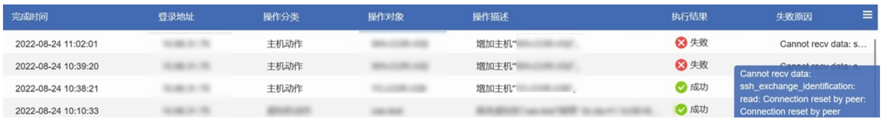
CAS扩容主机添加CVK报错：Cannot recv data:ssh_exchange_identification:read:Connection reset by peer: Connection reset by peer

戴丽丽 2022-09-11 发表

问题描述

E0535H05 CAS扩容主机添加CVK报错：Cannot recv data:ssh_exchange_identification:read:Connection reset by peer: Connection reset by peer



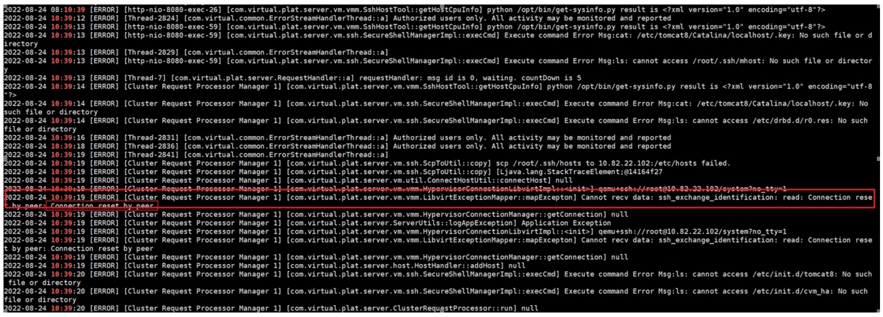
完成时间	登录地址	操作分类	操作对象	操作描述	执行结果	失败原因
2022-08-24 11:02:01	[redacted]	主机动作	[redacted]	增加主机"[redacted]	✕ 失败	Cannot recv data: s...
2022-08-24 10:39:20	[redacted]	主机动作	[redacted]	增加主机"[redacted]	✕ 失败	Cannot recv data: s...
2022-08-24 10:38:21	[redacted]	主机动作	[redacted]	增加主机"[redacted]	✓ 成功	
2022-08-24 10:10:33	[redacted]	[redacted]	[redacted]	[redacted]	✓ 成功	

Cannot recv data: ssh_exchange_identification: read: Connection reset by peer: Connection reset by peer

过程分析

1、检查主机与CVM、集群CVK之间SSH及网络连通性是否正常；

2、查看cas.log日志打印，与前台报错一致，怀疑与组网中网络有关。

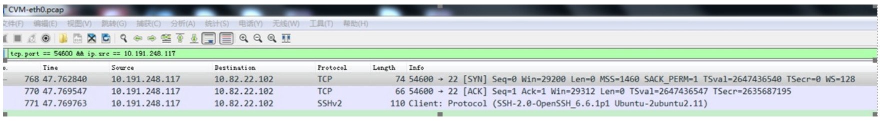


```
2022-08-24 08:10:39 [ERROR] [http-nio-8080-exec-26] [com.virtual.plat.server.vm.vmm.SshHostTool::getHostCpuInfo] python /opt/bin/get-sysinfo.py result is <?xml version="1.0" encoding="utf-8"?>
2022-08-24 10:39:12 [ERROR] [Thread-2824] [com.virtual.common.ErrorStreamHandlerThread::a] Authorized users only. All activity may be monitored and reported
2022-08-24 10:39:13 [ERROR] [http-nio-8080-exec-59] [com.virtual.plat.server.vm.vmm.SshHostTool::getHostCpuInfo] python /opt/bin/get-sysinfo.py result is <?xml version="1.0" encoding="utf-8"?>
2022-08-24 10:39:13 [ERROR] [http-nio-8080-exec-59] [com.virtual.plat.server.vm.ssh.SecureShellManagerImpl::execCmd] Execute command Error Msg:cat: /etc/tomcat8/Catalina/localhost/.key: No such file or d
irectory
2022-08-24 10:39:13 [ERROR] [Thread-2829] [com.virtual.common.ErrorStreamHandlerThread::a]
2022-08-24 10:39:13 [ERROR] [http-nio-8080-exec-59] [com.virtual.plat.server.vm.ssh.SecureShellManagerImpl::execCmd] Execute command Error Msg:ls: cannot access /root/.ssh/mhost: No such file or director
y
2022-08-24 10:39:13 [ERROR] [Thread-7] [com.virtual.plat.server.RequestHandler::a] requestHandler: msg id is 0, waiting. countDown is 5
2022-08-24 10:39:14 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.vmm.SshHostTool::getHostCpuInfo] python /opt/bin/get-sysinfo.py result is <?xml version="1.0" encoding="utf-8
"?>
2022-08-24 10:39:14 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.ssh.SecureShellManagerImpl::execCmd] Execute command Error Msg:cat: /etc/tomcat8/Catalina/localhost/.key: No
such file or directory
2022-08-24 10:39:14 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.ssh.SecureShellManagerImpl::execCmd] Execute command Error Msg:ls: cannot access /etc/drbd.d/r0.res: No such
file or directory
2022-08-24 10:39:16 [ERROR] [Thread-2831] [com.virtual.common.ErrorStreamHandlerThread::a] Authorized users only. All activity may be monitored and reported
2022-08-24 10:39:18 [ERROR] [Thread-2836] [com.virtual.common.ErrorStreamHandlerThread::a] Authorized users only. All activity may be monitored and reported
2022-08-24 10:39:19 [ERROR] [Thread-2841] [com.virtual.common.ErrorStreamHandlerThread::a]
2022-08-24 10:39:19 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.ssh.ScpToUtil::copy] scp /root/.ssh/hosts to 10.82.22.102:/etc/hosts failed.
2022-08-24 10:39:19 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.ssh.ScpToUtil::copy] [Ljava.lang.StackTraceElement;@14164f27
2022-08-24 10:39:19 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.util.ConnectHostUtil::connectHost] null
2022-08-24 10:39:19 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.vmm.HypervisorConnectionLibvirtImpl::<init>] qemu+ssh://root@10.82.22.102/system?no_tty=1
2022-08-24 10:39:19 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.vmm.LibvirtExceptionMapper::mapExcepton] Cannot recv data: ssh_exchange_identification: read: Connection rese
t by peer: Connection reset by peer
2022-08-24 10:39:19 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.vmm.HypervisorConnectionManager::getConnection] null
2022-08-24 10:39:19 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.ServerUtils::logAppException] Application Exception
2022-08-24 10:39:19 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.vmm.HypervisorConnectionLibvirtImpl::<init>] qemu+ssh://root@10.82.22.102/system?no_tty=1
2022-08-24 10:39:19 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.vmm.LibvirtExceptionMapper::mapExcepton] Cannot recv data: ssh_exchange_identification: read: Connection rese
t by peer: Connection reset by peer
2022-08-24 10:39:19 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.vmm.HypervisorConnectionManager::getConnection] null
2022-08-24 10:39:19 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.host.HostHandler::addHost] null
2022-08-24 10:39:20 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.ssh.SecureShellManagerImpl::execCmd] Execute command Error Msg:ls: cannot access /etc/init.d/tomcat8: No such
 file or directory
2022-08-24 10:39:20 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.vm.ssh.SecureShellManagerImpl::execCmd] Execute command Error Msg:ls: cannot access /etc/init.d/cvm_ha: No such
file or directory
2022-08-24 10:39:20 [ERROR] [Cluster Request Processor Manager 1] [com.virtual.plat.server.ClusterRequestProcessor::run] null
```

3、了解到，环境中CVM与CVK通过专线打通，不在同一个数据中心，测试报错CVK作为单独CVM集群，添加至集群中没有异常，添加成功，怀疑与网络相关。CVM与、CVK之间网络设备连接：CVM---运维核心交换机---运维管理区防火墙---总核心---广域网防火墙---CVK，分别从CVM、运维区防火墙、广域网防火墙、CVK依次进行抓包，根据抓包文件进行分析：

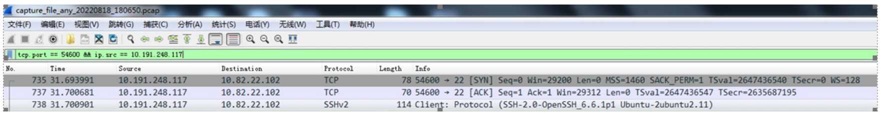
分析CVM发送的数据报文，路径如下：

（1）CVM发送的报文是正常的。


CVM-eth0.pcap
文件(F) 编辑(E) 视图(V) 跳转(G) 捕获(C) 分析(A) 统计(S) 电话(Y) 无线(W) 工具(T) 帮助(H)

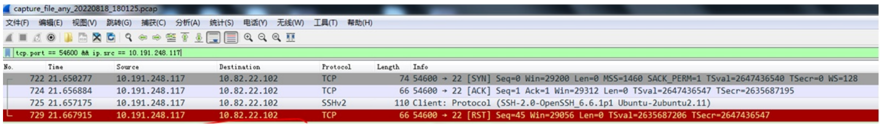
```
tcp.port == 54600 && ip.src == 10.191.248.117
o.   Time        Source          Destination    Protocol  Length  Info
 768 47.762840   10.191.248.117  10.82.22.102   TCP           74 54600 → 22 [SYN] Seq=0 Win=29200 Len=0 MSS=1460 SACK_PERM=1 TSval=2647436540 TSecr=0 WS=128
 770 47.769547   10.191.248.117  10.82.22.102   TCP           66 54600 → 22 [ACK] Seq=1 Ack=1 Win=29312 Len=0 TSval=2647436547 TSecr=2635687195
 771 47.769763   10.191.248.117  10.82.22.102   SSHv2        110 Client: Protocol (SSH-2.0-OpenSSH_6.6.1p1 Ubuntu-2ubuntu2.11)
```

（2）运维区防火墙，收到的报文也是正常的。


capture_file_any_20220818_180650.pcap
文件(F) 编辑(E) 视图(V) 跳转(G) 捕获(C) 分析(A) 统计(S) 电话(Y) 无线(W) 工具(T) 帮助(H)

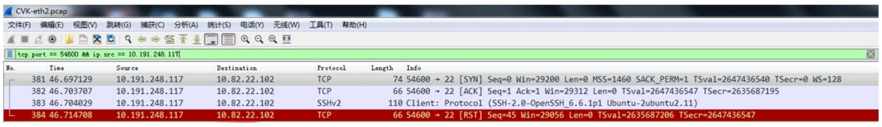
```
tcp.port == 54600 && ip.src == 10.191.248.117
No.  Time        Source          Destination    Protocol  Length  Info
 735 31.693991   10.191.248.117  10.82.22.102   TCP           78 54600 → 22 [SYN] Seq=0 Win=29200 Len=0 MSS=1460 SACK_PERM=1 TSval=2647436540 TSecr=0 WS=128
 737 31.700681   10.191.248.117  10.82.22.102   TCP           70 54600 → 22 [ACK] Seq=1 Ack=1 Win=29312 Len=0 TSval=2647436547 TSecr=2635687195
 738 31.700901   10.191.248.117  10.82.22.102   SSHv2        114 Client: Protocol (SSH-2.0-OpenSSH_6.6.1p1 Ubuntu-2ubuntu2.11)
```

（3）广域网防火墙，突然多了一个RST报文（源IP地址是CVM，目的IP地址是CVK），从抓包文件看不出报文从哪里来的。


capture_file_any_20220818_180125.pcap
文件(F) 编辑(E) 视图(V) 跳转(G) 捕获(C) 分析(A) 统计(S) 电话(Y) 无线(W) 工具(T) 帮助(H)

```
tcp.port == 54600 && ip.src == 10.191.248.117
No.  Time        Source          Destination    Protocol  Length  Info
 722 21.650277   10.191.248.117  10.82.22.102   TCP           74 54600 → 22 [SYN] Seq=0 Win=29200 Len=0 MSS=1460 SACK_PERM=1 TSval=2647436540 TSecr=0 WS=128
 724 21.656884   10.191.248.117  10.82.22.102   TCP           66 54600 → 22 [ACK] Seq=1 Ack=1 Win=29312 Len=0 TSval=2647436547 TSecr=2635687195
 725 21.657175   10.191.248.117  10.82.22.102   SSHv2        110 Client: Protocol (SSH-2.0-OpenSSH_6.6.1p1 Ubuntu-2ubuntu2.11)
 729 21.667915   10.191.248.117  10.82.22.102   TCP           66 54600 → 22 [RST] Seq=45 Win=29056 Len=0 TSval=2635687206 TSecr=2647436547
```

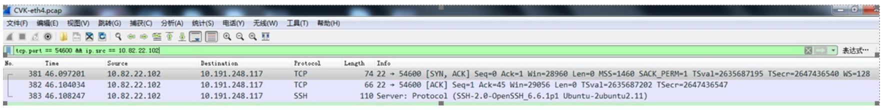
（4）在CVK的报文上也收到了RST报文。


CVK-eth2.pcap
文件(F) 编辑(E) 视图(V) 跳转(G) 捕获(C) 分析(A) 统计(S) 电话(Y) 无线(W) 工具(T) 帮助(H)

```
tcp.port == 54600 && ip.src == 10.191.248.117
No.  Time        Source          Destination    Protocol  Length  Info
 381 46.697129   10.191.248.117  10.82.22.102   TCP           74 54600 → 22 [SYN] Seq=0 Win=29200 Len=0 MSS=1460 SACK_PERM=1 TSval=2647436540 TSecr=0 WS=128
 382 46.703707   10.191.248.117  10.82.22.102   TCP           66 54600 → 22 [ACK] Seq=1 Ack=1 Win=29312 Len=0 TSval=2647436547 TSecr=2635687195
 383 46.704029   10.191.248.117  10.82.22.102   SSHv2        110 Client: Protocol (SSH-2.0-OpenSSH_6.6.1p1 Ubuntu-2ubuntu2.11)
 384 46.714708   10.191.248.117  10.82.22.102   TCP           66 54600 → 22 [RST] Seq=45 Win=29056 Len=0 TSval=2635687206 TSecr=2647436547
```

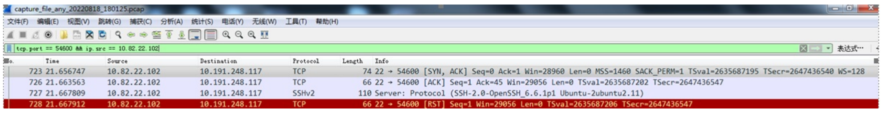
分析CVK发送的数据报文，路径如下：

（1）CVK发送的报文，是正常的。


CVK-eth4.pcap
文件(F) 编辑(E) 视图(V) 跳转(G) 捕获(C) 分析(A) 统计(S) 电话(Y) 无线(W) 工具(T) 帮助(H)
表达式…

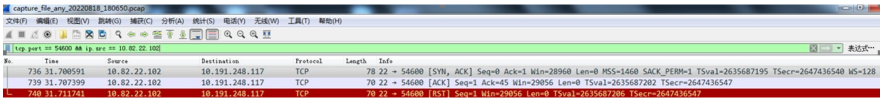
```
tcp.port == 54600 && ip.src == 10.82.22.102
No.  Time        Source         Destination     Protocol  Length  Info
 381 46.097201   10.82.22.102   10.191.248.117  TCP           74 22 → 54600 [SYN, ACK] Seq=0 Ack=1 Win=28960 Len=0 MSS=1460 SACK_PERM=1 TSval=2635687195 TSecr=2647436540 WS=128
 382 46.104034   10.82.22.102   10.191.248.117  TCP           66 22 → 54600 [ACK] Seq=1 Ack=45 Win=29056 Len=0 TSval=2635687202 TSecr=2647436547
 383 46.108247   10.82.22.102   10.191.248.117  SSH          110 Server: Protocol (SSH-2.0-OpenSSH_6.6.1p1 Ubuntu-2ubuntu2.11)
```

（2）广域网防火墙，突然多了一个RST报文（源IP地址是CVK，目的IP地址是CVM），从抓包文件看不出报文从哪里来的。


capture_file_any_20220818_180125.pcap
文件(F) 编辑(E) 视图(V) 跳转(G) 捕获(C) 分析(A) 统计(S) 电话(Y) 无线(W) 工具(T) 帮助(H)
表达式…

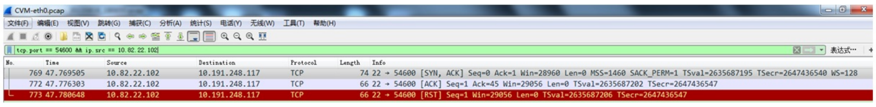
```
tcp.port == 54600 && ip.src == 10.82.22.102
No.  Time        Source         Destination     Protocol  Length  Info
 723 21.656747   10.82.22.102   10.191.248.117  TCP           74 22 → 54600 [SYN, ACK] Seq=0 Ack=1 Win=28960 Len=0 MSS=1460 SACK_PERM=1 TSval=2635687195 TSecr=2647436540 WS=128
 726 21.663563   10.82.22.102   10.191.248.117  TCP           66 22 → 54600 [ACK] Seq=1 Ack=45 Win=29056 Len=0 TSval=2635687202 TSecr=2647436547
 727 21.667809   10.82.22.102   10.191.248.117  SSHv2        110 Server: Protocol (SSH-2.0-OpenSSH_6.6.1p1 Ubuntu-2ubuntu2.11)
 728 21.667912   10.82.22.102   10.191.248.117  TCP           66 22 → 54600 [RST] Seq=1 Win=29056 Len=0 TSval=2635687206 TSecr=2647436547
```

（3）运维区防火墙，也收到了RST报文


capture_file_any_20220818_180650.pcap
文件(F) 编辑(E) 视图(V) 跳转(G) 捕获(C) 分析(A) 统计(S) 电话(Y) 无线(W) 工具(T) 帮助(H)
表达式…

```
tcp.port == 54600 && ip.src == 10.82.22.102
No.  Time        Source         Destination     Protocol  Length  Info
 736 31.700591   10.82.22.102   10.191.248.117  TCP           78 22 → 54600 [SYN, ACK] Seq=0 Ack=1 Win=28960 Len=0 MSS=1460 SACK_PERM=1 TSval=2635687195 TSecr=2647436540 WS=128
 739 31.707399   10.82.22.102   10.191.248.117  TCP           70 22 → 54600 [ACK] Seq=1 Ack=45 Win=29056 Len=0 TSval=2635687202 TSecr=2647436547
 740 31.711741   10.82.22.102   10.191.248.117  TCP           70 22 → 54600 [RST] Seq=1 Win=29056 Len=0 TSval=2635687206 TSecr=2647436547
```

（4）CVM也收到了这个RST报文



```
tcp.port == 54600 && ip.src == 10.82.22.102

No.   Time       Source        Destination     Protocol  Length  Info
  769 47.769505  10.82.22.102  10.191.248.117  TCP       74 22 → 54600 [SYN, ACK] Seq=0 Ack=1 Win=28960 Len=0 MSS=1460 SACK_PERM=1 TSval=2635687195 TSecr=2647436540 WS=128
  772 47.776303  10.82.22.102  10.191.248.117  TCP       66 22 → 54600 [ACK] Seq=1 Ack=45 Win=29056 Len=0 TSval=2635687202 TSecr=2647436547
  773 47.780648  10.82.22.102  10.191.248.117  TCP       66 22 → 54600 [RST] Seq=1 Win=29056 Len=0 TSval=2635687206 TSecr=2647436547
```

从上述抓包文件，大概率是广域网防火墙设备有问题，该设备在转发过程中，会突然多出一个RST报文，目前无法确定这个RST报文的来源，针对该设备进行排查。

解决方法

经现场排查网络设备后，发现CVM与CVK之间的连接备其他厂商的入侵防御阻断导致。放开限制后添加CVK正常。