Netconf for UMT

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Network Configuration Protocol (NETCONF)

- The Network Configuration Protocol (NETCONF) provides mechanisms to install, manipulate, and delete the configuration of network devices.
- Extensible Markup Language (XML)-based data encoding for the configuration data as well as the protocol messages.
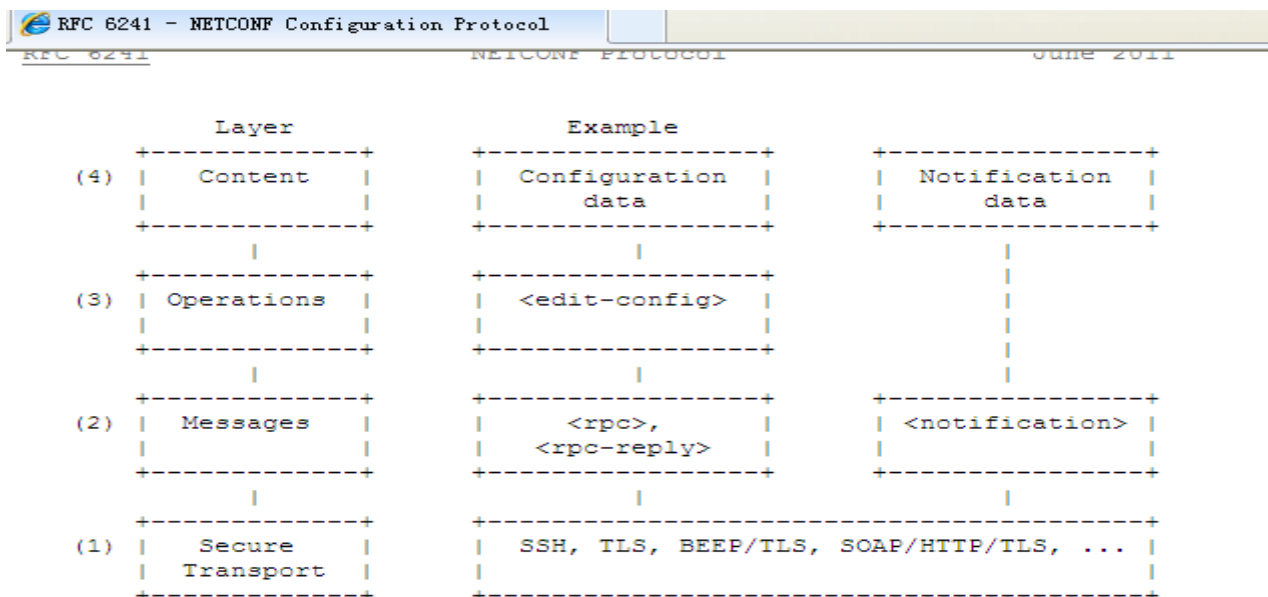
```
 RFC 6241 – NETCONF Configuration Protocol

RFC 6241              NETCONF Protocol              June 2011


            Layer                    Example
           +-------------+        +-------------------+
    (4)    |   Content   |        |   Configuration   |        +-------------------+
           |             |        |       data        |        |   Notification    |
           +-------------+        +-------------------+        |       data        |
                  |                        |                   +-------------------+
           +-------------+        +-------------------+                |
    (3)    | Operations  |        |   <edit-config>   |                |
           |             |        |                   |                |
           +-------------+        +-------------------+                |
                  |                        |                          |
           +-------------+        +-------------------+        +-------------------+
    (2)    |  Messages   |        |      <rpc>,       |        |   <notification>  |
           |             |        |    <rpc-reply>    |        |                   |
           +-------------+        +-------------------+        +-------------------+
                  |                        |                          |
           +-------------+        +-----------------------------------------------+
    (1)    |   Secure    |        | SSH, TLS, BEEP/TLS, SOAP/HTTP/TLS, ...         |
           |  Transport  |        |                                               |
           +-------------+        +-----------------------------------------------+

                   Figure 1: NETCONF Protocol Layers

    (1)    The Secure Transport layer provides a communication path between
           the client and server.  NETCONF can be layered over any
           transport protocol that provides a set of basic requirements.
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SNMP maybe upgrade to Netconf for some new deployment

- FTTdP project in BBF used Netconf for DPU management
- MEF also consider Netconf as management protocol
- So, for CPE management, it also possible to use Netconf
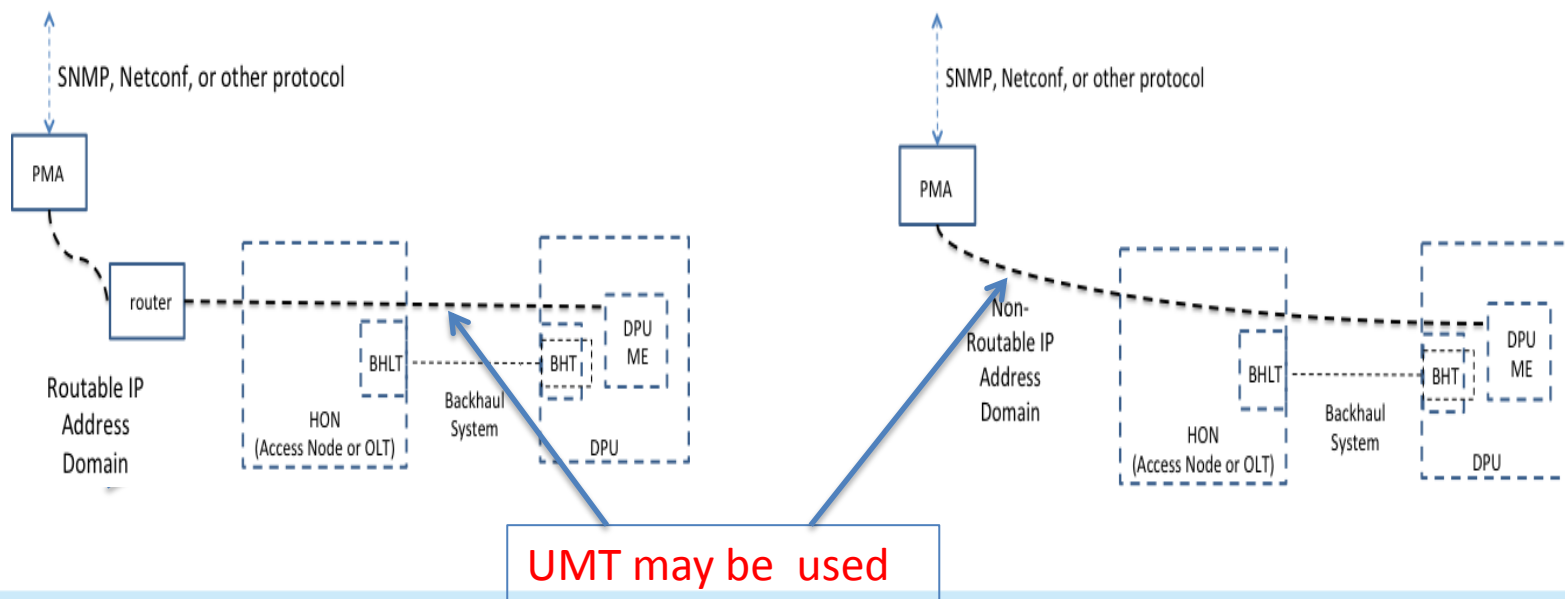
Proposal

- Suggest to add Netconf as payload of UMT.

Thanks!