NetConf Proxy Updates

draft-wangzheng-netconf-proxy-01

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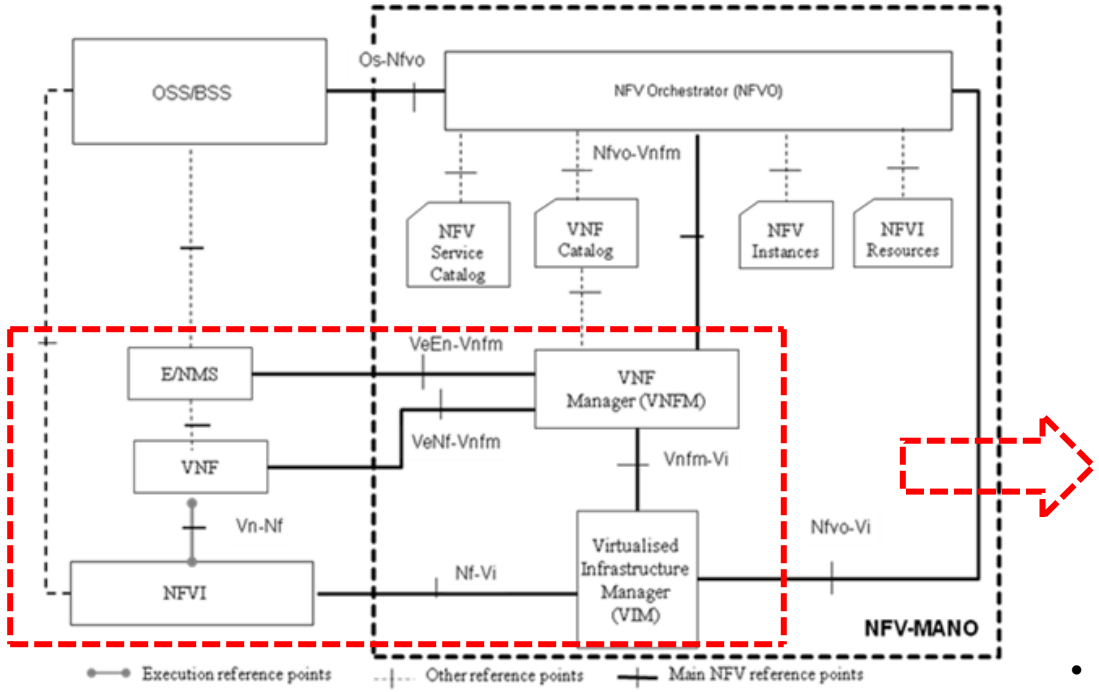
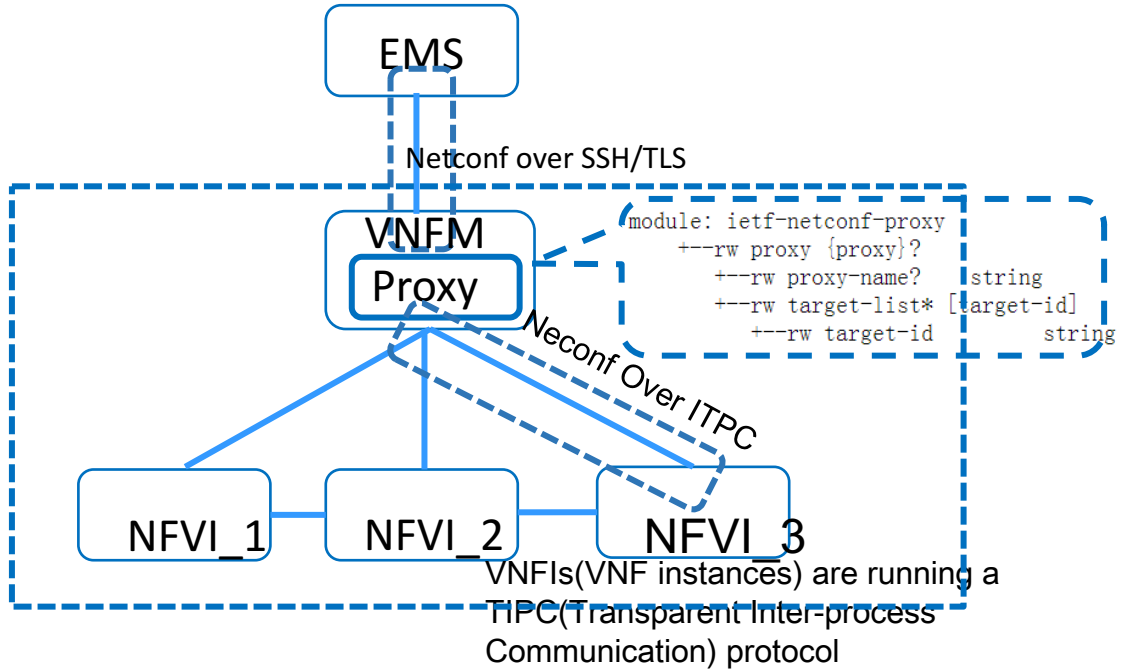
Scenario 1: Using Netconf Proxy to manage the NFVi

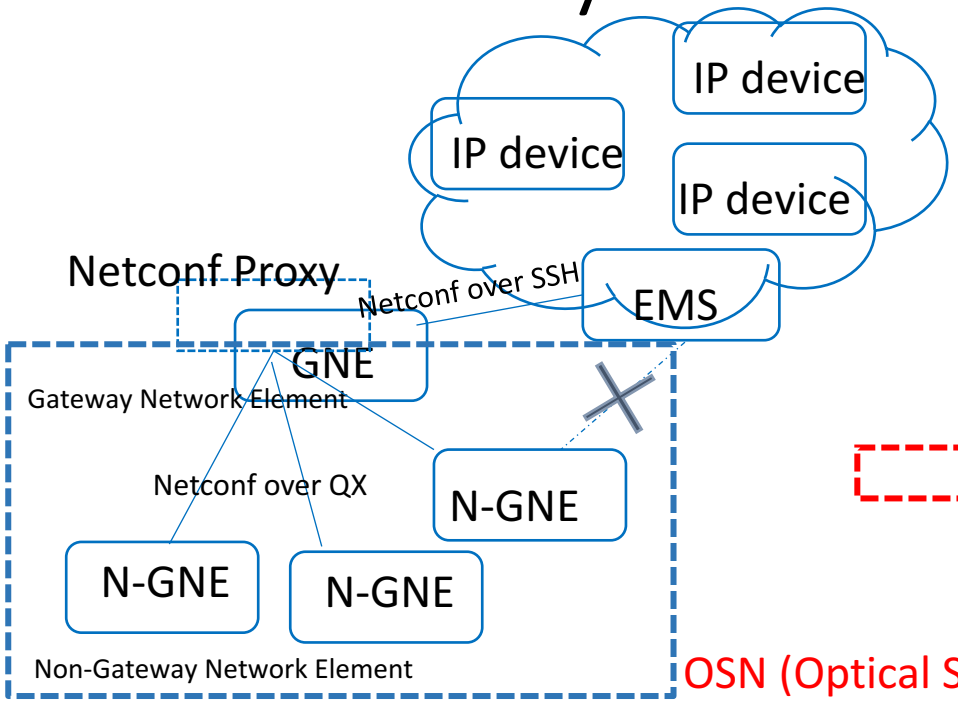


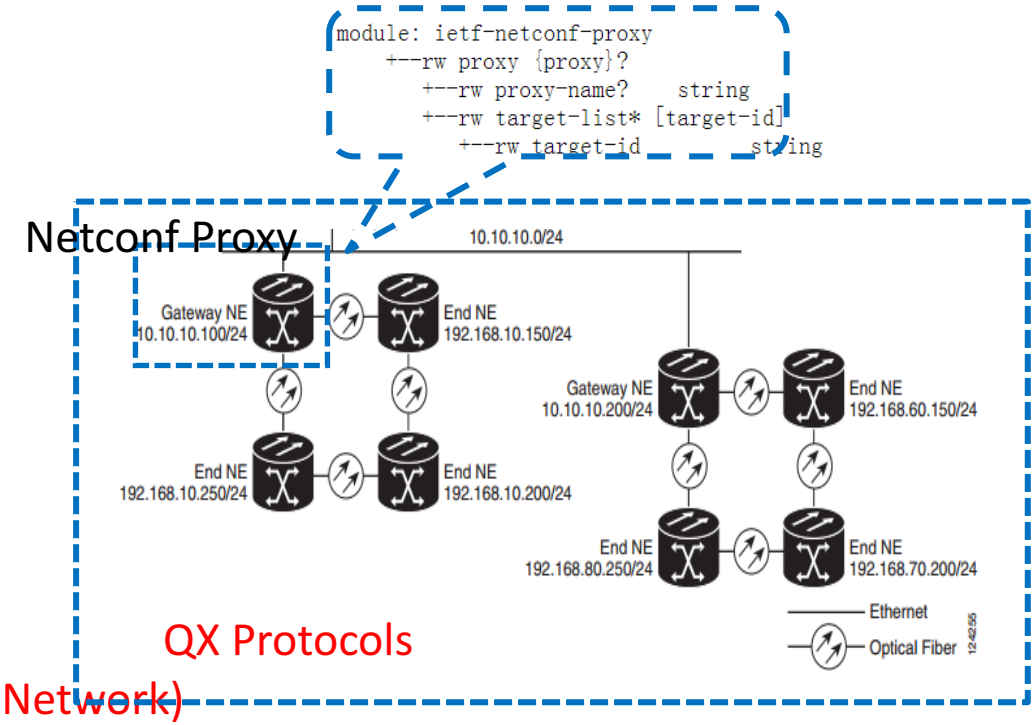


- EMS is connected to VNFM through public network.
- Within the NFV network, some private protocol (e.g. Transparent Inter-process Communication protocol) may run between the NFVIs, and these NFVIs are not assigned IP address.
- Within the NFV Network, the TIPC will provide the data to NETCONF.

- To manage the NFVIs, EMS access the NFVIs via the Proxy which located in the VNFM.
- EMS access to Netconf Proxy through Netconf over SSH.
- Within the NFV network, the NETCONF data will be transported from VNFM to NFVIs over Transparent Inter-process Communication (TIPC) protocol.
- NFVIs will report their IDs to proxy. The proxy will store these information in the "target-list".
- Base on “target-list”, the EMS can manage the NFVIs.

Scenario 2 :Using NetConf Proxy to manage the Non-Gateway Elements





OSN (Optical Switch Network)

- EMS is connected to Gateway Network Elements via public network.
- Within the OSN network, the Network Elements run QX(via QX interface [G.773]) protocol, and these Non-Gateway Elements are not assigned IP address.
- Within OSN Network, QX protocol will provide the data to NETCONF.

- To manage the Non-Gateway Elements, EMS access the Non-Gateway Networks Elements via the Proxy which located in the Gateway Element.
- EMS access to Netconf Proxy through Netconf over SSH.
- Within the OSN network, the NETCONF data will be transported from Gateway Element to Non-Gateway Elements over QX protocol (via QX interface).
- Non-Gateway Elements will report their IDs to proxy. The proxy will store these information in the "target-list".
- Base on “target-list”, the EMS can manage the Non-Gateway Elements.

Next Steps

- Socialite more comments and suggestions.
- Prepare another version.
- Call for WG adoption.

Appendix: Brief introduce for the process.

- The Process shows below:

Step 1:
Client setup the ssh/tls connection to proxy

Step 2:
The Client sends a <get> RPC to retrieve the target information;
And proxy responds with a <get-reply> RPC which containing the target id

Step 3:
The Client constructs a rpc based on received target id, and sends it to proxy.

Step 4:
The proxy receives and handles this rpc.