# LMAP Interim Meeting Notes - Sept 29, 2015

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Interim LMAP WG Meeting

Date and Time: TUESDAY 9/29/2015, 10AM EDT

Chairs: Dan Romascanu, Jason Weil Notetakers: Barbara Stark, Jason Weil

The agenda and reading list is available at <a href="https://www.ietf.org/proceedings/interim/2015/09/29/lmap/agenda/agenda-interim-2015-lmap-3">https://www.ietf.org/proceedings/interim/2015/09/29/lmap/agenda/agenda-interim-2015-lmap-3</a>.

- 1. Note Well, Note Takers, Agenda Bashing Chairs (5 min)
- 2. WG Status Chairs (5 min)
- 3. IPPM Status, how registries work (Al, 40 min)
- 4. LMAP Information Model (Juergen, 50 min)
- 5. Next steps and open mic 20 min

## Reading List

https://datatracker.ietf.org/doc/draft-morton-ippm-initial-registry/ https://datatracker.ietf.org/doc/draft-morton-lmap-examples/ https://datatracker.ietf.org/doc/draft-ietf-lmap-information-model/

https://datatracker.ietf.org/doc/draft-ietf-lmap-restconf/

http://datatracker.ietf.org/doc/draft-ietf-lmap-yang/

All interim meeting materials are at:

https://www.ietf.org/proceedings/interim/2015/09/29/lmap/proceedings.h
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#### Chair Slides:

https://www.ietf.org/proceedings/interim/2015/09/29/lmap/slides/slides-interim-2015-lmap-3-2.pdf

Note Well, assigned notetakers, reviewed agenda, thank authors of framework for getting it published

Participants: Tim Carey, Al Morton, Alissa Cooper, Holger Wiehen, Reinhrad Schrage, Cristian Varas. Juergen, Barbara Stark, Marcelo, Philip Eardley, Simon, Romano, Trevor Burbridge

### Chair Slides:

https://www.ietf.org/proceedings/interim/2015/09/29/lmap/slides/slides
-interim-2015-lmap-3-2.pdf

Note Well, assigned notetakers, reviewed agenda, thank authors of framework for getting it published

Initial Performance Metrics Registry Content:

https://www.ietf.org/proceedings/interim/2015/09/29/lmap/slides/slides
-interim-2015-lmap-3-1.pdf

Al Morton presented slides.

Registry Format - main topic today

measurement role will be configuration item

Tim Carey (looking at slide 4): If we make roles a configuration item, is it one role or multiple?

Al: MAs need to be able to say in capabilities that they support multiple roles. For a task it is one role.

Performance Metrics Experts group will be created to vet new metrics

Dan (looking at slide 5): Is the proposal for creating an IANA registry entry to require expert review or a specification? Al: Need to sort that out.

Tim: Is metric fully contained or is there a way to reference other parameters not stored in the metric registry

Al: example of repetitions is a system parameter and should not be included in the registry

Tim: so no normative events defined today it seems that would include number of repetitions

Al: when you get down to packet sending parameters that should go in the registry

Tim (looking at slide 9): Would registry entry have complete set of parameters neede to execute the test? Specifcally wondering about number of repetitions?

Al: Repetitions is in schedule and not in the registry.

Tim: Doesn't that mean that tests aren't completely nailed down? Barbara/Al: Registry entries can contain number of iterations as a parameter, but don't have to. It depends on the registry entry.

Tim: So a registry entry may not contain everything needed to run a complete "test"?

Al: We no longer talk about "test" in registry.

## Registry Meets LMAP:

https://www.ietf.org/proceedings/interim/2015/09/29/lmap/slides/slides
-interim-2015-lmap-3-0.pdf

Al Morton presented slides.

(Slide 5) Tim and Juergen had a discussion regarding outputs of a task going into a schedule without being specific to a particular action within the schedule. It was stated that outputs from a task that are

inputs to a schedule are available as inputs to the (set of) initial actions executed by the schedule. Al said we need examples and volunteered to help.

Tim: A registry entry itself, does not necessarily constitute a complete test, but will provide the information necessary to construct a necessary packet stream? So a test is a Registry Entry + some system components

-each entry specify the test protocol? no too many entries if we did that Tim: how do we ensure for a particular metric, which parameters are associated with a particular metric?

Al: Options (Run-time parameters apply to all Registry URIs)
Juergen: don't understand MA's use of Measurement Option (option-meas\_point option)

Al: could be used for anonymization purposes - allows you to replace say source IP address with something else for example

(Slide 6) Al: This section needs further discussion.

Tim and AI: we need to connect information model to the ref path and measurement points IPPM RFC

\*\*Jason's Note: The Information model currently does not include path information which is called for in the Framework Report Protocol Section - last sub-bullet

Al doesn't want to change the current format if it results in having a new entry for each output type

(Slide 7): Juergen: certain parameters seem to require specific encoding; this is not good for certain data models; different data models use different encodings (binary, text).

Al: Agree there is something that needs to be solved.

Juergen: Will send questions to ippm.

Dan: Is there another consumer of registry other than LMAP?

Al: Possibly some ETSI efforts.

Barbara: BBF.

Juergen (slide 5): How much complexity can be in output generated by a metric?

Al: Raw results of packet stream can be very complex.

Juergen: Would have done this by having each row get different statistic.

Al: So column labels are not the metrics. They are something else. What are they?

Juergen: 2 columns: 1st is metric 2nd is values. May be additional columns like timestamp.

Al: Good way this example could be expanded.

Juergen - would have setup the columns differently

Information Model. There were no slides prepared. Juergen displayed the issues list that he is maintaining. Walked through the list. Need additional discussion on handling of suppression and disablement. See proposal Juergen sent to the list. Juergen takes action item to see if idea on handling suppression can be made to work.

Jason: Do we need to add path information RFC reference in the information model (as mentioned in Al's slides)? The measurement point designation of the MA? [mp100 in Al's slide 6]. Section 5.4 of the framework describes the report protocol requirements.

Al / Juergen: this field may or may not be used for anonimization.

Juergen: Need to know how it is configured and where it is being reported. [Juergen wrote this in his issues list under a new item of "Reporting of the measurement point".]

Holger Wiehen: Raised new issue (on the list) that notion of capabilities be tied to constraints. That is, MA can report constraints to the Controller as an element of capabilities. Juergen: This may be too open-ended.

Dan: Where are we on getting to last call? Do we need to wait on restconf?

Juergen: Don't need to wait on restconf. Data model is dependent on information model. The two get updated at the same time.

Jason: Will we have a new info model draft by IETF 94?

Juergen: Yes

Jason: IETF 94 planning: Finalize info and data models as primary discussion items. Other comments?

Alissa: LMAP provisionally scheduled for Friday morning. Is that ok? Jason: Would prefer an afternoon slot to be convenient for European presenters.

Alissa - will try to schedule for afternoon

Holger - Restconf - MAs - Does LMAP thought about support for constrained MAs?

would CoAP use YANG data model - yes but it would run over YANG but would use a lightweight communication model instead of TCP

Juergen: CORE group is considering CoAP support of YANG data models.