IP Services Service OAM and Service Activation Testing Projects

Title	IP Services Service OAM and Service Activation Testing Projects
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At the 1Q2018 meeting in Singapore, MEF approved two projects addressing IP services that may be of interest to you. The first covers defining Service OAM for IP services as defined by MEF's IP Service Attributes project. The second covers defining Service Activation Testing for IP services as defined by MEF's IP Service Attributes project. These projects will include references to work completed by both IETF and BBF. A high level scope of each project is shown below.

Service OAM

- Project scope will be phased
    - First phase is service provider to subscriber services
    - Second phase is operator to operator services
- Define what functions equipment must support
    - Equipment broken out to PE and CE
- Recommend how operator uses the functions
- FM has two solutions
    - Proactive monitoring
    - On-demand
- FM proactive monitoring will be BFD (RFC 5880)
    - Recommendations on what options are used for different services
- FM on-demand will be ping and trace route
    - ICMP (RFC 792, RFC 4443)
    - TCP
    - HTTP
- PM has three possible solutions based on RFC 7799 definitions
    - Active monitoring
    - Hybrid monitoring
    - Passive monitoring is out of scope of this phase due to implementation specific issues
- Active monitoring is TWAMP/TWAMP Lite/STAMP (draft-ietf-ippm-stamp-00)
- Active monitoring will measure all metrics defined in IP Service Attributes document
    - Packet Delay
    - Mean Packet Delay
    - Inter-Packet Delay Variation
    - Packet Delay Range
    - Packet Loss Ratio
- Hybrid monitoring will be discussed in the document referencing IETF draft/RFC
    - Alternate marking falls into this area
    - No requirements included until implementation becomes more standardized

Service Activation Testing

- Project scope will be phased
    - First phase is service provider to subscriber services
    - Second phase is operator to operator services
    - Cloud access is not in scope for phase 1
- Define what tools and protocols equipment must support
    - Equipment broken out to Service Provider and Subscriber
- Recommend how operator uses the tools and protocols
- No end point or UNI attributes that require testing
- Service Configuration per IPVC
    - IPVC Packet Delivery
    - IPVC Max Number of Routes
    - IPVC DSCP Preservation
    - IPVC MTU
    - IPVC Ingress CoS Map
    - IPVC Ingress and Egress BWP
- Service Configuration per UNI Access Link
    - UNI Access Link BFD
    - UNI Access Link IP MTU
    - UNI Access Link Ingress and Egress BWP
- Service Performance per IPVC based on Service Acceptance Criteria not SLS
    - Packet Delay
    - Mean Packet Delay
    - Inter-Packet Delay Variation
    - Packet Delay Range
    - Packet Loss Ratio

We look forward to any feedback or comments on these projects that you might have. We will notify you when documents are available for review.

The forthcoming MEF meetings are:

- April 23-26, 2018 in Athens, Greece
- July 23-26, 2018 in Nashville, USA
- November 1-2, 2018 in Los Angeles, USA