开机安装完host端的doca环境，使用 `dmesg -l err` 发现错误：

```
root@node138:/opt/mellanox/doca/samples/doca_comm_channel/cc_client# dmesg -l err
[    9.891271] Couldn't get size: 0x800000000000000e
[    9.895040] MODSIGN: Couldn't get UEFI db list
[25061.535817] PKCS#7 signature not signed with a trusted key
[25373.613833] PKCS#7 signature not signed with a trusted key
[25373.623974] PKCS#7 signature not signed with a trusted key
[25373.624751] NNT Driver:: function name:create_file_name_mft, line:142 | MFT device name created: id: 41686, slot id: 0, device
 name: /dev/mst/mt41686_pciconf0 domain: 0x0 bus: 0x3b
[25373.624869] NNT Driver:: function name:create_file_name_mft, line:142 | MFT device name created: id: 41686, slot id: 1, device
 name: /dev/mst/mt41686_pciconf1 domain: 0x0 bus: 0x3b
[31796.525311] PKCS#7 signature not signed with a trusted key
root@node138:/opt/mellanox/doca/samples/doca_comm_channel/cc_client#
```

之后使用doca comm channel的连接例子程序：

```
root@node138:/opt/mellanox/doca/samples/doca_comm_channel/cc_client# ./build/doca_cc_client
[12:49:25:398182][DOCA][ERR][COMMON:67]: Matching device not found.
[12:49:25:398243][DOCA][ERR][CC_CLIENT:80]: Failed to open Comm Channel DOCA device based on PCI address
```

提示device未发现，之后再使用 `dmesg -l err`：

```
[25373.624751] NNT Driver:: function name:create_file_name_mft, line:142 | MFT device name created: id: 41686, slot id: 0, device
 name: /dev/mst/mt41686_pciconf0 domain: 0x0 bus: 0x3b
[25373.624869] NNT Driver:: function name:create_file_name_mft, line:142 | MFT device name created: id: 41686, slot id: 1, device
 name: /dev/mst/mt41686_pciconf1 domain: 0x0 bus: 0x3b
[31796.525311] PKCS#7 signature not signed with a trusted key
[33735.698239] mlx5_core 0000:3b:00.0: mlx5_enter_error_state:121:(pid 2272): start
[33735.698326] mlx5_core 0000:3b:00.0: mlx5_enter_error_state:128:(pid 2272): end
[33736.210258] mlx5_core 0000:3b:00.1: mlx5_enter_error_state:121:(pid 1022): start
[33736.210336] mlx5_core 0000:3b:00.1: mlx5_enter_error_state:128:(pid 1022): end
[33850.384644] mlx5_core 0000:3b:00.0: starting health recovery flow
[33903.632697] mlx5_core 0000:3b:00.1: starting health recovery flow
[34120.468363] mlx5_core 0000:3b:00.1: mlx5_enter_error_state:121:(pid 1022): start
[34120.468460] mlx5_core 0000:3b:00.1: mlx5_enter_error_state:128:(pid 1022): end
[34123.028382] mlx5_core 0000:3b:00.0: mlx5_enter_error_state:121:(pid 68619): start
[34123.028473] mlx5_core 0000:3b:00.0: mlx5_enter_error_state:128:(pid 68619): end
[34235.413436] mlx5_core 0000:3b:00.1: starting health recovery flow
[34288.661804] mlx5_core 0000:3b:00.0: starting health recovery flow
```

然后我搜索关于 `mlx5_core` 的问题，在一篇blog（关于Infiniband网卡安装、使用）上发现命令 `sudo hca_self_test.ofed`：

```
root@node138:/opt/mellanox/doca/samples/doca_comm_channel/cc_client# sudo hca_self_test.ofed

---- Performing Adapter Device Self Test ----
Number of CAs Detected ................. 2
PCI Device Check ....................... PASS
Kernel Arch ............................ x86_64
Host Driver Version .................... OFED-internal-5.8-1.0.1: 4.15.0-197-generic
Host Driver RPM Check .................. PASS
Firmware on CA #0 HCA .................. v24.35.1012
Firmware on CA #1 HCA .................. v24.35.1012
Host Driver Initialization ............ FAIL
Number of CA Ports Active ............. NA
Error Counter Check ................... NA
Kernel Syslog Check ................... NA
Node GUID on CA #0 (HCA) .............. 04:3f:72:03:00:a0:d8:17
Node GUID on CA #1 (HCA) .............. 04:3f:72:03:00:a0:d8:16
----------------- DONE --------------------
```

这里可以看出 `Host Driver Initialization` 是处于FAIL状态的，这说明Device是有问题的。

上面那篇blog上有两个命令我看着好像是重启相关系统，上面的Infiniband网卡安装过程也需要用到，我就尝试着使用了以下两个命令

```
sudo /etc/init.d/openibd restart
```

```
sudo /etc/init.d/opensmd restart
```

之后再使用 `sudo hca_self_test.ofed` 查看：

```
● root@node138:/opt/mellanox/doca/samples/doca_comm_channel/cc_client# sudo hca_self_test.ofed

 ---- Performing Adapter Device Self Test ----
 Number of CAs Detected ................. 2
 PCI Device Check ....................... PASS
 Kernel Arch ............................ x86_64
 Host Driver Version .................... OFED-internal-5.8-1.0.1: 4.15.0-197-generic
 Host Driver RPM Check .................. PASS
 Firmware on CA #0 HCA .................. v24.35.1012
 Firmware on CA #1 HCA .................. v24.35.1012
 Host Driver Initialization ............ PASS
 Number of CA Ports Active ............. 0
 Port State of Port #1 on CA #0 (HCA)..... DOWN (InfiniBand)
 Port State of Port #1 on CA #1 (HCA)..... DOWN (InfiniBand)
 Error Counter Check on CA #0 (HCA)...... PASS
 Error Counter Check on CA #1 (HCA)...... PASS
 Kernel Syslog Check .................... PASS
 Node GUID on CA #0 (HCA) .............. 04:3f:72:03:00:a0:d8:16
 Node GUID on CA #1 (HCA) .............. 04:3f:72:03:00:a0:d8:17
 ----------------- DONE --------------------
```

发现 `Host Driver Initialization` 已经成功，之后在运行cc例子程序，成功运行。

```
● root@node138:/opt/mellanox/doca/samples/doca_comm_channel/cc_client# ./build/doca_cc_client
 [13:43:57:547971][DOCA][INF][CC_CLIENT:130]: Connection to server was established successfully
 [13:43:57:548169][DOCA][INF][CC_CLIENT:168]: Server response: Message from the server
```

以上解决问题的blog网址为：Infiniband网卡安装、使用总结_abin在路上的博客-CSDN博客_infiniband网卡配置