

Network Configuration Protocol (NETCONF) Proxy

draft-wangzheng-netconf-proxy-00

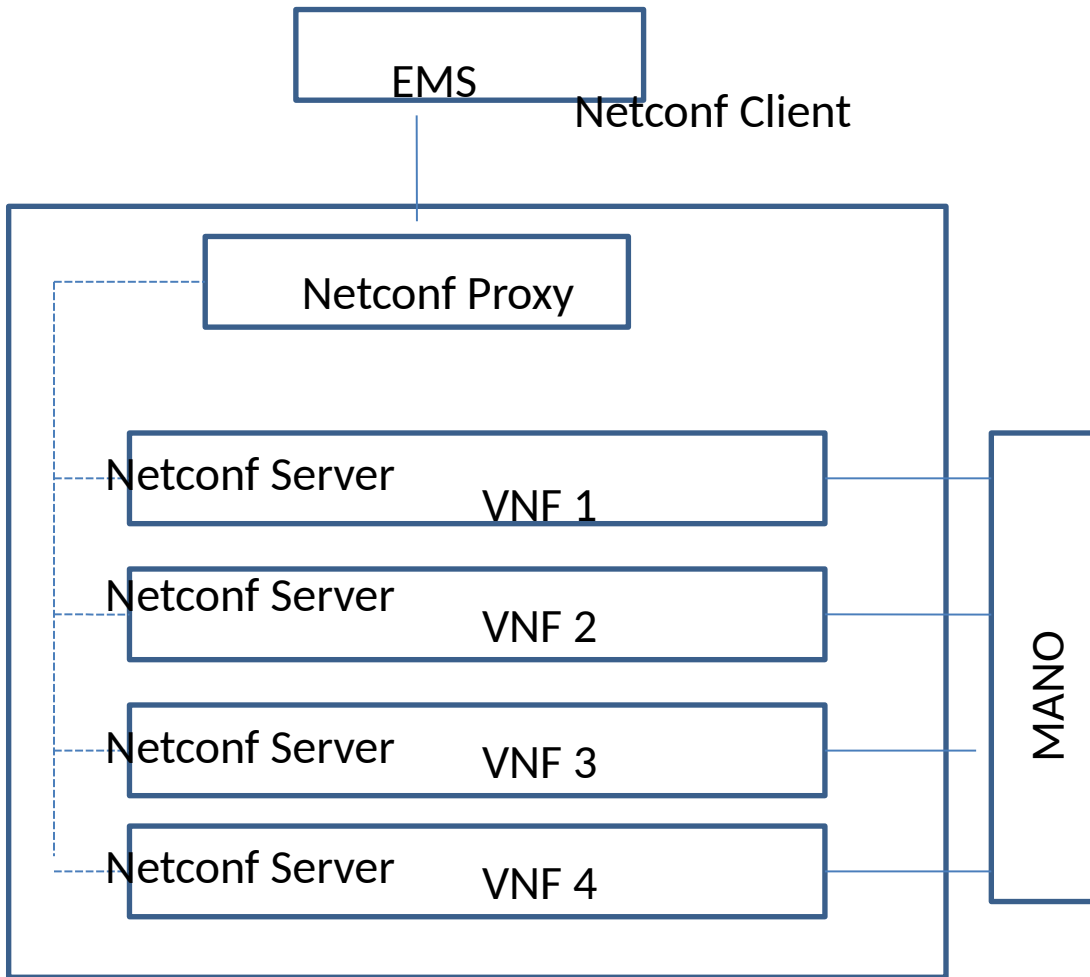
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Motivation & Scenarios

- This document proposes a NETCONF Proxy mechanism.
 - The proxy can act as an intermediary between manager and target device.
 - The client can set up a NETCONF session to a target through a NETCONF Proxy.
 - The mechanism allows the client to subsequently direct NETCONF requests to the server, to receive responses, and to subscribe to notifications from the server.
- It would be useful when a client does not have direct network access to a target host.

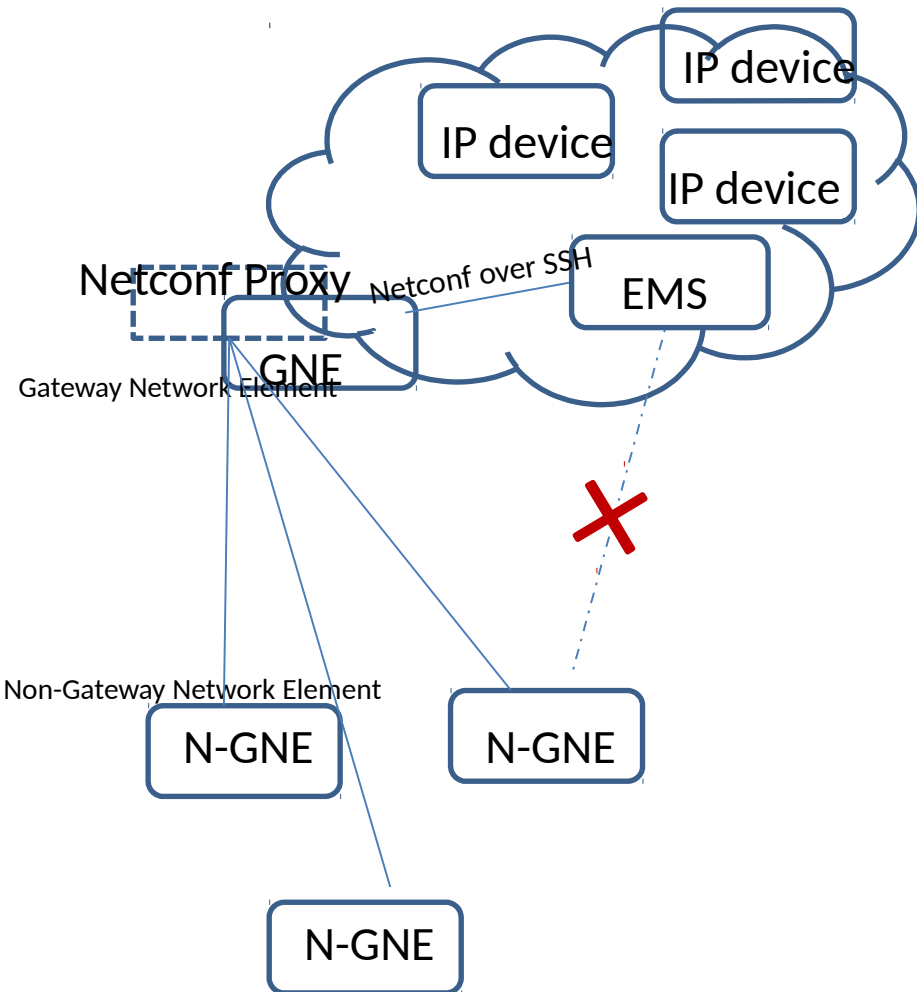
Motivation & Scenarios: VNF Scenario



- EMS is connected to Netconf Proxy through public network;
- Netconf Proxy is connected to all VNFs through private network;
- Netconf Proxy act as a pass-through for VNFs;
- EMS perform configuration of all VNFs through Netconf Proxy.
- Support for aggregated managed VNFs,
- Can reduce the management resources (like IP resources, bandwidth, etc) of large-scale management activities.

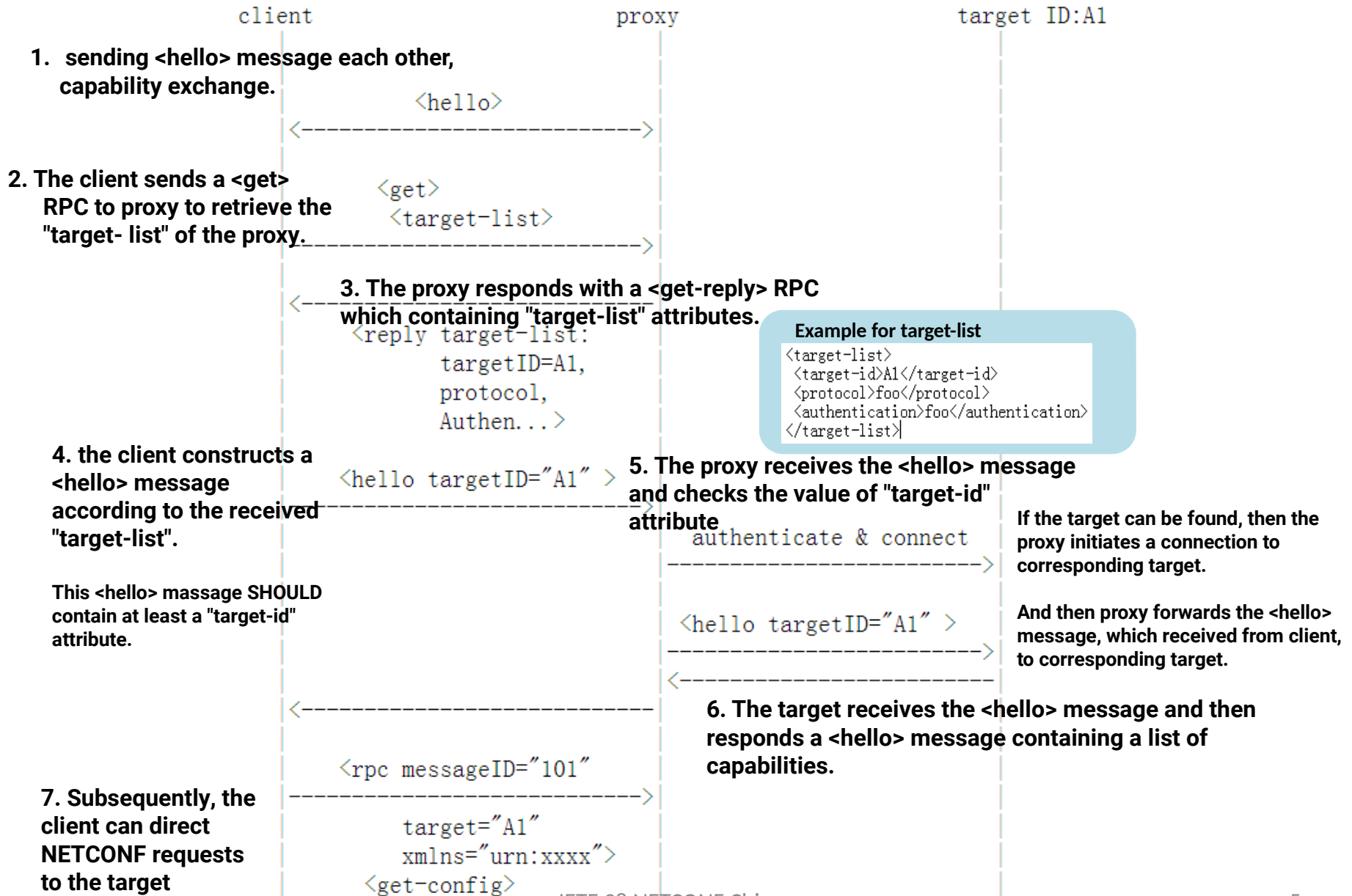
Motivation & Scenarios: Cloud Center Scenari

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- Netconf Proxy located in the gateway network element (GNE);
- Cloud Center EMS is connected to Netconf Proxy through Netconf over SSH;
- The transport protocol between GNE and N-GNEs is some private protocol;
- The N-GNEs are not IP devices, therefore, the EMS cannot be aware of the address of N-GNEs,
- and the N-GNEs are not supported NAT.

Solutions



Example for target-list

```
<target-list>
  <target-id>A1</target-id>
  <protocol>foo</protocol>
  <authentication>foo</authentication>
</target-list>
```

Next Steps

- The authors appreciate thoughts, feedback, and text on the content of the documents.
- And then prepare another version.