

LMAP WG Meeting Minutes
IETF 92
Wednesday, March 25, 2015, 9-11am

Chairs: Jason Weil, Dan Romascanu
Minutes: Barbara Stark & Marius Georgescu
Jabber: Juergen Schoenwaelder
Agenda posted at: <http://www.ietf.org/proceedings/92/agenda/agenda-92-lmap>

Jason walked through the Chair Slides: <http://www.ietf.org/proceedings/92/slides/slides-92-lmap-0.pptx>

FRAMEWORK UPDATE

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Al Morton had no slides but briefly spoke about the framework draft. It is in IESG evaluation.

INFORMATION MODEL UPDATE

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Trevor Burbridge remotely presented the information-model slides: <http://www.ietf.org/proceedings/92/slides/slides-92-lmap-4.pdf>

There was discussion regarding how to run tasks sequentially and simultaneously. Sequential can be in a single schedule. Simultaneous would be in separate schedules set for same time. Trevor will provide clarifying text.

Juergen Schoenwaelder: I want to be able to run task A and then run task B, and that doesn't seem to be ok for the moment, because everything is triggered by time schedules.

Trevor: It's specified in the model that if you have two tasks, one after the other, they will run back-to-back with minimum gap.

Juergen: I thought they will start all at the same time.

Dan: If you want to run two tasks at the same time, how would you do it?

Trevor: If you want to run two tasks at the same time, you have to create two schedules with the same execution time.

Dan: There needs to be some text to explain this.

Trevor: There is, I think. We will need to review it.

Dan asked if we should try to get this approved and published or keep cycling it with data models until it is more stable. Preferences were expressed to keep information model open until data model can be used in an implementation.

Suggested that information-model needs better descriptions.

Need more reviews. Some people would prefer to review information and data models together.

We will come back to discuss at end of meeting during next steps

Juergen: For me the preferred path would be to synchronize frequently, otherwise you lose track.

Vichanday: we should ask for more reviews from the WG.

Dan: Sending a document to WG last call may trigger more attention, or we should we try to get more review from the WG without getting the document to WG last call.

Dan: Let's see a show of hands of how many people have read the draft. Everybody who read sent comments ? Ok so n-1 people also sent comments. Please find the time to review the document, if you do have comments.

Barbara: I think the document is at a stage where the data model should be designed in order to identify problems.

Dan: This is very true. On the other hand there are people here experienced enough in reading data models and understanding the architecture without implementing it. I am not expecting comments only from implementers.

Al: I really support Juergen comment to include descriptions in each of the elements. I think it's absolutely necessary.

Dan: Can I get from the people in the room a few more volunteers ? The list is open.

Benoit: There are many people that have not reviewed the document; Is it because there is no data model that the people are not reviewing the information model ? So, let's assume we have both data model and information model. Who would want to review both of them? Some more people.

Protocol Criteria:

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Barbara Stark mentioned that it was revised after last call, but there is no need to review as it should not need to be revised after this meeting. There are 2 protocol contributions into this meeting.

REST Style Large Measurement Platform Protocol

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Vic Liu presented <http://www.ietf.org/proceedings/92/slides/slides-92-lmap-2.pptx>.

Presentation on proposal to use REST style LMAP protocol. It may be that the biggest different is that for Control sessions, MA is the server, and for Report sessions the MA is the client. Discussion on NAT traversal techniques. Mentioned that NAT traversal techniques work by having the client start the session.

There is a question if using YANG data models with RESTCONF, how is this different than other proposals.

Dan: So the criteria is presented in the draft, that's what you meant with that bullet point.

Vic: We are considering extending the JSON with the information model.

Dan: Do you mean to propose more criteria for the information model, the extensibility criteria.

Barbara: There is a requirement that it should be extensible, if that's needed.

Vic: More detail can be added.

Dan: Did you read the other proposal? What do you think is the principle difference?

Vic: I think the main difference is in the implementation of the control protocols. The other

proposal implement the controller as a server and the client as MA.

Marcello: Can you explain how this works through NATs ?

Vic: There are many NAT traversal protocols proposed in the IETF. WE can use one of those.

Dan: One thing to add is a short section that explains how this can allow NAT traversal.

Marcello: What is the benefit of this ? What is the motivation for this, other than being different?

Dapeng: I think the benefit is that you can port the controller.

Marcello: OK, that make sense, but if you need to use a NAT traversal technique, so you will still need the client to initiate the connection, and only after you can allow the controller to push information.

Trevor (over Jabber): What does adding information mode mean ? What does adding YANG and restconf mean?

Vic: For now we implemented the configuration by XML and REST. I think this is very simple and the header is short, but by using RESTCONF it can contain more information and it can be accepted by the WG.

Dan: i think writing a YANG data model can be useful for both proposals.

Dapeng: I think our proposal has some benefits. it can save a lot of unnecessary traffic in the network. That's a very important aspect of our proposal.

Matt Mathis: I think that the discussion on NAT is important. I don't think that NATs are a part of the architecture, and that means that the protocol can't presuppose which end has to do the initiation. There has to be a mechanism to do it both ways. But it can't be an architectural property of the protocol to always start in a certain way. Otherwise, there will be many cases in which it will not work.

Marcello: I think it's fair to assume that NATs are everywhere. I understand that NAT cannot be part of the architecture, heavily optimizing for a very common case seems reasonable to me.

Dan: We really did not include in the decision criteria anything about this. Do we have an optimal criteria ?

Barbara: The question in the criteria was simply: Do you have anything else than the basic STUN, TURN & ICE that you make use of ?

Dan: If we need to optimize for a certain interaction, we need to discuss this in the criteria. I don't think it's the right way to have that discussion here.

Vic: We are hoping to gather more comments on the mailing list.

Large Measurement Platform Protocol and YANG Data Model

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Juergen Schoenwaelder presented <http://www.ietf.org/proceedings/92/slides/slides-92-lmap-3.pdf>.

Proposed NETCONF/RESTCONF with YANG data model.

Criteria shown in email: <http://www.ietf.org/mail-archive/web/lmap/current/msg02035.html>

Dan instructed protocol proponents to have updates within a month. There will be discussion on the list, and then an interim meeting. Suggestion to adopt YANG data model as WG draft, since both proposals use that. Dan asked for Hum on adoption of YANG data model. Hum was all in favor with no dissenting hum. The question will also be taken

to the list.

It would be good if there were working code to show at time the WG is ready to make a decision. Targeting late May for the interim where it would be good for WG to make a decision.

Dan: 2 suggestion

1- use RESTCONF with a YANG data model. Use some kind of REST case. The YANG model is the common denominator.

2- I would like to put your mail about how you made the criteria to have some symmetry.

[Unidentified speaker] Would there be any changes to the RESTCONF ?

Juergen: No, we have no plans to change it.

Dan: How about writing a short Internet draft about RESTCONF. We need to somehow document it if it is to become a LMAP protocol.

Ed: examples should be helpful

Juergen: how many examples are needed ?

Dan: We need this Internet draft as a second proposal. At this point in time the two proposal look very similar.

They seem to be bridgeble.

Vic: what is the time of pooling. Aprox. how much traffic is needed to perform pooling ?

Juergen: We need to do a RESTCONF tutorial. [Many explanations about how RESTCONF works]

Dan: We need documents on how the proposal work. How about by the end of April ? One month?

Barbara: I was curious, should we have two proposal?

Dan: we discuss by the end of April about merging the two proposal and we decide by the end of MAY.

Juergen: we have code for the model, but not for the protocol.

Dan: you can accelerate a decision by showing your code works.

Dan: Let's get a humm. The question is: YANG data model as the lmap data model ?

If you agree please humm.

many people humm.

Strongly disagree ?

no humm

We have strong consensus.

Dan: Working code can help with the decision.

Juergen: Running code on what?

Dan: various functionalities. Is this possible by mid May ?

Any other comments ?

[no other comments]

Jason: NAT traversal is one issue. IPv6 firewall in another. Is that covered in the toolkit ?

Use Cases for Collaborative LMAP

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Rachel Huang presented slides on Use Cases for Collaborative LMAP.

Slides will be uploaded after the meeting.

Discussion indicated that use cases were interesting, and solution is not obvious. Use cases are not in scope of current LMAP charter but could be considered for new charter and next phase. Dan encouraged people to read draft and discuss/comment on list, keeping in mind that the idea would be to consider for new charter.

[Unidentified speaker]: Two somewhat different scenarios. Province has a big virtual agent. The second one seems more likely. There's much more data aggregation. I'm wondering if you're more concerned about real time.

The motivation is real time

Muchom ???: collaboration between probes and not just the controller. From the perspective of the regulators, isn't that going to look like sabotage ?

Rachel: I haven't considered that in detail.

Dan: It seems there are 2 problems.

1. We have a scalability problem (very large networks) current architecture is not sufficient. Maybe we missed something in the design. I am trying to separate the problem from the solution.

The issues of scalability is more complex. We need to solve issues of authority.

2. The issue of multiple domains.

I believe that when you are done with these two we can start a possible re-charter.

[Unidentified speaker]: thank you for expressing interest in the scenario. In the EU we have not discussed the details of the architecture yet. But I wanted to say we are interested in this scenario and we are interested in contributing

Al: This for the next phase of the lmap charter. This looks over the edge.

Matt Mathis: one of the problematic things in my experience is the lack of good way of delegating authentication. We need to think some more about this.

Dan(as chair): How many people have read the I-D ?

more than 5 less than 10

Please read and comment on this.

Possible recharter at the IESG. good work and thank you.

Comments to the list.

Liaison addressing IEEE project 802.16.3 (Mobile Broadband Network Performance Measurements)

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Antonio Bovo remotely presented slides for Liaison input addressing IEEE Project 802.16.3. <http://www.ietf.org/proceedings/92/slides/slides-92-lmap-1.pdf>

Both active and passive measurements are covered by the architecture. There was discussion around how and whether to include "Service Attributes" and environmental parameters (conditions under which a measurement was conducted) in the information model. Trevor explained that the way these are handled in the information model is to treat

the service attributes / environmental parameters as the output of a Task that is called in a Schedule. More clarification might be needed. Dan encouraged contributors from 802.16.3 to provide a IETF draft describing the wireless use case, and to provide direct input and comments to LMAP WG drafts. Dan will aim to set up an interim meeting the 2nd or 3rd week of May.

Mike Ackermann: in the realm of active vs passive, does your frame accommodate both?

Roger: Yes. [intricate explanations]

Mike: you listed a couple of challenges. What is the number 1 challenge ?

Roger: from my perspective only, I think that the focus on mobile is the major contribution. And giving a specific supplement, like the change of radio conditions and keep in mind that the mobile parameters are taken into consideration in lmap.

Hening: having had some experience with mobile measurements, a detailed contribution on the mobile parameters can have a significant effect on performance.

Summarize in detail what are the parameters and how they fit into the data model.

Roger: I agree, that the parameters can be static/ dynamic, we can have different radio conditions, different mobility conditions of the user (e.g. indoor, outdoors) There are a number of scenarios which can be taken into consideration.

Juergen: Is this a concrete protocol or just a concept ?

Roger: the protocol is sketched as a workflow and specific procedures are listed. There are also working documents that are related to the peers and a data model that can be useful from the semantics point of view.

Barbara: The lmap schedule needs to continue. I do not see why IEEE members cannot contribute individually.

Dan: IEEE liaison, actually we are in a phase where we need to complete the 1st phase of lmap. I encourage the participants of 802.16.3 to write a mobile lmap draft. By looking at the enhancements i don't see anything ground shacking. Maybe multiple ...

for the info model. LMAP over transport 802.16.3 folks know the details. Testing should be done to confirm there are no problems

Barbara: the environmental conditions, there was that decision to not include those in the IETF docs. Parameters were added as an extension.

Dan: short draft on mobile use case. Collaborative use case discussed by IETF93

Benoit: you're doing a good job to summarize this. Multiple domains etc. We start to see the lights. Focus on the use cases.

Not a presentation on the solution. Let's not go there now.

Dan: will send a doodle poll for the meeting: 2nd week of May, 3rd week of May.