#root>

```
!
app-hosting appid guestshell
 app-vnic management guest-interface 0


app-resource profile custom

  cpu 1000
  memory 512
  persist-disk 200
!
```

您需要禁用然后启用Guest Shell以使更改生效。

<#root>

```
Switch#

guestshell disable

Guestshell disabled successfully
Switch#

guestshell enable

*Mar 11 01:17:46.841: %SYS-5-CONFIG_I: Configured from console by coguestshell enable
Interface will be selected if configured in app-hosting
Please wait for completion
guestshell activated successfully
Current state is: ACTIVATED
guestshell started successfully
Current state is: RUNNING
Guestshell enabled successfully
Switch#

show app-hosting detail appid guestshell | sec Resource reservation


Resource reservation
  Memory               : 512 MB
  Disk                 : 200 MB
  CPU                  : 1110 units
  CPU-percent          : 15 %
  VCPU                 : 1
```



注意：在交换机上，资源大小调整最多允许达到平台的最大限制，请参阅Cisco Catalyst 9000平台硬件资源应用。

常见情况

DHCP 配置

问题：DHCP客户端二进制(DHCLIENT)不存在。

解决方案

您可以使用Yum实用程序并使用sudo yum install dhcp-client命令来安装DHCP客户端。但是，请注意，CentOS Stream 8的存储库不再可用。

1.必须避免在应用托管中设置IP地址以允许DHCP正常工作。

```
!
interface AppGigabitEthernet1/0/1
 switchport trunk allowed vlan 50
 switchport mode trunk
!
app-hosting appid guestshell
 app-vnic AppGigabitEthernet trunk
  vlan 50 guest-interface 0
name-server0 8.8.8.8
!
```

2.将mirrorlist更改为yum repo中的baseurl vault。

<#root>

Switch#

guestshell run bash

[guestshell@guestshell ~]$

sudo find /etc/yum.repos.d/ -type f -exec sed -i 's/mirrorlist=/#mirrorlist=/g' {} +

[guestshell@guestshell ~]$

sudo find /etc/yum.repos.d/ -type f -exec sed -i 's/#baseurl=/baseurl=/g' {} +

[guestshell@guestshell ~]$

sudo find /etc/yum.repos.d/ -type f -exec sed -i 's/mirror.centos.org/

/g' {} +

```
[guestshell@guestshell ~]$ cat /etc/yum.repos.d/CentOS-Stream-RealTime.reporepo
# CentOS-Stream-RealTime.repo
# The mirrorlist system uses the connecting IP address of the client and the
# update status of each mirror to pick current mirrors that are geographically
# close to the client.  You should use this for CentOS updates unless you are
# manually picking other mirrors.
#
# If the mirrorlist does not work for you, you can try the commented out
# baseurl line instead.

[rt]
name=CentOS Stream $releasever - RealTime
#mirrorlist=http://mirrorlist.centos.org/?release=$stream&arch=$basearch&repo=RT&infra=$infra
```

baseurl=http://

/$contentdir/$stream/RT/$basearch/os/

```
gpgcheck=1
enabled=0
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-centosofficial
```

3.安装软件包。

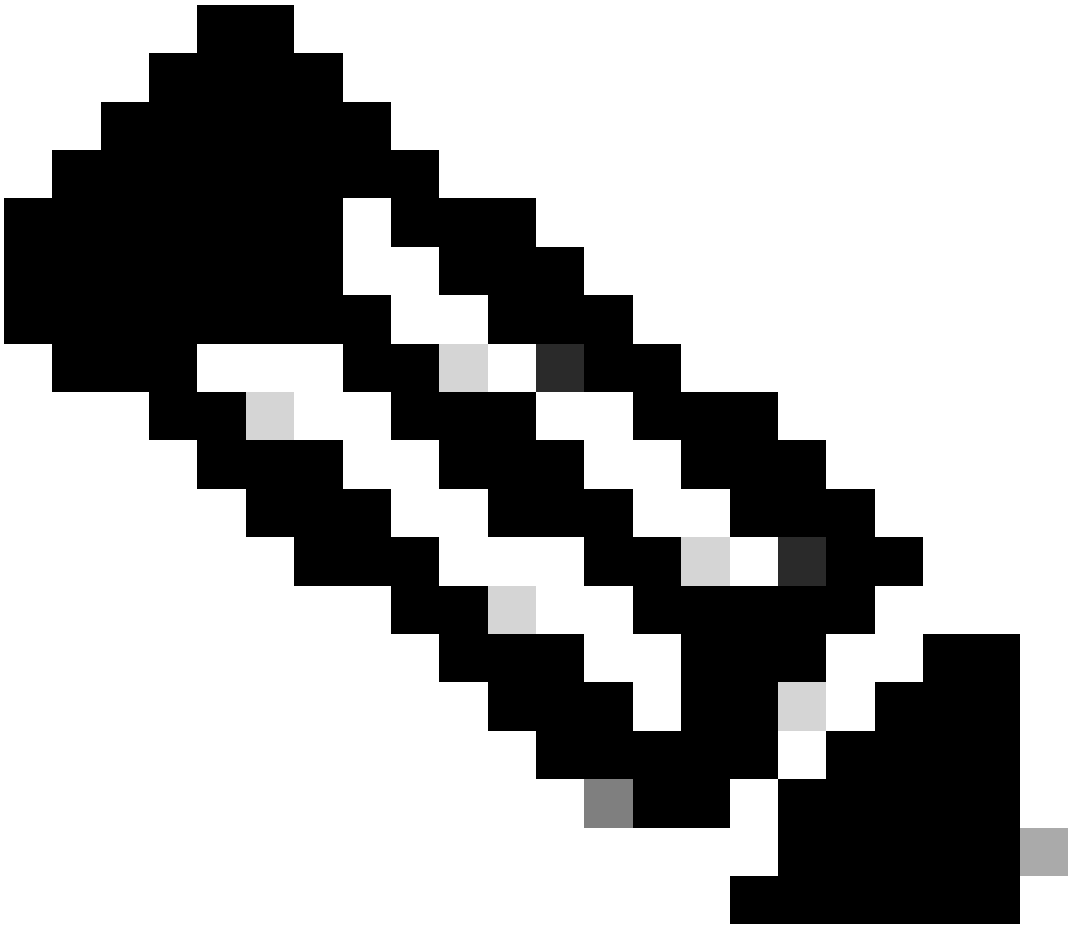
<#root>

```
guestshell@guestshell ~]$
```

sudo yum install dhcp-client

```
ast metadata expiration check: 0:50:34 ago on Wed Mar 12 17:44:46 2025.
Dependencies resolved.
================================================================================
 Package                Architecture Version                 Repository    Size
================================================================================
Installing:
 dhcp-client            x86_64       12:4.3.6-50.el8         baseos       319 k
Installing dependencies:
 bind-export-libs       x86_64       32:9.11.36-13.el8       baseos       1.1 M
 dhcp-common            noarch       12:4.3.6-50.el8         baseos       208 k
 dhcp-libs              x86_64       12:4.3.6-50.el8         baseos       148 k

Transaction Summary
================================================================================
Install  4 Packages

Total download size: 1.8 M
Installed size: 3.9 M
Is this ok [y/N]: y
Downloading Packages:
(1/4): dhcp-client-4.3.6-50.el8.x86_64.rpm      284 kB/s | 319 kB     00:01
(2/4): dhcp-common-4.3.6-50.el8.noarch.rpm      171 kB/s | 208 kB     00:01
(3/4): dhcp-libs-4.3.6-50.el8.x86_64.rpm        572 kB/s | 148 kB     00:00
(4/4): bind-export-libs-9.11.36-13.el8.x86_64.r 577 kB/s | 1.1 MB     00:02
--------------------------------------------------------------------------------
Total                                           908 kB/s | 1.8 MB     00:02
CentOS Stream 8 - BaseOS                        1.6 MB/s | 1.6 kB     00:00
Importing GPG key 0x8483C65D:
 Userid     : "CentOS (CentOS Official Signing Key) <CentOS Official Signing Key>"
 Fingerprint: 99DB 70FA E1D7 CE22 7FB6 4882 05B5 55B3 8483 C65D
 From       : /etc/pki/rpm-gpg/RPM-GPG-KEY-centosofficial
Is this ok [y/N]: y
Key imported successfully
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing        :                                                        1/1
  Installing       : dhcp-libs-12:4.3.6-50.el8.x86_64                       1/4
  Installing       : dhcp-common-12:4.3.6-50.el8.noarch                     2/4
  Installing       : bind-export-libs-32:9.11.36-13.el8.x86_64              3/4
  Running scriptlet: bind-export-libs-32:9.11.36-13.el8.x86_64              3/4
```

```
  Installing       : dhcp-client-12:4.3.6-50.el8.x86_64                    4/4
  Running scriptlet: dhcp-client-12:4.3.6-50.el8.x86_64                    4/4
  Verifying        : bind-export-libs-32:9.11.36-13.el8.x86_64             1/4
  Verifying        : dhcp-client-12:4.3.6-50.el8.x86_64                    2/4
  Verifying        : dhcp-common-12:4.3.6-50.el8.noarch                    3/4
  Verifying        : dhcp-libs-12:4.3.6-50.el8.x86_64                      4/4

Installed:
  bind-export-libs-32:9.11.36-13.el8.x86_64  dhcp-client-12:4.3.6-50.el8.x86_64
  dhcp-common-12:4.3.6-50.el8.noarch         dhcp-libs-12:4.3.6-50.el8.x86_64

Complete!
```



注意：（对于CALO）可以为Yum配置代理。这允许Yum通过代理服务器连接进行软件包下载：

[guestshell@guestshell ~]$ echo "proxy=http://<IP_address:port>/" | sudo tee -a /etc/yum.conf > /dev/null

---

4..请求eth0的DHCP IP地址。

<#root>

```
[guestshell@guestshell ~]$
```

sudo dhclient eth0

5.通过检查IP地址分配来验证DHCP客户端是否正常工作。

<#root>

```
Switch#
```

guestshell run ifconfig

```
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
```

inet 192.168.10.2 netmask 255.255.255.0 broadcast 192.168.10.255

```
        inet6 fe80::5054:ddff:fea0:4aef  prefixlen 64  scopeid 0x20
        ether 52:54:dd:a0:4a:ef  txqueuelen 1000  (Ethernet)
        RX packets 1516  bytes 2009470 (1.9 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 687  bytes 54603 (53.3 KiB)
        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
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 773  bytes 90658 (88.5 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 773  bytes 90658 (88.5 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

DNF数据包管理器更新失败

问题：由于以下错误，无法在Guestshell上完成sudo dnf update -y:

```
[guestshell@guestshell ~]$ sudo dnf upgrade --refresh
Warning: failed loading '/etc/yum.repos.d/CentOS-Base.repo', skipping.
```

解决方案

1.重新安装并升级RPM包。

<#root>

```
! Clean packages

[guestshell@guestshell ~]$ sudo dnf clean all

! Reinstall and update the tpm2-tss package:

[guestshell@guestshell ~]$

sudo dnf install tpm2-tss-2.3.2-3.el8

[guestshell@guestshell ~]$

sudo dnf upgrade rpm
```

2.单独安装git软件包。

<#root>

```
[guestshell@guestshell ~]$

sudo dnf install git -y
```

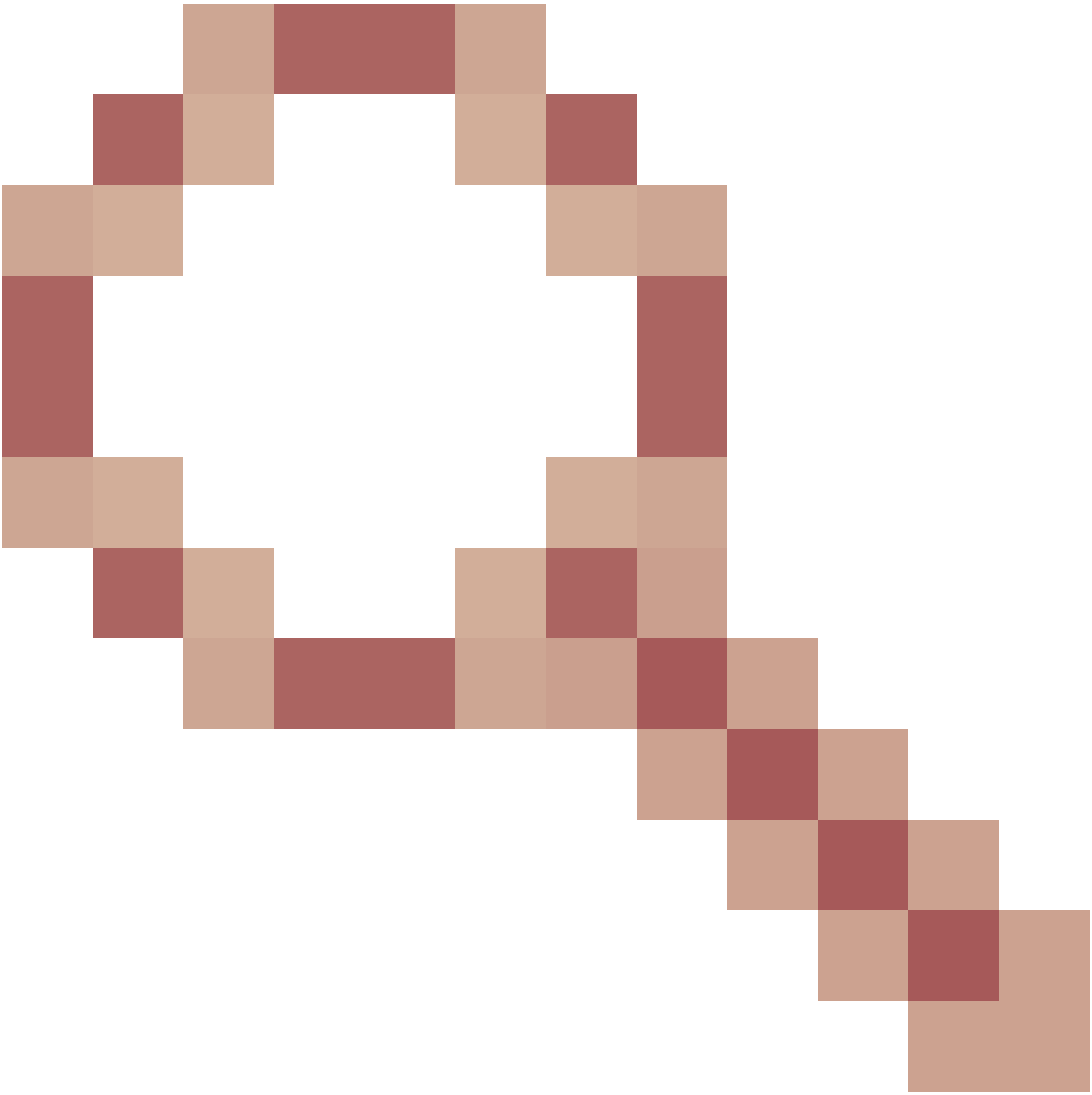
升级后丢失的Guestshell访问

问题：升级到版本17.08.01或更高版本后，Guest Shell变得不可访问，从而导致无法执行脚本。

```
Switch#guestshell run bash
Switch#
```

解决方案

此问题与思科漏洞ID CSCwi63075相关



，在交换机上启用FIPS时，在升级期间触发。

1.禁用FIPS。

<#root>

Switch#

configure terminal

Switch(config)#

no fips authorization-key

FIPS: Authorization-key erased ONLY from the Flash.
But the authorization-key is still operational. Use

```
"reload"

 command for complete removal of key and to enter into non fips-mode.
Make sure to remove fips key from all the members of the stack individually
```

2.您可以升级到包含修补程序、版本17.12.04或任何更高版本的其中一个版本。

限制IPv6编址

问题：此问题涉及在Cisco Guestshell环境中的接口上出现意外的IPv6地址。但是，并非有意配置。

在使用IPV4的交换机上观察到的配置如下：

<#root>

```
!
app-hosting appid guestshell
 app-vnic AppGigabitEthernet trunk
  vlan 50 guest-interface 0

guest-ipaddress 192.168.20.10 netmask 255.255.255.0  <-- IPv4 address configured

 app-default-gateway 192.168.20.1 guest-interface 0
 app-resource profile custom
 name-server1 192.168.20.1
 !
```

在Guestshell环境中运行ifconfig命令时，IPv4和IPv6地址都变为可见。

<#root>

```
lat1-2-ssw01.gts#guestshell run bash
[guestshell@guestshell ~]$

sudo ifconfig

eth0: flags=4163  mtu 1500
        inet 192.168.20.10  netmask 255.255.255.0 broadcast 192.168.20.255

 inet6 2620:119:5022:515:5054:ddff:fe41:c643  prefixlen 64  scopeid 0x0
        inet6 fe80::5054:ddff:fe41:c643  prefixlen 64  scopeid 0x20

        ether 52:54:dd:41:c6:43  txqueuelen 1000  (Ethernet)
        RX packets 7829  bytes 1750981 (1.6 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 5551  bytes 744320 (726.8 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 292  bytes 63812 (62.3 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 292  bytes 63812 (62.3 KiB)
```

```
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

解决方案

步骤 1：在Guestshell中禁用IPv6路由和编址。

<#root>

```
lat1-2-ssw01.gts#
guestshell run bash
[guestshell@guestshell ~]$
sudo sysctl -w net.ipv6.conf.all.disable_ipv6=1
[guestshell@guestshell ~]$
sudo sysctl -w net.ipv6.conf.default.disable_ipv6=1
[guestshell@guestshell ~]$
sudo sysctl -w net.ipv6.conf.lo.disable_ipv6=1
```

步骤 2：检验IPv6是否已禁用。

```
[guestshell@guestshell ~]$ /sbin/ifconfig
eth0: flags=4163  mtu 1500
        inet 192.168.20.10  netmask 255.255.255.0 broadcast 192.168.20.255
        ether 52:54:dd:41:c6:43  txqueuelen 1000  (Ethernet)
        RX packets 7829  bytes 1750981 (1.6 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 5551  bytes 744320 (726.8 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 292  bytes 63812 (62.3 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 292  bytes 63812 (62.3 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

运行Python脚本时出现磁盘空间错误

问题：此问题涉及在Guestshell中的嵌入式事件管理器(EEM)上运行的Python脚本。由于磁盘空间不足，脚本失败，错误为：

<#root>

```
guestshell run python3 /flash/guest-share/monitoring.py -rt True -bgp True
---- pushing bgp status ----
OSError: [Errno 28] No space left on device

During handling of the above exception, another exception occurred:

Traceback (most recent call last):
  File "/flash/guest-share/monitoring_periodic_tasks.py", line 18, in
    print(bgp_status())
  File "/bootflash/guest-share/monitoring_bgp_status.py", line 15, in bgp_status
    vrf = cli.cli('show vrf')
  File "/usr/lib/python3.6/site-packages/cli/__init__.py", line 311, in cli
    _log_to_file("CLI execution invoked for '" + command + "'")
  File "/usr/lib/python3.6/site-packages/cli/__init__.py", line 87, in _log_to_file
    logfile.close()

OSError: [Errno 28] No space left on device

! This error indicates that the disk space allocated for logging command executions within the Guestshe
```

解决方案

要解决磁盘空间耗尽的问题，您需要增加Guestshell环境的持久磁盘大小：

1.修改应用资源配置文件，以增加持久磁盘的大小。

<#root>

```
Switch(config-app-hosting)#

app-resource profile custom

Switch(config-app-hosting-profile)#

persist-disk 100

Switch(config-app-hosting-profile)#

cpu 800

Switch(config-app-hosting-profile)#

memory 256

Switch(config-app-hosting-profile)#

end
```

2.保存配置并启用/禁用guestshell。

```
Switch# write memory
Switch#guestshell disable
Guestshell disabled successfully
Switch#guestshell enable
Interface will be selected if configured in app-hosting
Please wait for completion
```

```
guestshell installed successfully
Current state is: DEPLOYED
guestshell activated successfully
Current state is: ACTIVATED
guestshell started successfully
Current state is: RUNNING
Guestshell enabled successfully
```

日志记录Syslog

可以在guestshell中运行以下命令以显示系统日志消息：

<#root>

```
[guestshell@guestshell ~]$
```

sudo logger -p 1 "Priority 1"

```
[guestshell@guestshell ~]$
```

sudo cat /var/log/messages

```
Mar 11 02:05:24 localhost systemd[248]: user@0.service: Failed at step PAM spawning /usr/lib/systemd/sy
Mar 11 02:05:24 localhost systemd[1]: user@0.service: Failed with result 'protocol'.
Mar 11 02:05:24 localhost systemd[1]: Failed to start User Manager for UID 0.
Mar 11 02:05:24 localhost systemd[1]: Stopping /run/user/0 mount wrapper...
Mar 11 02:05:24 localhost systemd[1]: run-user-0.mount: Succeeded.
Mar 11 02:05:24 localhost systemd[1]: user-runtime-dir@0.service: Succeeded.
Mar 11 02:05:24 localhost systemd[1]: Stopped /run/user/0 mount wrapper.
Mar 11 02:05:24 localhost root[250]: Priority 1
[guestshell@guestshell ~]$ sudo cat /var/log/secure
Mar 11 02:05:24 localhost systemd[248]: pam_unix(systemd-user:account): expired password for user root
Mar 11 02:05:24 localhost sudo[246]: pam_systemd(sudo:session): Failed to create session: Start job for
Mar 11 02:05:24 localhost sudo[246]: pam_unix(sudo:session): session opened for user root by (uid=0)
```

跟踪日志

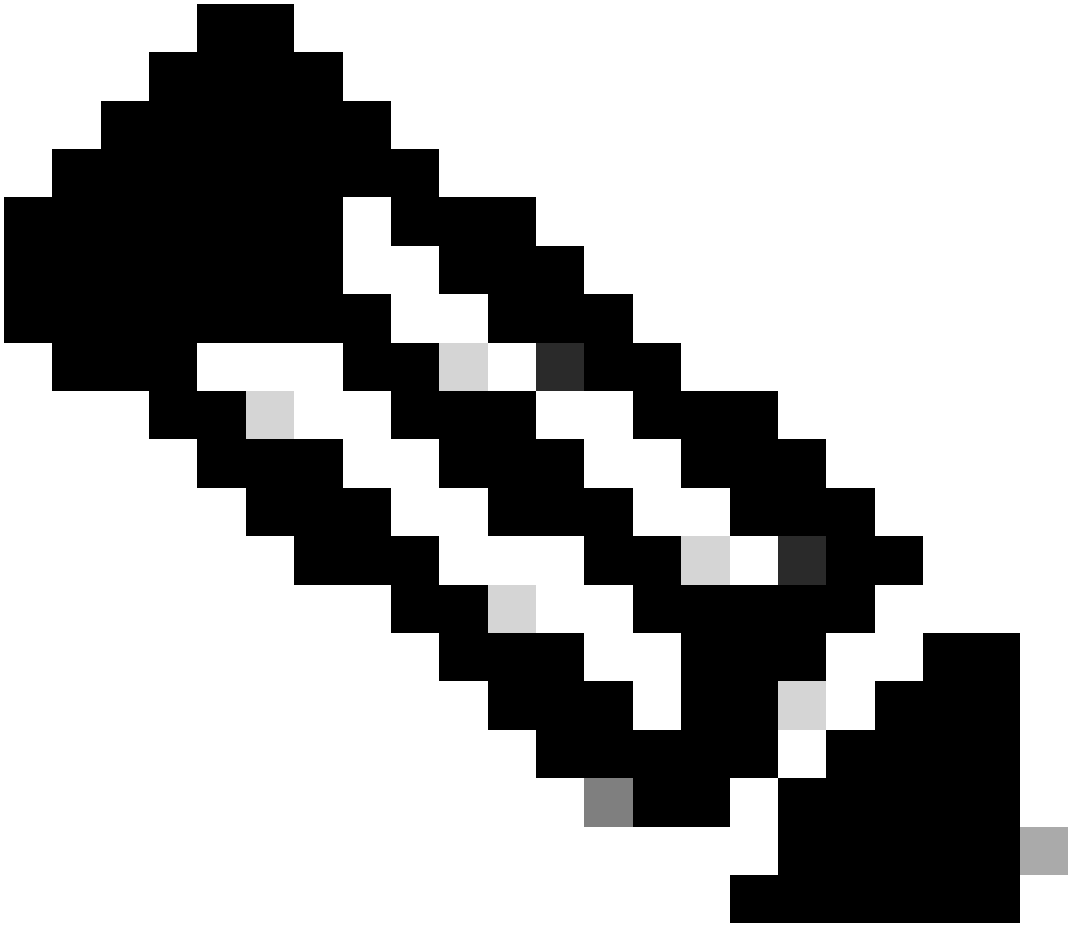
可以使用app-hosting move appid guestshell log到bootflash:folder_name来旋转文件。这可用于旋转到目标目录，但也会旋转到traceloguestshell目录。

<#root>

```
Switch#
```

app-hosting move appid guestshell log to bootflash:

```
Successfully moved tracelog to flash:/ioxapploguestshell/iox_R0-0_R0-0.14195_0.20250311023831.bin.gz
```



注意：IOX guestshell.log始终是/tmp/rp/trace·下的活动tracelog文件。当此文件达到1MB时，会自动将其旋转为带有时间戳的bootflash:traceloguestshell/，并启动一个新文件。

相关信息

- Cisco Catalyst 9000系列交换机上的应用托管白皮书
- Cisco Catalyst 9300系列交换机硬件安装指南
- 可编程性配置指南，Cisco IOS XE 17.9.x
- Catalyst 9300 Stackwise系统架构白皮书
- Cisco Bug ID CSCwi63075 - 在升级到17.08.01或更高版本后，如果启用FIPS模式，则无法通过CLI访问Guestshell
- 技术支持和文档 - Cisco Systems

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