Hi Juan and Juan!

sorry for going technical and with many questions but I'm trying to keep my them as general as possible for others to benefit.

1) Can we consider the vManageGUI as a separate component that talks to vManage, vSmart, and vBond "separately" in the SD-WAN brain?

2) Once the SD-WAN brain (vSmart/vBond/vManage) is up and running I use **show control connections** and **show orchestrator connections** to check that they can see one another. In my seetup it seems everything is fine. I noticed that vSmart and vManage cannot see the vBond's system IP whereas the same output's command on vBond does show that it sees the system-ip of vSmart and vManage and I would like to know if it is normal or not and in case if I have to take action and how.
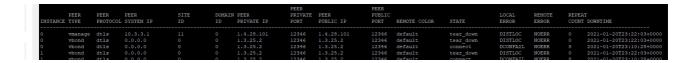
```
vsmart#
vsmart#
vsmart# show control connections

        PEER    PEER PEER            SITE        DOMAIN PEER
INDEX TYPE      PROT SYSTEM IP       ID          ID     PRIVATE IP
---------------------------------------------------------------
0       vbond   dtls 0.0.0.0         0           0      1.3.25.2
0       vmanage dtls 10.3.3.1        11          0      1.4.28.101
1       vbond   dtls 0.0.0.0         0           0      1.3.25.2

vsmart#
```

```
vmanage# show control connections
                                    PEER
        PEER    PEER PEER           CONFIGURED      SITE        DOMAIN PEER
INDEX TYPE      PROT SYSTEM IP      SYSTEM IP       ID          ID     PRIVATE IP
-----------------------------------------------------------------------------------
0       vsmart  dtls 10.3.3.3       10.3.3.3        12          1      1.3.25.6
0       vbond   dtls 10.3.3.2       10.3.3.2        0           0      1.3.25.2
1       vbond   dtls 0.0.0.0        -               0           0      1.3.25.2
2       vbond   dtls 0.0.0.0        -               0           0      1.3.25.2
3       vbond   dtls 0.0.0.0        -               0           0      1.3.25.2
4       vbond   dtls 0.0.0.0        -               0           0      1.3.25.2
5       vbond   dtls 0.0.0.0        -               0           0      1.3.25.2
6       vbond   dtls 0.0.0.0        -               0           0      1.3.25.2
7       vbond   dtls 0.0.0.0        -               0           0      1.3.25.2

vmanage#
```

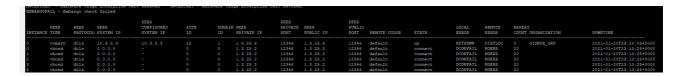So my question is: is it normal that vSmart doesn't see the vBond's system-ip and site-id and the vManage sees the vBond's system-id and site-id only on one connection and not all the others?

3) It's not clear to me if **show control connections-history** reports only errors or also success in connection. If everything is OK what should I see in the output of such command?

This is the output from vSmart as an example

```
                                            PEER                    PEER
         PEER    PEER    PEER        SITE    DOMAIN PEER   PRIVATE  PEER      PUBLIC             LOCAL    REMOTE   REPEAT
INSTANCE TYPE    PROTOCOL SYSTEM IP  ID      ID     PRIVATE IP  PORT  PUBLIC IP  PORT  REMOTE COLOR  STATE    ERROR    ERROR    COUNT DOWNTIME
-------------------------------------------------------------------------------------------------------------------------------------------
0        vmanage dtls    10.3.3.1    11      0      1.4.28.101  12346 1.4.28.101 12346 default     tear_down DISTLOC  NOERR    0     2021-01-20T23:22:03+0000
0        vbond   dtls    0.0.0.0     0       0      1.3.25.2    12346 1.3.25.2   12346 default     tear_down DISTLOC  NOERR    0     2021-01-20T23:22:03+0000
0        vbond   dtls    0.0.0.0     0       0      1.3.25.2    12346 1.3.25.2   12346 default     connect   DCONFAIL NOERR    8     2021-01-20T23:10:28+0000
1        vbond   dtls    0.0.0.0     0       0      1.3.25.2    12346 1.3.25.2   12346 default     tear_down DISTLOC  NOERR    0     2021-01-20T23:22:03+0000
1        vbond   dtls    0.0.0.0     0       0      1.3.25.2    12346 1.3.25.2   12346 default     connect   DCONFAIL NOERR    8     2021-01-20T23:10:28+0000
```

and this from vmanage

```
HWCERTREN - Hardware vEdge Enterprise Cert Renewed    HWCERTREV - Hardware vEdge Enterprise Cert Revoked.
EMBARGOFAIL - Embargo check failed

                                    PEER                    PEER                 PEER
         PEER    PEER    PEER        CONFIGURED SITE DOMAIN PEER   PRIVATE PEER      PUBLIC             LOCAL    REMOTE   REPEAT
INSTANCE TYPE    PROTOCOL SYSTEM IP  SYSTEM IP  ID   ID    PRIVATE IP  PORT PUBLIC IP  PORT  REMOTE COLOR STATE   ERROR    ERROR    COUNT ORGANIZATION   DOWNTIME
-------------------------------------------------------------------------------------------------------------------------------------------------------------
0        vsmart  dtls    10.3.3.3    10.3.3.3   12   1     1.3.25.6    12346 1.3.25.6  12346 default     up       RXTRDWN  DISTLOC  0     GIONFA_GRP     2021-01-20T23:22:03+0000
0        vbond   dtls    0.0.0.0     -          0    0     1.3.25.2    12346 1.3.25.2  12346 default     connect  DCONFAIL NOERR    20                  2021-01-20T23:10:28+0000
1        vbond   dtls    0.0.0.0     -          0    0     1.3.25.2    12346 1.3.25.2  12346 default     connect  DCONFAIL NOERR    20                  2021-01-20T23:10:25+0000
2        vbond   dtls    0.0.0.0     -          0    0     1.3.25.2    12346 1.3.25.2  12346 default     connect  DCONFAIL NOERR    20                  2021-01-20T23:10:25+0000
3        vbond   dtls    0.0.0.0     -          0    0     1.3.25.2    12346 1.3.25.2  12346 default     connect  DCONFAIL NOERR    20                  2021-01-20T23:10:25+0000
4        vbond   dtls    0.0.0.0     -          0    0     1.3.25.2    12346 1.3.25.2  12346 default     connect  DCONFAIL NOERR    20                  2021-01-20T23:10:25+0000
```

Do the output above show problems or the health of the system is OK?

4) I read that once the vSmart-vManage-VBond are installed on the Vmanage's GUI we have to issue the following command

https://vmanage-GUI/dataservice/system/device/sync/rootcertchain

but it's not clear to me its purpose. Would you be so kind to explain, please?

MTIA!

Gio