

# LMAP WG - IETF 88

## draft-ietf-lmap-use-cases-00

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# draft-ietf-lmap-use-cases-00

- Consolidated with:
  - draft-huang-lmap-data-collection-use-case
  - draft-nagami-lmap-use-case-measurement-provider
- Now 2 Use Cases
  - ISP
  - Regulator
  - (End user use case was moved to appendix)

# ISP use case

- Identifying, isolating and fixing problems in the network
  - Assist Test and Diagnostics tools
  - Identify degradations as well as failures
  - Identify issues affecting a group of customers (shared network element, equipment type, etc)
  - Test network segments, as well as access line
  - Scheduled and ad hoc tests needed
- Design and planning
  - To assist capacity planning & monitor suppliers
- Understanding the impact and operation of new devices, technology, products and services
  - IPv6, CGNAT, IPTV, new line cards...
- Understanding the quality experienced by customers
  - End-to-end service experience

# Regulator use case

- Need to compare multiple broadband service providers, regardless of technical solution
  - Enforcement of policy
- Attributes to support Regulator use case
  - Verifiable, accurate, and fairness
  - Scalable, cost-effective

# LMAP characteristics from the use cases

- Large-scale
  - Capable of running tests on individual lines (panel is not enough)
  - Potentially MA in every edge and end device
- Standardized
  - Meaningful to compare measurements of same metric
  - Allow operators to use multiple vendors for Measurement Agents
- Diversity
  - Measurement Agents in different devices (home hubs, set top boxes, edge devices), from different vendors, with different capabilities (wired, wireless)
- On-demand tests

# (leftover) To Do's

- Reference to draft-schulzrinne-lmap-requirements-00
  - Will remove! (editorial miss)
- General comments
  - Lacking text on IPv4 vs. IPv6 and multiple interfaces
    - Under discussion amongst authors
  - Clarify how many MAs are expected
    - Expected >100,000
    - Will add to draft
  - Clarify various terms (QoS, QoE – RFC6390)
    - Will review in context of this draft

# Feedback on mailing list

- Frode Sorensen submitted extensive text for the regulator use case
  - Should we add to the draft?
    - No list comments
  - <http://www.ietf.org/mail-archive/web/imap/current/msg00920.html>
  - It's my understanding this a collective use case from EU regulators

# Outstanding Issues

- Where do LMAP 'requirements' belong??
  - In a section of this draft???
  - Or is having the constraints in Framework good enough?
- Multiple interfaces
  - Do we want a controller to dictate which/how interface tests are performed?
- Security/Privacy
  - Which draft? Framework?



# Outstanding Issues

- End-user use case
  - Currently an end-user can initiate testing via the ISP
  - Is this good enough?
  - Merge the Framework text into this draft??
- Charter text:
  - *“Standardizing control of end users Measurement Agents is out of scope. However, end users can obtain an MA to run measurement tasks if desired and report their results to whomever they want, most likely the supplier of the MA. This provides for user-initiated on-demand measurement, which is an important component of the ISP use case.”*