

CN_VMware_虚拟机报错导致AS硬件配置无法成功打开的问题

Exported from Confluence on 2024 January 26

Table of Contents

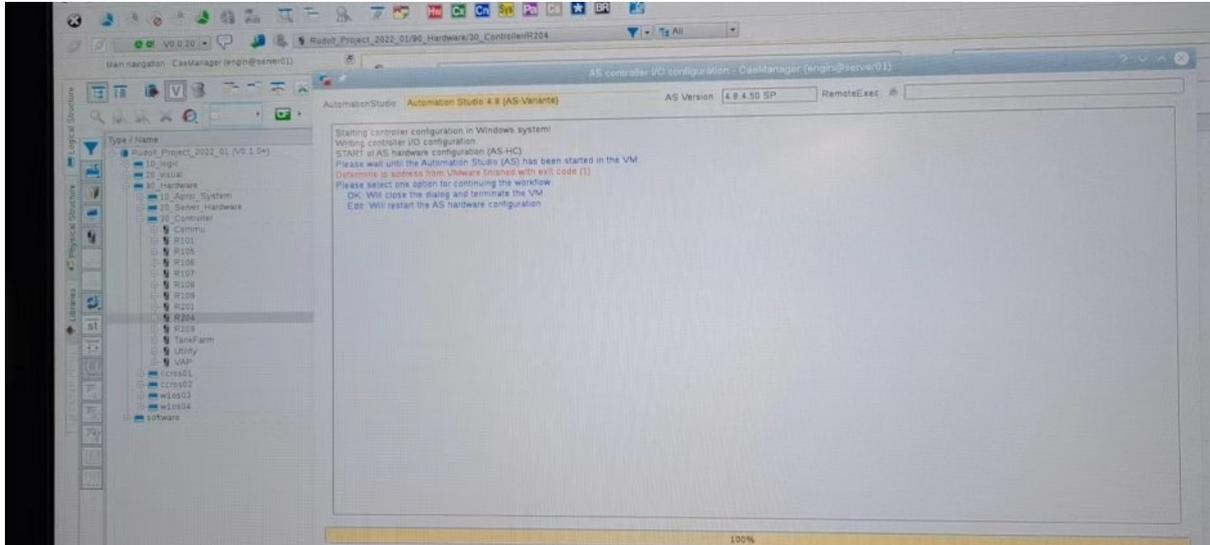
问题起源和表现 3

排查解决 3

· 问题起源和表现

问题

客户现场反馈说工程师站打开硬件配置时 **VMware** 里面提示 **“Determined IP address from VMware finished with exit code (1)”** 报错后无法继续，导致无法去修改硬件配置。如下图



该工程师站在公司安装配置完成后，已测试可以正确去打开硬件配置并进行相应的修改的，这个客户工程师也是亲眼所见。这次是硬件到现场后第一次打开硬件配置，出现这个问题。

由于在公司是正常的，到现场后不正常，那么应该在现场可能由于某种操作导致问题的发送，工程师反馈现场可能的误操作是把该工控机的两个网卡的网线插错过，发现不同后重新按配置的 IP 设置网段插好相应的网线。

· 排查解决

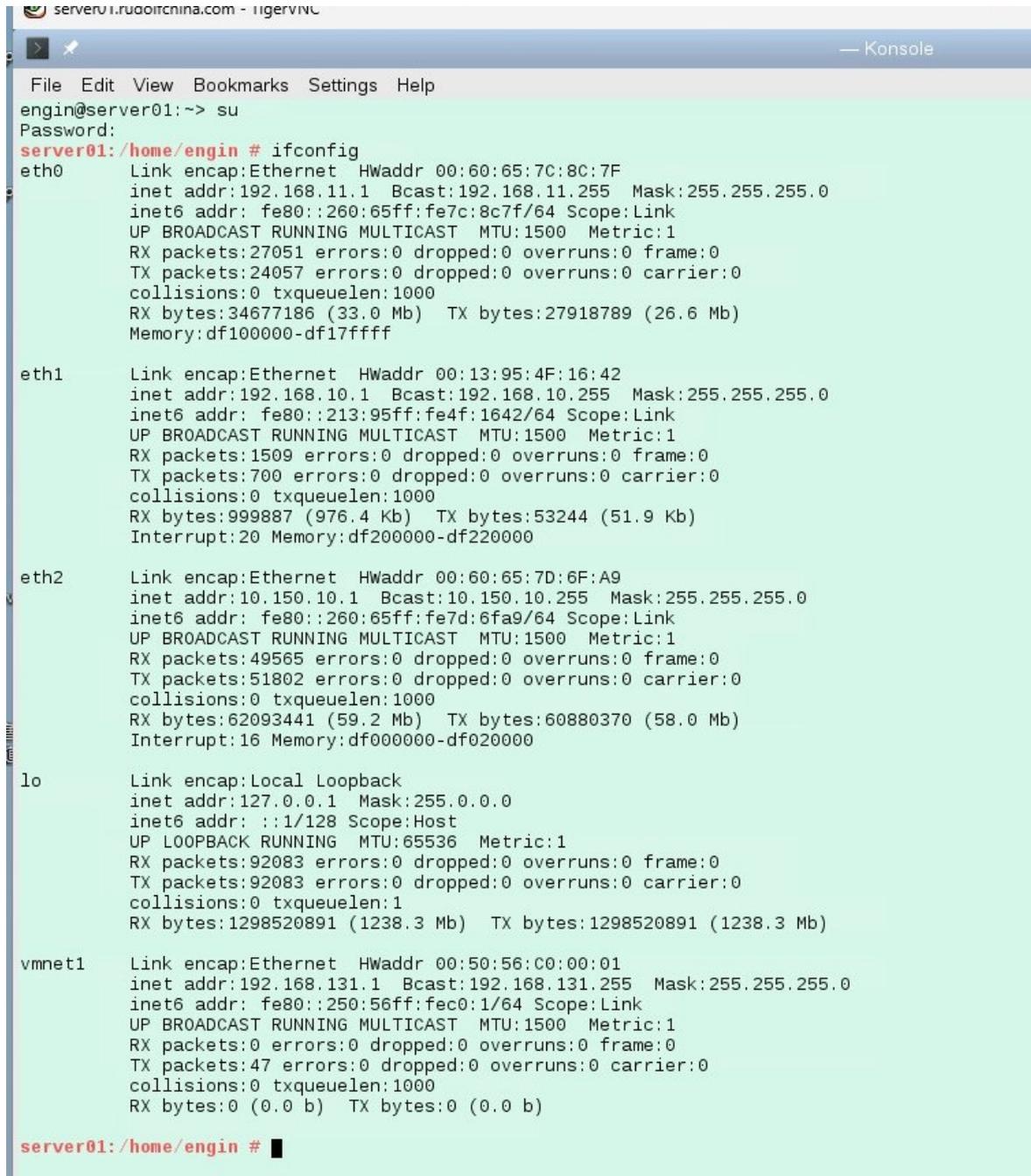
排查步骤过程和解决方法

“Determined IP address from VMware finished with exit code (1)” 错误排查和解决

远程连上工程师站测试了去打开硬件配置，遇到相同的打开硬件配置时 **VMware** 里面提示 **“Determined IP address from VMware finished with exit code (1)”** 报错，只能点击 **OK** 退出当前硬件配置。

之前没有遇到过 VMware 的这种报错，只能先尝试去重新初始化 VMware 的 AS 的镜像，在退出 CaeManager 和相应的工程编辑用户后，剪切 /home/engin/AS 文件夹到临时的 /home/engin/tmp/ 文件夹，之后使用命令 `AproUpdateEngineering -update` 去重新生成新的 AS 镜像，但是再次打开硬件配置还是遇到同样的报错。继续尝试过 `AproUpdateEngineering -resetVMware` 以及 `AproUpdateEngineering -create` 命令，但还是遇到同样的问题。因此可以排查 AS 镜像文件本身问题。

因为客户反馈提及在现场插错过网线的事情，因此通过 `ifconfig` 命令去检查当前的网络情况，结果如下图：



```
server01.ruooircnina.com - tigervnc
File Edit View Bookmarks Settings Help
engin@server01:~> su
Password:
server01:/home/engin # ifconfig
eth0      Link encap:Ethernet  HWaddr 00:60:65:7C:8C:7F
          inet addr:192.168.11.1  Bcast:192.168.11.255  Mask:255.255.255.0
          inet6 addr: fe80::260:65ff:fe7c:8c7f/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:27051 errors:0 dropped:0 overruns:0 frame:0
          TX packets:24057 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:34677186 (33.0 Mb)  TX bytes:27918789 (26.6 Mb)
          Memory:df100000-df17ffff

eth1      Link encap:Ethernet  HWaddr 00:13:95:4F:16:42
          inet addr:192.168.10.1  Bcast:192.168.10.255  Mask:255.255.255.0
          inet6 addr: fe80::213:95ff:fe4f:1642/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:1509 errors:0 dropped:0 overruns:0 frame:0
          TX packets:700 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:999887 (976.4 Kb)  TX bytes:53244 (51.9 Kb)
          Interrupt:20 Memory:df200000-df220000

eth2      Link encap:Ethernet  HWaddr 00:60:65:7D:6F:A9
          inet addr:10.150.10.1  Bcast:10.150.10.255  Mask:255.255.255.0
          inet6 addr: fe80::260:65ff:fe7d:6fa9/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:49565 errors:0 dropped:0 overruns:0 frame:0
          TX packets:51802 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:62093441 (59.2 Mb)  TX bytes:60880370 (58.0 Mb)
          Interrupt:16 Memory:df000000-df020000

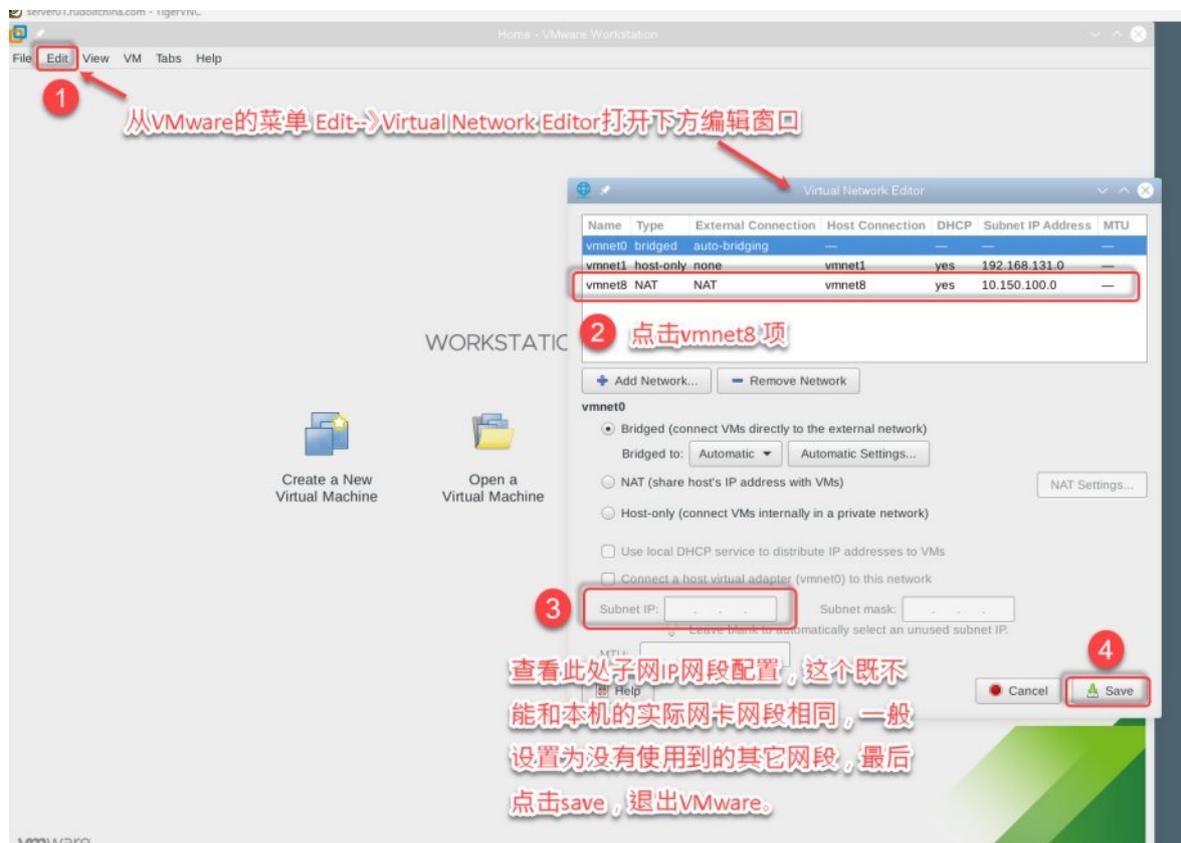
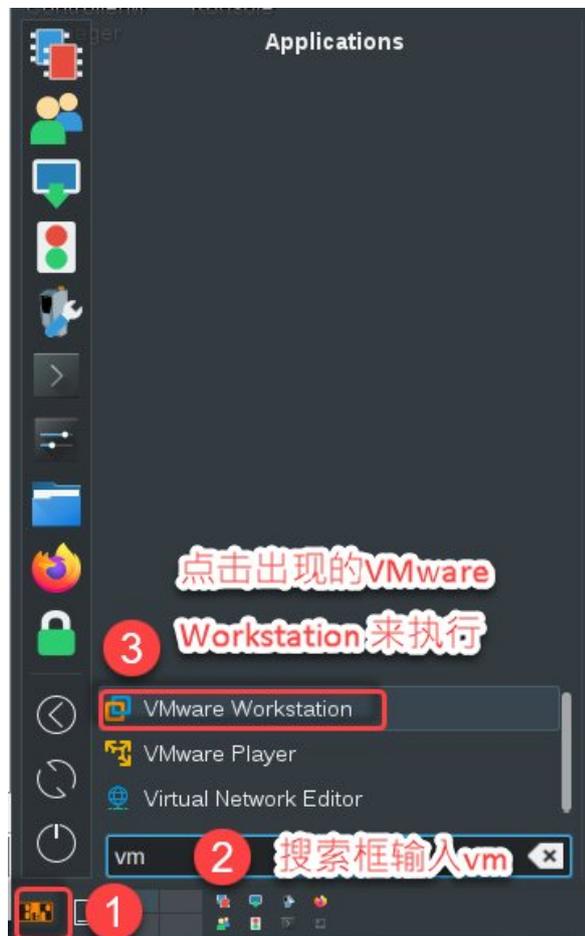
lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:92083 errors:0 dropped:0 overruns:0 frame:0
          TX packets:92083 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1
          RX bytes:1298520891 (1238.3 Mb)  TX bytes:1298520891 (1238.3 Mb)

vmnet1    Link encap:Ethernet  HWaddr 00:50:56:C0:00:01
          inet addr:192.168.131.1  Bcast:192.168.131.255  Mask:255.255.255.0
          inet6 addr: fe80::250:56ff:fec0:1/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:47 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 b)  TX bytes:0 (0.0 b)

server01:/home/engin #
```

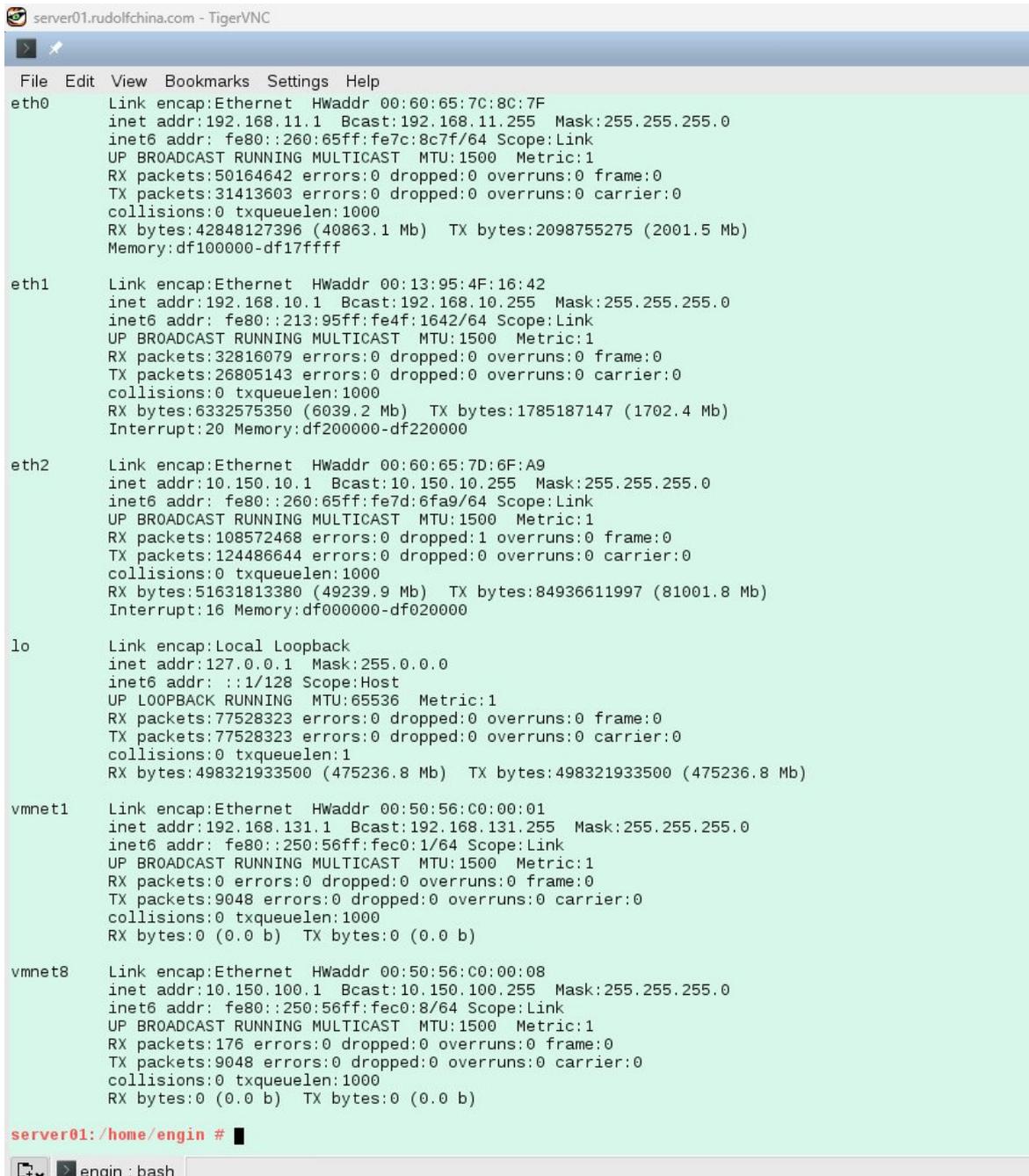
从上图中，缺少了 `vmnet8` 的信息，这个是不正常的，需要检查 VMware 的网络配置，查看是否存在问题。

从搜索框输入 `vm` 然后点击 `VMware Workstations` 可以手动打开，然后从菜单 `Edit` 去打开 `VMware Network Editor` 去查看里面的参数配置，如下图所示说明。



从现场的 VMware Network Editor 去查看到 vmnet8 的子网网段配置为 192.168.10.x，这个是当前工程师站的过程总线的网段 IP，这就是使用 ifconfig 命令没有 vmnet8 项内容，也是出现“Determined IP address from VMware finished with exit code (1)”报错的原因。因此需要如上图去修改 vmnet8 的子网网段 IP 设置。

修改后，ifconfig 可以正确获取所有网络的信息，如下图。



```
server01.rudolfchina.com - TigerVNC
File Edit View Bookmarks Settings Help
eth0      Link encap:Ethernet HWaddr 00:60:65:7C:8C:7F
          inet addr:192.168.11.1 Bcast:192.168.11.255 Mask:255.255.255.0
          inet6 addr: fe80::260:65ff:fe7c:8c7f/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
          RX packets:50164642 errors:0 dropped:0 overruns:0 frame:0
          TX packets:31413603 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:42848127396 (40863.1 Mb) TX bytes:2098755275 (2001.5 Mb)
          Memory:df100000-df17ffff

eth1      Link encap:Ethernet HWaddr 00:13:95:4F:16:42
          inet addr:192.168.10.1 Bcast:192.168.10.255 Mask:255.255.255.0
          inet6 addr: fe80::213:95ff:fe4f:1642/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
          RX packets:32816079 errors:0 dropped:0 overruns:0 frame:0
          TX packets:26805143 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:6332575350 (6039.2 Mb) TX bytes:1785187147 (1702.4 Mb)
          Interrupt:20 Memory:df200000-df220000

eth2      Link encap:Ethernet HWaddr 00:60:65:7D:6F:A9
          inet addr:10.150.10.1 Bcast:10.150.10.255 Mask:255.255.255.0
          inet6 addr: fe80::260:65ff:fe7d:6fa9/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
          RX packets:108572468 errors:0 dropped:1 overruns:0 frame:0
          TX packets:124486644 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:51631813380 (49239.9 Mb) TX bytes:84936611997 (81001.8 Mb)
          Interrupt:16 Memory:df000000-df020000

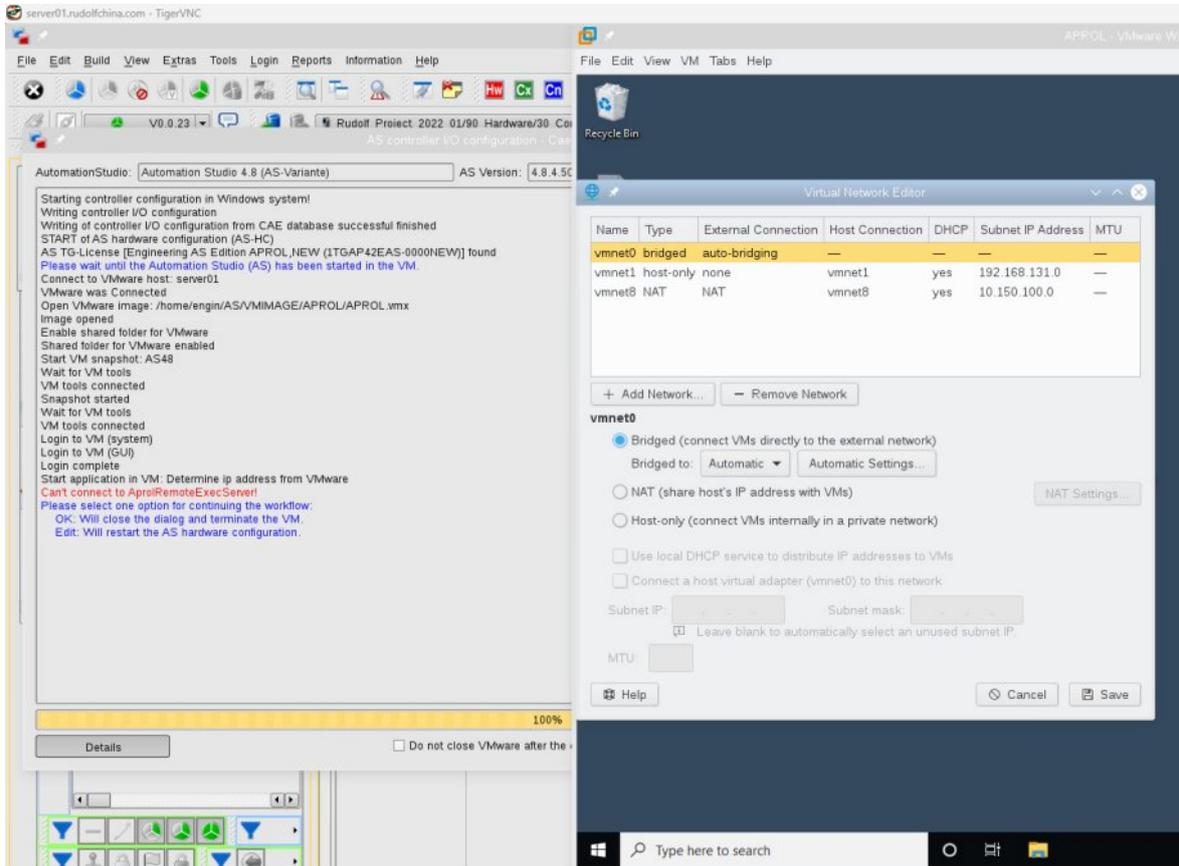
lo        Link encap:Local Loopback
          inet addr:127.0.0.1 Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING MTU:65536 Metric:1
          RX packets:77528323 errors:0 dropped:0 overruns:0 frame:0
          TX packets:77528323 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1
          RX bytes:498321933500 (475236.8 Mb) TX bytes:498321933500 (475236.8 Mb)

vmnet1    Link encap:Ethernet HWaddr 00:50:56:C0:00:01
          inet addr:192.168.131.1 Bcast:192.168.131.255 Mask:255.255.255.0
          inet6 addr: fe80::250:56ff:fec0:1/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:9048 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 b) TX bytes:0 (0.0 b)

vmnet8    Link encap:Ethernet HWaddr 00:50:56:C0:00:08
          inet addr:10.150.100.1 Bcast:10.150.100.255 Mask:255.255.255.0
          inet6 addr: fe80::250:56ff:fec0:8/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
          RX packets:176 errors:0 dropped:0 overruns:0 frame:0
          TX packets:9048 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 b) TX bytes:0 (0.0 b)

server01:/home/engin #
└─┬─┘ engin : bash
```

此后从 CaeManager 去打开硬件配置，就没有出现“Determined IP address from VMware finished with exit code (1)”的报错了，但是出现了新的报错，“Can't connect to AprolRemoteExecServer !”，如下图。



Can't connect to AprotRemoteExecServer 错误排查和解决

对于新出现的“Can't connect to AprotRemoteExecServer !”错误，无法通过手动启动 AprotRemoteExecServer 来解决。

在写 Ticket 寻求总部的支持的同时，在 Confluence 里面搜寻有关 AprotRemoteExecServer 关键字，最后查到下图的一个解决方法，AprotRemoteExecServer 无法连接是 R4.2-05 后的一个 bug。

From R4.2-05 there are a few new features in the handling of VMware (AprolRemoteExecServer)

Read IP, lost connection to RemoteExecServer

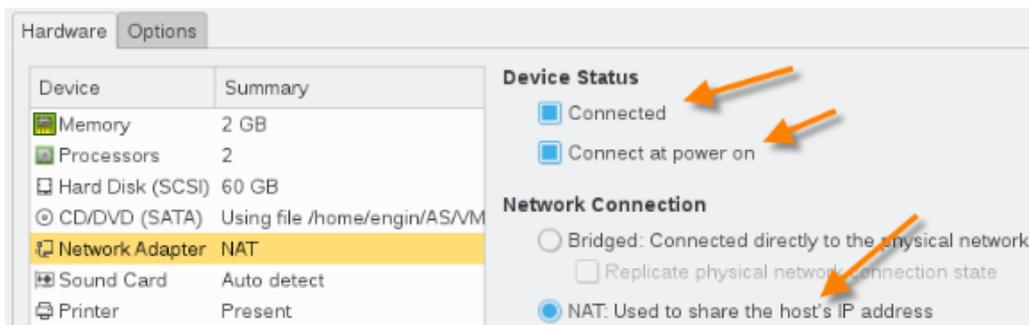
The message indicates that the virtual networks in the VM cannot find the outside or are not active.

Start VMware from the console, open the APROL VM and carry out the following checks:

- **Virtual Network Editor** : Compare with the routing table in the host system. These must not overlap. Correct if necessary
- **VMware Settings --> Shared Folders** : Check the directory link in the host system (possibly wrong engine name?)

Folders	
Name	Host Path
APROL	/home/engin/AS/SHARED

- **VMware Settings --> Network Adapter** : it must be set to NAT or the appropriately configured vmnet interface
- **VMware Settings --> Network Adapter** : the two checkboxes above (Connect, Connect at Startup) must be activated



If these things are set correctly, load the snapshot (eg AS45) once.

Carry out the following checks in Windows:

- Network adapter IP must be set to Obtain **automatically**
- check in the status of the NIC whether an IP has been assigned
- Check the shared folder (Z:) in Explorer

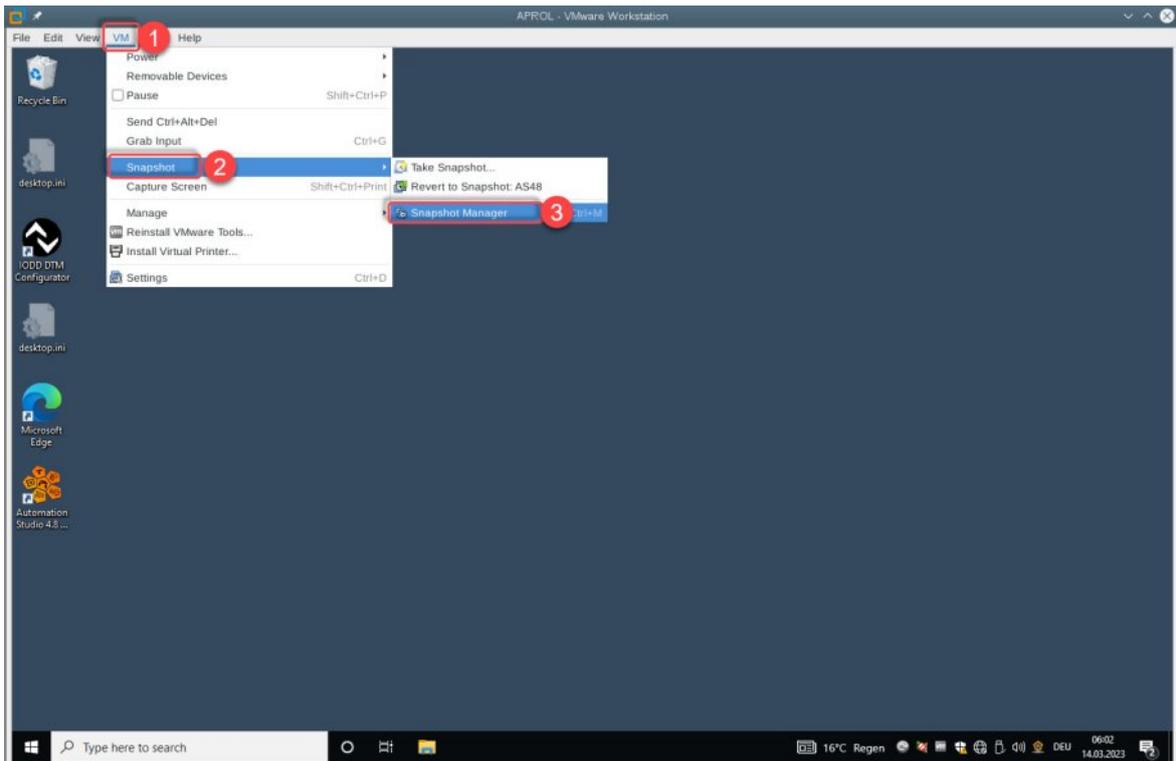
If that works, close all windows in Windows, delete the old snapshot and create a new one with the same name.

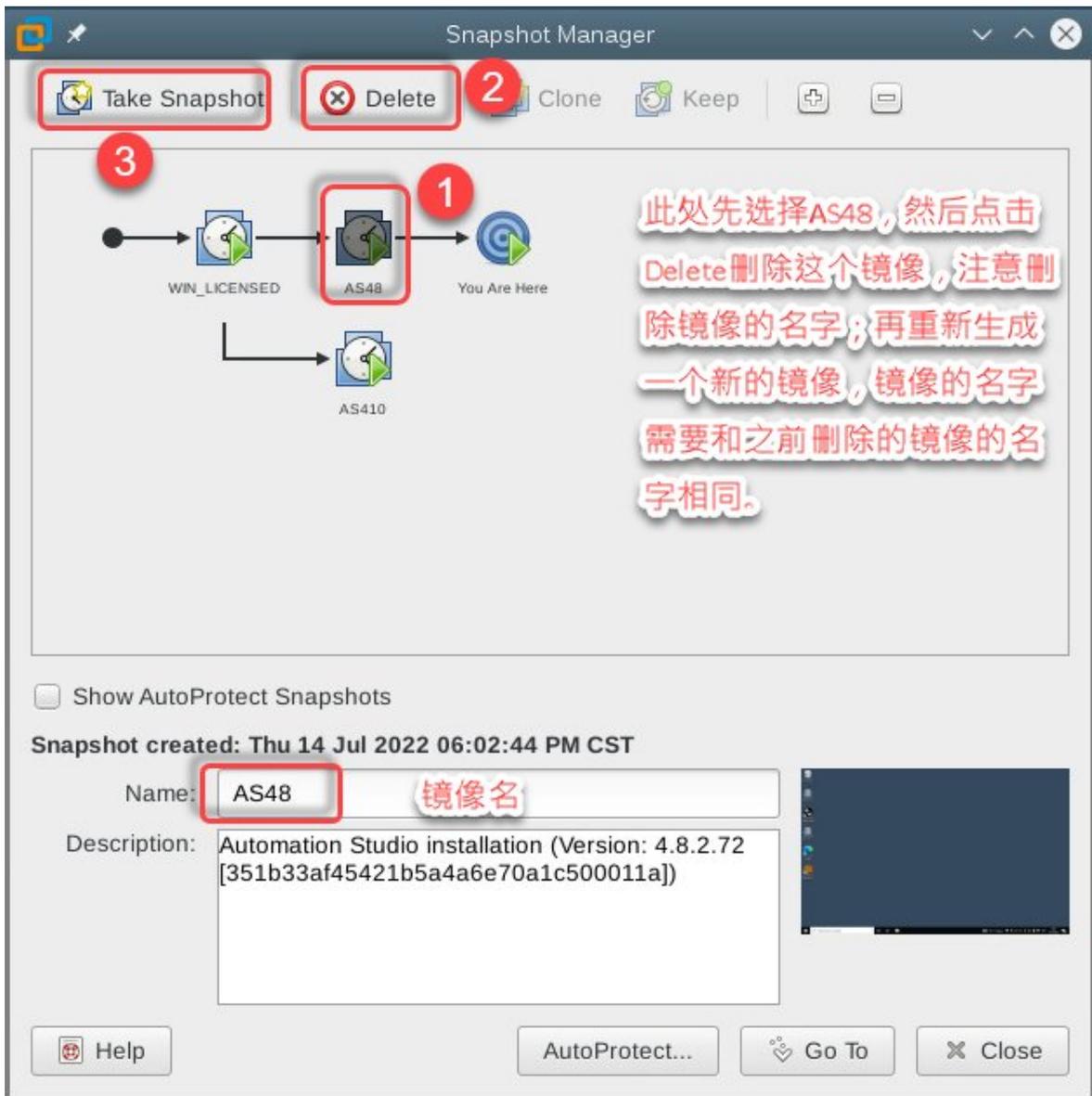
Then close the VMware (using the **suspend** function)

按照图示的步骤，VMware 设置上没有问题，然后去加载 AS 的镜像，去掉 Windows 系统里面网卡的默认的错误的 DNS 设置，需要把 DNS 设置修改为自动获取 DNS server 地址。查看一下当前获取的 IP 地址，并检查一下共享对的 Z: 文件夹。



上面没有问题后，接下来需要对当前的镜像文件首先删除，然后再创建一个新的和之前删除的镜像名字相同的新的镜像，如下面图示操作。





最后退出 VMware Workstations, 选择 **suspend** 方式, 重新打开 CaeManager, 之后就可以正常打开硬件配置进行硬件的修改工作而不报错了。