2014年9月16日 星期二

IETF DMM Intrim 2

- Time: 2014/9/16 8:00 Athens

- Attendes: Jouni, Dapeng, Alper, Carlos J. Bernardos, Danny Moses, Fred Templin, Satoru Matsushima, Anthony Chan

- Jouni: Last IETF, the conclusion were to form some teams to work on document. those teams working on each milestone document skeleton. Within the working group do decide whether the skeleton is good enough. Skeleton document would like any other individual document and we could do call for adoption. Are we still on the same thinking? we have three teams according to last IETF meeting.

- Alper: Can I response to the work split?

- Alper: Whether to form design team, I do not have strong opinion. Regarding how to split work, we need to discuss in detail. The work item just every high level some idea of piece of work. We need to very clearly draw the border. I can present my view of work spitting. charter text does not show how to spit the work.

- Alper: Here is how I proceed the work space to spit into pieces. You may not agree on the details. Here I am showing a mobile node communicate with CN. Four different flow types. The first flow1, the flow is anchoring on the access network. Anchoring also covers host routers scenario. shows two pings, main point is the IP address is maintained by the access network. IP address stays the same when moving access network. Flow 2, pings is in the CN, IP address is maintained the CN network. 3rd type of flow, does not have mobility support, the mobility handles at higher layer support. 4th flow is anchoring at core network. That is not other type of a choring. Taking this as the baseline covering all the possibility, go the next slides. Work items for us, first is flow 3, does not any work for us. flow 4, already take care of IETF mobile, and 3GPP GTP etc, nothing new for us to do.

- Danny: Agree about flow 3 and 4. But since we are planning to provide MN some way of selecting the type of flow each application want to use. We need some kind of negotiation, or the network convey to the MN, this need some change even we use 3 or 4.

- Alper: Yes. that implication has 3 and 4. like item 2. I will get in to that later.

- Alper: Let us jump to the item that I think is related to us. Look at the work item 1 here. I have presented in IETF90, interaction between IP layer mobility and higher layer mobility. coordinate different mobility solutions. Specify which mobility solution to use which flow. 2rd item is source address selection, how to bind a flow to an given IP address. Whether fix IP or mobile IP etc. That item ties into anchoring in the core, anchoring in the CN etc. 3rd item is access network anchoring. Access network

anchoring involves discovery of the anchor point's capability. How the mobile node configure IP address that subject to access network anchoring and then how set up the data path and updates the corresponds mobility events. 4th item is doing the similar thing for the CN and CN anchoring. again, the discovery of capability, configure IP address, setting up the data path. These are the items. For mobile IP based anchoring solutions, we do not exclude Mobile IP based and Proxy Mobile IP based solution, it will be both considered. For the access network anchoring , both Mobile IP and routing based solutions will be considered. User plane and data plane separation will be applicable in various scenario. Each work area may end up generating one or more specifications. Let me show the last slides then take questions and comments. This slides I have done analysis on the mailing list. Here I am showing each of these existing drafts fall into the the work items. It not means to be beady contest. It like a cross check. That is it, I can talk questions and comments.

- Danny: I general I feel good split, I support it. Maybe there are some details we can add. For example, we need work to defining APIs to indicate the type of mobility. receiving notifications, like IP address changes etc. You mentioned tunneling and host routing, as a way of routing packet to the mobile node. There maybe other solutions. We should show other solutions as well.
- Alper: Regarding other solutions if you can name it , I can add it.
- Danny: Maybe double NAT as alternative to tunneling. Find a way to use Mobility IPv6 sub headers also for routing.
- Jouni: Regarding the original split of work, I have mine, that is my personal opinion, comparing with Apler has. Source address selection kind of thing, is part of expose mobility. Number 4, CN anchoring, this is could be mobility anchoring enhancement. could be part of the enhance anchoring selection. Then for the forwarding path and signaling management, that would be part of number 3, access network anchoring. not sure whether it would cover all the things that you have in mind. seems that the work item of exposing mobility state is lest controversial thing. Include some mechanism embedding the meta data in the address configuration phase.
- Alper: Yes. It not only api, it needs network to support this.
- Jouni: You mention work for API, is it something similar to RFC 5014?
- Alper: Yes, it could be extension of RFC 5014.
- Jouni: Next question is whether we need multiple document. one for API extension and one for convey mobility meta data.
- Alper: My option is separate documents, one is for DHCP, one is the source address selection etc. multiple documents.

- Jouni: Kind of summarize, what we have in the exposing mobility state. milestone like multiple document describing API extension to let the applications to select IP address. to have the information certain IP address is intended to how to use it. I would suggest that we call for if some one who want to coordinate.
- Alper: I can volunteer myself.
- Jouni: Any one have problem with Alper to take the coordinator role for this work item? Any number of ingested people can join and work together. Or you can go and write document and submit as individual document.
- Anthony: Can you repeat which item is it?
- Jouni: exposing mobility state to network and mobile node.
- Anthony: John may also interest.
- Jouni: I will announce this in the mailing list, people will know who is the task leader of this. Even this kind of team, every one can go and submit their own documents and call for adoption. we can not prohibit anyone submit individual document. It is in the same line.
- Danny: In the past, we just had multiple people writing multiple document. we should not disallow any one to write any document. since we are trying to form a team, at least suggest that people work as team to focus.
- Jouni: This is trying to make people to work together at the beginning. we have one done. The other thing that I was thinking about is whether it is easy to understand enhance mobility anchoring. Also Alper's CN and network anchoring would fit into this work item. This would also inline with other mechanisms, like enhancing PMIPv6 etc. any thought about that?
- Anthony: access network anchoring?
- Jouni: In general documents for the mobility anchoring enhancement. my personal opinion is this item is Mobile IP flavor.
- Fred: We are discussing on the ML solutions that not mobile IP based. can this in scope as well?
- Jouni: In theory, is it yes. I am not follow the discussion in the ML. Not sure you have any conclusion.
- Fred: Discussion is still on going.
- Alper: In my presentation, I have two items, one is access anchoring, the other is CN anchoring. last question, you are combing the two or you lost the other?
- Jouni: I was asking if it could combine in the same milestone.

- Alper: I think the two can be combined. number of ideas for access anchoring, if you want to limit number of design team we can do that.
- Jouni: Whether is there any alignment between access network anchoring vs CN.
- Alper: At the hight level, we need coordinate across design team.
- Danny: On the other hand, I do not expect application can use entirely different set of APIs to request a CMIP anchoring or network anchoring. I would expect in the application, there maybe some parameters, not entirely different interface. It has value to keep them as one design team.
- Jouni: We could combine those two. Non-moible IP solution is also in the scope.
- Alper: I would say, I am not against anything new. We need to see the benefit clearly. Why AREO better than mobile IP?
- Danny: AREO approach is different approach. should also be evaluate. should progress in different design team. maybe not necessarily to choose the two.
- Fred: AREO has the same the goal. address the same problem space.
- Danny: Do you think both can exist or people need to choose one?
- Fred: AEO start from enterprise network. recently come into to mobile network. Both solving the same problem.
- Jouni: The problem I have now. Who want to take coordinate role on this. I need some one who is able to set up a webex or something.
- Anthony: How many draft ? this could large amount of work.
- Jouni: we need to nailing down protocol solution. not having ten of those.
- Anthony: so there will be lot of discussion before we get the direction. need a lot of discussion to merge them.
- Jouni: This mainly about figuring out how to discovery the anchoring. how you want to use anchoring.
- Alper: selection and merging, it may a little harder. work top to bottom not bottom to up.
- Anthony: we can try to agree on common mechanism as base draft, it is quite general .then next step is to select best solution. The advantage is to provide general solution first.
- Danny: How about start a design team, give it couple of weeks, if it has influence, other activities want to do. then decide how we can proceed.

- Anthony: Teleconference need to invite those people who are interest.
- Anthony: I can be the coordinator.
- Danny: You are talking about anchoring selection?
- Alper: Not only selection, singling setting up the data path?
- Jouni: we have the 3rd work item is about setting up the data path.
- Anthony: That need coordination between the two items at higher level.
- Jouni: Then the 3rd one is forwarding path and signaling. like SDN. define information element, then do the protocol. I can take the first one then shift to someone else. e.g. Sri.
- Marco: If Sri can not work on this, I can take it.
- Jouni: You can talk it immediately. will announce in the mailing list.
- Danny: Design team need chair to participate. Let us call it working team. chair may participate.
- Jouni: Any one who really want to call it design team we can do it.
- Alper: one item we did not discuss is, item number 1in my presentation, how do we handle that?
- Jouni: We need more discussion on this.
- Alper: I can do that in the mailing list. then we can discuss again whether it falls into the items.
- Jouni: Schedule is very aggressive. you can push it, you can do that, but at current stage I have to defer it.
- Alper: what is the technical item in the mailing list.
- Fred: I can continue the discussion on the mailing list.
- Anthony: We also need coordinate among different teams. is the chair need to do?
- Jouni: Of course, Dapeng and I will look at what is going on.
- Jouni: Dapeng will post the minutes, will announce in the mailing list.