

LMAP WG IETF 89, London, UK

Friday March 7, 2014, 0900-1130, Morning Session I Audio recording at:

<https://www.ietf.org/audio/ietf89/ietf89-balmoral-20140307-0900-am1.mp3>

Time markings of the mp3 recording are noted for the start of each topic.

Meetecho recording at: http://ietf89.conf.meetecho.com/index.php/Recorded_Sessions and go down to "LMAP WG meeting".

Chairs:

Dan Romascanu

Jason Weil (not present)

Minutes:

Chairs Slides (at 00:20 in mp3 recording)

Dan: Hi, welcome. Jason was suddenly called away, so we are stuck with just Dan.

Note Well.

Administrative Tasks. Blue sheets being passed. Note takers and jabber assigned.

Agenda presented. No agenda bashing occurred.

Posted agenda:

1. Note Well, Note Takers, Jabber Scribes, Agenda Bashing - Chairs (5 min)
2. WG Status - Chairs (5 min)
3. LMAP Use Cases - Phil (20 min)
4. LMAP Framework - Phil (30 min)
5. LMAP Information Model - Trevor (20 min)
6. IPPM registry work status and open issues - Brian (10 min)
7. Next steps and open mic

Reading List

<https://datatracker.ietf.org/doc/draft-ietf-lmap-use-cases/>

<https://datatracker.ietf.org/doc/draft-ietf-lmap-framework/>

<https://datatracker.ietf.org/doc/draft-ietf-lmap-information-model/>

<https://datatracker.ietf.org/doc/draft-akhther-ippm-registry-passive/>

<https://datatracker.ietf.org/doc/draft-mornuley-ippm-registry-active/>

WG Status

Dan: Described the status of WG efforts as shown in the Chair Slides

(<http://tools.ietf.org/agenda/89/slides/slides-89-lmap-1.pdf>).

There were no comments.

Use Cases (at 07:43 in mp3 recording)

Phil (on behalf of the absent Marc Linsner) reviewed the status of the Use Case draft

(<http://tools.ietf.org/agenda/89/slides/slides-89-lmap-0.pdf>).

There were no comments. Authors will have a call next week or so to agree on updates.

Dan: There will be another WGLC.

Dan asked who had read it. About 10 people raised hands. OK. It should be fine to go to 2nd WGLC and everyone should look at it.

Framework (at 12:30 in mp3 recording)

Phil reviewed the status of the Framework draft (<http://tools.ietf.org/agenda/89/slides/slides-89-lmap-2.pdf>).

Nalini Elkins: <comment on slide 2> Heavy network traffic days occur (e.g., Black Friday) and characteristics are different from normal days. Thoughts on how to handle?

Dan: We know these days exist. These days are not specifically dealt with in framework architecture.

Nalini: Measurement schedule can be designed to take these days into account. E.g., for these days measure less / measure more. These days can be taken into consideration.

Marcelo: Don't understand how this impacts framework requirements. Requirements are to support arbitrary schedule of tests.

Juergen: The Information Model already allows this to be taken into account. Calendar-based scheduling can be done.

Dan: Do we need text in framework?

Juergen: I don't think so.

Dan: If someone thinks something is needed they should suggest specific text.

Phil: <continues to present, going to slide 3, paraphrases slide 3> Describes updates to draft.

Phil: <Past slide 4 to slide 5> This is getting in to the agreements reached Monday (Monday get-together mentioned on slide 3), but which started from list discussions. Definitions for MA, MP, Measurement Tasks.

Greg Mirsky: You specify that MP participates in Active Measurement tests, and not Passive Measurements. Does this mean MP does not participate in passive measurements?

Phil: Correct

Greg: So for passive measurements, it must be 2 MAs interacting?

Marcelo: Difference is not active/passive but 1-way / 2-way?

Greg: That's important.

Marcelo: <tries to describe 2-way / 1-way>

Greg: We need some clarification. There is ambiguity. MP can participate whether active or passive, 1-way or 2-way.

Phil: Need example to better picture.

Andrea Soppera: Example is MA reporting passive measurements for traffic sent from MP. MP is simply something that participates in Measurements but doesn't talk to Controller.

Aamer: Passive Measurements were meant as singular observation point. Why do we need to coordinate among multiple MAs for passive measurements?

Juergen: In definition of MP just change "Active Measurement Tasks" to "Measurement Tasks" and problem is solved.

Trevor: Don't call active "2-way". Don't introduce terms of "1-way" and "2-way". Leave these definitions out and just use current terms.

Nalini: If there is MA at the client that does a packet trace... All you need is that one MA and not anything else. It may be that MP does helping function. Why can MP not help with passive?

Alan Clark: We (referring to Alan's affiliated company) use "Agent" as something we're controlling. We use term "Network Entity" to mean the thing that we execute tests against but don't control. MP doesn't seem to be this, because there seems to be an assumption that some specific "helper function" exists in it. Need tighter definition of MP.

Phil: <requests additional clarification>

Alan: <clarifies further how he uses various terms>

Juergen: We don't make a distinction as to what types of MPs we have. There's no need to have different types of MPs because they don't talk to each other or anything else other than the MA during measurements.

Dan: <to Phil> Did you get any sense of how to proceed with this? We can take it to the list also.

Phil: If we remove "Active" from MP definition is that ok?

Dan: If removing "Active" from MP definition is the right answer, hum. <weak humming>. If no, hum. <weak humming>. <humming is inconclusive> There is more work to do.

Juergen: Can those who disagree say why they disagree?

Dan: Yes, send the proposal to the list and have people say why they disagree.

Marcelo: We have one clear question of whether or not there needs to be 2 MPs, one with helper function and one without. It seems that there is a failure to communicate what was meant in the draft. There seems to be nothing new suggested that is not in the document - just a failure to communicate.

Juergen: Not sure where we are. Unclear whether those who hummed against removing "Active" were in favor of keeping as is or want something different.

Dan: There was a 2nd proposal to completely remove MP definition.

Barbara Stark: This is an operational framework and not describing the actual running of measurements. The operational framework is not supposed to care about which measurements are run or their directions.

Al Morton: There are different types of measurements that needed 2 endpoints. Not all endpoints were controlled. The definition is here to indicate an uncontrolled measurement endpoint.

Phil: For me the definition [of MP] includes both of the types of endpoints that Alan C. talked about.

Brian Trammell: Al and Barbara seemed to say different things, but I agree with both. We need framework to provide descriptive architecture of measurements that is sufficient to understand the operational protocols. If we go to slide with the picture <slide 6 now displayed on screen>... Looking at this picture, with my ippm hat on, this argument is happening in the ippm space. The configuration simply tells the MA which MP to talk to. This happens often in active measurements where you need another endpoint. But I have no idea what a passive MP is which is why I was in the back urging people to hum against. BTW, pictures are fine.

Benoit: Can we go to 2 slides with pictures and have Phil explain those.

Juergen: I think removing "Active" is good because it's possible for the MP to send traffic to MA and MA to passively measure the traffic and report results.

<break in discussion for Broadband Forum (BBF) report> (at 50:00 in mp3 recording) David Sinicrope: Giving quick update on BBF work. BBF work (item 304) is progressing. BBF will try to liaise work to IETF soon. It probably won't be ready for straw ballot coming out of 1Q2014 meeting 10-14 March), but will try to get stable parts sent. Many of the same people are participating in BBF and IETF and this is good.

Dan: Can you send email to Imap with name of BBF documents and relevant info?

David: Yes, but we also want BBF to liaise stable text, because otherwise the info is only available to BBF members.

Dan: Should we send last call of Use Cases announcement to BBF?

David: It's nice to send liaison but people are tracking Imap and will know, anyway.

<back to Phil> (at 53:13 in mp3 recording) <displaying slides 6 and 7 (pictures)>

Phil: We will try to have pictures that are more descriptive and include several examples in draft to illustrate how terminology is being used.

Marcelo: It would be useful to include examples in next version that explain how definitions satisfy various usages.

Greg Mirsky: Note pictures will be ASCII-art and not as good as pictures in slides. Need to show "1-way" somehow in a picture.

Matt Mathis: Gave example of MP that is a passive device <discussion with Phil to clarify example>. Wants to know why people were against dropping "Active".

Greg: Reason for humming against dropping "Active" is MP is subset of MA.

Barbara: This is an operational framework. MA is the device we control. MP is something we don't control that MA can interact with.

Juergen: What Barbara said.

Dan: <at floor microphone, as contributor> I agree that removing "Active" will clarify the definition. Don't think framework should be talking about active/passive or directions.

Alan Clark: Disagree with Barbara. This is more than just operational framework and we need to describe better the elements that participate in testing. Need elements definitions that are knowledgeable about the tests.

Barbara Stark: <to Alan> Which of those elements are in communication with Controller and which not, and which provide Reports, because that's what I care about?

Alan: The MA communicates with the Controller, the responder function could be configured to have credentials and respond but that doesn't mean it's configured by Controller.

Barbara: <mumbles something not at microphone>

Alan: If Controller can configure the responder function then you would have to allow for communication to occur via CLI (Command Line Interface) and not just via the Control Protocol that will be selected.

Barbara: <mumbling again> <The framework does not mandate a single Control Protocol and theoretically even CLI could work if it supported the Information Model and other requirements of a Control Protocol.>

Dan: Use the microphone, please.

Trevor: It does not matter what type of box the MP is. It has no impact on our framework. MA is controlled as part of LMAP framework. If not controlled as part of LMAP framework, then MP. Of course MP may still be controlled by something, but if not per LMAP, then it's a MP.

Andrea: We can remove "Active" (slide 7, line between 2 MAs), and elsewhere. Do we want example 1 and 2 (slides 6 and 7) in draft or can we just have generic example?

Dan: We need examples clarified.

Phil: We need to add examples. These 2 and others as well.

Mike Ackermann: Is it correct that MP is something not managed in the context of this framework, as Trevor said? <many people nodded, including Trevor, but not all>

Phil: <Paraphrased slide 8>. (at 01:09:48 in mp3 recording). Framework is silent about level of Instruction update granularity.

Phil: <Paraphrased slide 9>. Described overlapping measurements tasks and propose that allowing overlapping measurement tasks is up to the implementer. When it happens it is info that can be in the report.

Nalini: Did we want to take any security aspects into account? E.g., how measurements can be used to flood system and create DoS attacks?

Matt Mathis: Happens in many cases where inappropriate measurements can impact authorized measurements.

Phil: Will think about this for security section.

Phil: <Paraphrased slide 10>. Should MA do CPU test to see if it has resources to run task? Proposal is not to change what framework says. This is not something that needs to be discussed at framework level.

Phil: <Paraphrased slide 11>. Talks about suppression. We have option that you can suppress on-going tasks.

Matt Mathis: Suppression should generate record in log that test was suppressed.

Phil: Thinks this is mentioned but will make sure.

Nalini: Wonder if everything should be logged. Log sanity checks, too.

Phil: Some question about possible need to suppress MP, but MP is uncontrolled.

Matt: Rather say that suppressing MP is out of scope of this framework.

Phil: OK. OK? <no disagreement expressed>. OK.

Phil: <Paraphrased slide 12>. Need data transfer task concept which Trevor will address with Information Model.

Dan: Will it be mentioned in framework?

Phil: Yes.

Phil: <Paraphrased slide 13>. Test environment and subscriber parameters may be used to "enhance" test results in report. They can be included in the report but how to get info is not discussed.

Phil: <Paraphrased slide 14>. There were comments about things that needed more text. Hopefully work can be done in coming weeks. Definitely need to work through MA / MP on list. Hopefully will publish revision in about 3 weeks or so.

Dan: We will work on timeline.

</end of framework discussion>

Information Model

Trevor Burbridge on Information Model (<http://tools.ietf.org/agenda/89/slides/slides-89-lmap-3.pdf>) (starts at 01:28:55 in mp3 recording)

Trevor: <Paraphrased slides 1-6>. <slide 1>: There are points that still need to be discussed before providing -01 version of draft. <slide 2>: Control Protocol and Report Protocol will carry information.

<slide 3>: Info Model has different information sections. <slide 4>: Last recap slide. Instruction has different parts. <slide 5>: What changed going to -00. <slide 6>: Functional changes to info model.

Nalini: <slide 6 is on the screen> Looking at pre-configuration portion. Certificates expire. Anything more to say about that?

Trevor: Controller should ensure certificates are up-to-date. Controller does need to know about status of such things. Can allow for certificate status to be reported.

Tim Carey: How certificates are configured or maintained is outside the scope of lmap.

Trevor: Agreed.

Benoit: Logging is required. Should it be something that can be extended beyond LMAP and be described as a Measurement Task?

Trevor: Will come back to changes made to express logging as measurement task.

Trevor: <Paraphrased slide 7>: Continues describing functional changes made to Info Model.

<Paraphrased slide 8>: Mentions proposed changes to include in -01. <Paraphrased slide 9-10>: Examples of new task and channel model.

Matt: Like this architecture. Need to allow data transfer task to run asynchronously. That would solve many potential problems but may be out of scope.

Tim Carey: You mentioned that there is a capability that if no output, don't send report. This is tied to channels now. Will this come over to this new model?

Trevor: Yes.

Trevor: <slide 11> Discussions that still need to happen.

Phil: Are there examples for how to do general interface names? Has anyone done this?

Matt: SNMP has ways to do that.

Need to make sure that reported info is all uniquely identified. This helps identify task collisions.

Aamer: <back to slide 10> Will there be multiple logging tasks with their own schedules that get attached to a measurement report?

Trevor: We will not specify that.

Aamer: So it's allowed?

Trevor: Yes.

Aamer: We still need connection between logging and measurement task records.

Trevor: Yes.

Matt: Need log of all attempted tasks.

Trevor: Yes, any task needs to have an output (whether or not successful).

<ippm update> (at 01:59:13 in mp3 recording) Brian Trammel <as ippm chair>: <slide of relevant ippm work, slide 11 of Chair slides> Slide shows hyperlinks to ippm agenda for meeting this week, draft-ietf-ippm-lmap-path and draft-ietf-ippm-rate-problem.

Regarding registry work, there were 3 documents and hum for adoption which indicated adoption was desired.

Don't understand passive registry problem as well. Needs more input.

Also need to better understand passive/active hybrid measurements.

Expect to have pretty good documents after Toronto.

Please come to ippm.

Next Steps <slide 12 of Chair slides> (at 02:04:35 in mp3 recording)

Dan: We need to start discussing proposals for protocols and data models. Are there any ideas or initial proposals to declare for this?

Marcelo: We presented at last IETF for using HTTP and JSON as a protocol. We thought it more important to focus on framework and information model at this meeting, but are continuing to actively work and expect to bring work in to next IETF meeting.

Dan: Excellent. Other thoughts on using existing protocols? Between now and Toronto is good time for submissions suggesting existing protocols. Chairs will send something out to lmap and ops lists on the need to discuss protocols next.

Matt: Suspect we need protocols like those used to control printers, but I don't work at that layer of the stack.

Dan: Suggest that you ask this on the mailing list. Thanks for the good work.