已连接移动经验的数据包捕获(CMX)

目录

简介

(CMX) 10.xCLI((WLC)CMXNMSP)

要求

- CMX(CLI)
- Wireshark

使用捕获的TCPDUMP

TCPDUMP是显示在CMX服务器的已发送和收到的信息包的信息包分析程序。它起一分析&故障排除工具作用对于网络/系统管理员。包是内置对从数据包的原始数据可以查看的CMX服务器。

运行tcpdump作为'cmxadmin'用户失效与以下错误：('根'访问要求)

```
In this example, tcpdump is attempted to be run as a 'cmxadmin' user.

[cmxadmin@laughter ~]$ tcpdump -i eth0 port 16113
tcpdump: eth0: You don't have permission to capture on that device (socket: Operation not
permitted)
```

'根源'用户在登陆以后作为'cmxadmin'用户对在SSH的CLI或控制的交换机。

```
[cmxadmin@laughter ~]$ su - root
Password:
[root@laughter ~]#
```

使用正确的接口

记录下来数据包将捕获的接口。它可以获取使用'ifconfig-a'

```
In this example, 10.10.10.25 is the IP address of CMX server and 'eth0' is the interface it's
tied to on the server.
[cmxadmin@laughter ~]$ ifconfig -a eth0 Link encap:Ethernet HWaddr 00:50:56:A1:38:BB inet
addr:10.10.10.25 Bcast:10.10.10.255 Mask:255.255.255.0 inet6 addr:
2003:a04::250:56ff:fea1:38bb/64 Scope:Global inet6 addr: fe80::250:56ff:fea1:38bb/64 Scope:Link
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 RX packets:32593118 errors:0 dropped:0
```

```
overruns:0 frame:0 TX packets:3907086 errors:0 dropped:0 overruns:0 carrier:0 collisions:0
txqueuelen:1000 RX bytes:3423603633 (3.1 GiB) TX bytes:603320575 (575.3 MiB) lo Link encap:Local
Loopback inet addr:127.0.0.1 Mask:255.0.0.0 inet6 addr: ::1/128 Scope:Host UP LOOPBACK RUNNING
MTU:65536 Metric:1 RX packets:1136948442 errors:0 dropped:0 overruns:0 frame:0 TX
packets:1136948442 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX
bytes:246702302162 (229.7 GiB) TX bytes:246702302162 (229.7 GiB) [cmxadmin@laughter ~]$
```

捕获数据包

```
This example captures and displays all packets that are sourced from port - 16113 and enter the
CMX server on the eth0 interface.

[root@laughter ~]# tcpdump -i eth0 src port 16113 tcpdump: verbose output suppressed, use -v or
-vv for full protocol decode listening on eth0, link-type EN10MB (Ethernet), capture size 65535
bytes 09:50:29.530824 IP 172.18.254.249.16113 > laughter.cisco.com.40020: Flags [P.], seq
983381312:983382645, ack 2483597279, win 191, options [nop,nop,TS val 1792647414 ecr
1148435777], length 1333 09:50:31.507118 IP 172.18.254.249.16113 > laughter.cisco.com.40020:
Flags [.], seq 1333:2715, ack 1, win 191, options [nop,nop,TS val 1792647908 ecr 1148437650],
length 1382 09:50:31.507186 IP 172.18.254.249.16113 > laughter.cisco.com.40020: Flags [P.], seq
2715:2890, ack 1, win 191, options [nop,nop,TS val 1792647908 ecr 1148437650], length 175
09:50:33.483166 IP 172.18.254.249.16113 > laughter.cisco.com.40020: Flags [P.], seq 2890:4239,
ack 1, win 191, options [nop,nop,TS val 1792648402 ecr 1148439626], length 1349 09:50:35.459584
IP 172.18.254.249.16113 > laughter.cisco.com.40020: Flags [P.], seq 4239:5396, ack 1, win 191,
options [nop,nop,TS val 1792648896 ecr 1148441603], length 1157 ^C 5 packets captured 5 packets
received by filter 0 packets dropped by kernel [root@laughter ~]#
```

写输出到文件

```
In this example, tcpdump would capture packets that are from 10.10.20.5 received on it's eth0
interface and write it to a file named TEST_NMSP_WLC.pcap.

[root@laughter cmxadmin]# tcpdump -i eth0 src 10.10.20.5 -w TEST_NMSP_WLC.pcap
tcpdump: listening on eth0, link-type EN10MB (Ethernet), capture size 65535 bytes
^C7 packets captured
7 packets received by filter
0 packets dropped by kernel
[root@laughter cmxadmin]#
```

一旦文件准备好，您将需要抽出从CMX的.pcap文件到您的分析的计算机在一个更加方便的工具例如wireshark。您能使用所有SCP应用程序如此执行。例如在Windows， WinSCP应用程序将允许您连接到CMX使用SSH凭证，并且您能然后浏览文件系统和找到您创建的.pcap文件。要查找当前路径，请选择"pwd"，在运行tcpdump知道后文件哪里保存。

获取数据包特定编号

如果数据包计数一个特定编号希望，使用- c选项为该计数正确地过滤。

```
[root@laughter ~]# tcpdump -Z root -i eth0 -c 5 src 10.10.20.5 -w CMX_WLC_Capture.pcap tcpdump:
listening on eth0, link-type EN10MB (Ethernet), capture size 65535 bytes 5 packets captured 6
packets received by filter 0 packets dropped by kernel [root@laughter ~]#
```

其他过滤选项

```
[root@laughter cmxadmin]# tcpdump -i eth0 dst 10.10.20.5 (filtered based on destination IP
address)
[root@laughter cmxadmin]# tcpdump -i eth0 src 10.10.20.4 (filtered based on Source IP address)

[root@laughter cmxadmin]# tcpdump -i eth0 port 80  (filtered for packets on port 80 in both
directions)
[root@laughter cmxadmin]# tcpdump -i eth0 port 443  (filtered for packets on port 443 in both
```

directions)

使用Wireshark，捕获写入对文件在服务器的当前目录将保存，并且可以为详细的复核复制。