CFN-dyncast (Dyncast in CFN) Virtual Side meeting in IETF 109

Time: Wed (Nov 18) , 75min, 5 min after plenary ends

- UTC 10:45 - 12:00
- CET (UTC+1) 11:45 - 13:00 France/Germany
- Bangkok Time (UTC+7) 17:45 - 19:00
- CST (UTC+8) 18:45 - 20:00 Beijing
- PST (UTC-8) 02:45 - 04:00
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Information also available on side meeting
wiki: https://trac.ietf.org/trac/ietf/meeting/wiki/109sidemeetings

Github: https://github.com/cfn-dyncast/ietf109

Webex

- Webex Meeting number (access code): 175 335 6387
- Password:7wrDVwRt7B4
- Password if joining from a phone: 79738978
- Webex: https://fipe-meeting.my.webex.com/fipe-meeting.my/j.php?MTID=m2e7d90ec32145ba12f4a6b7e8baf3bcd

Participants: (in total 56 participants)

Name Affiliation
Yizhou Li (Huawei)
Georgios Karagiannis (Huawei)
Luigi Iannone (Huawei)
Dirk Trossen (Huawei)
Peng Liu (China Mobile)
Ike Kunze (RWTH Aachen University)
Adlen Ksentini (EURECOM)
Pedro Cruz (INRIA)
Morteza Kheirkhah (UCL), UK
Jianfei Li (China Unicom)
Tao He (China Unicom)
Yuexia Fu (China Mobile)
Luis M. Contreras (Telefonica)
Diego Lopez (Telefonica)
Aihua Liu (ZTE)

Aldo Artigiani (Huawei)
Benjamin Steinert (Uni Tuebingen)
Bing Liu (Huawei)
Carsten Bormann (Uni Bremen TZI)
Chathura Sarathchandra (InterDigital)
Cheng Zhou (China Mobile)
Colin Perkins (University of Glasgow)
David Lou (Huawei)
David Millman (USA)
Dhruv Dhody (Huawei – india)
Dirk Kutscher – (University of Applied Sciences Emden/Leer)
Fan Yang (Huawei)
Frank Li (Huawei)
Haisheng Yu (University of colorado, boulder)
Haiyang Su (Huawei)
John Kaippallimalil (Futurewei Inc)
Jordi
JS
Julien Maisonneuve (Nokia)
Kazuaki Ueda (KDDI Research, Inc)
Khoa Phan
Kimberly Mitchell (Canada)
Kiran Makhijani Futurewei
Linda Dunbar (Futurewei)
Mach Chen (Huawei)
Mark Nottingham (Fastly)
Max Zhuang (Huawei)
Michael Menth (University of Tuebingen)
Mihail Zverev (Ikerlan)
Philip Eardley (BT)
Qin Wu (Huawei)
Shaowen Zheng (China Mobile)
Sharon
Shuping Peng (Huawei)
Sunil
Tao Sun (China Unicom)
Xia
Yan Zhuang (Huawei)
Yangang (Huawei)
Yao Huijuan (China Mobile)
Yingzhen Qu (Futurewei)
Zong Peng (China Mobile)

Presentations and clarification questions

1. **Admin** (Georgios Karagiannis, Peng Liu)

2. **Problems and use cases**: Peng Liu (China Mobile): draft-geng-rtgwg-cfn-dyncast-ps-usecase

3. **CFN-dyncast architecture as an example:** Luigi Iannone - draft-li-rtgwg-cfn-dyncast-architecture

   Clarification questions:
   - Linda Dunbar: SID is segment routing ID?
   - Luigi Iannone: No. on the data plane you can use SRv6 but insofar we focused on the decision
   - Li Yizhou: SID is not segment ID
   - Luigi: Indeed there is a terminology issue.
   - The chat identified a number of possible alternatives for SID, e.g., SvID, ServID, ESID (edge service ID)

4. **Computing and networking metrics**: Jianfei Li (China Unicom)

5. **Recap of the feedback received and related work in IETF**

Comments/questions

- Dirk Kutscher: two key things. If you want to charter new work it is useful to focus on scope and milestones and as well on how to convince people about the problem and how to solve it. These questions are important and we need good intuition of what needed. How, for example Service Providers can interact with the system that will support CNF-dyncast
- Linda Dunbar: How to get information about the service status?
- Li Yizhou: Service provider owns the mini data center gateways, so the trust relationship allow to share information. The system management server can do that or you could use a protocol like eBGP.
- Linda Dunbar: You should talk to Application level people who usually encrypt everything.
- Peng Liu: Answering Linda's question: Operators can build their own edge computing infrastructure. And operators have the advantage of the distributed infrastructure.
- Dirk T.: Linda and Dirk K. are right how to tie the application and routing & computing solution. Take the scenarios we have and show how this can be solved. If you do not own the infrastructure but the routing is available how can you use it? May be there is a need to specify work on the interfaces (API).
- Colin: You claim is more about engineering. Just bring this work to COINRG and ICNRG to make sure it is the case.
- Yizhou: we do not expect routers to do in-network operation. We probably want to often update information. We need to check anyway with these IRTF RG.

- Colin: There is discussion to adapt using name to route towards resources. You want to make sure what they do and they may learn something and vice-versa.
- Dirk Trossen : I do support what Colin said. I am active in the COINRG, there are relations and COINRG have to be aware but at the same time COINRG has different scope. There are conceptually different thigs here that make the difference.
- Carsten Bormann: Client side, it will be happy is the network take care of everything. Do you have intuition about the type of services. They go on for a week (long live) or are just question/reply (short live)?
- Li Yizhou: face recognition is a good example. You can put computation at the edge. You can support both types of services, long live and short live;
- Carsten Bormann.: you do not care if a second face is done on a different node. You might have less affinity needed.
- Diego Lopez: CFN-dyncast vs COINRG: CFN-dyncast can be an interesting enabler of COINRG technology. How to provide a control plane for this, COINRG is studying service discovery that can be used as control plane. CFN-dyncast focus on useful work that is needed;
- Dirk Kutscher: whole topic on dealing with services has a wide range of issues/problems; You could for example have a functional split in overlays, traffic steering, forwarding... When you have a specific proposal would be good to compare to other approaches to better understand what are the differences. Maybe is good
- Phil Eardley: This is an interesting activity. More details needed to be ready for IETF.

6. Wrap up and next steps (chairs)

The first poll was a test poll, such that the participants could get experience using the Polling system provided by Webex; Afterwards the following questions were polled

- Q1: Is the problem space clearly defined?
- Q2: Should this work be done in IETF?
- Q3: Is there interest to participate in this work?

The total number of the participants on the polls was 48; The results of the polls are:

- Q1: Is the problem space clearly defined?
  - A. Yes : 26/48 (54%)
  - B. No: 5/48 (10%)
  - C. Abstain: 3/48 (6%)
  - No response: 14/48 (29%)

- Q2: Should this work be done in IETF?
  - A. Yes: 28/47 (60%)
  - B. No: 1/47 (2%)
  - C. Abstain: 9/47 (19%)

No response: 9/47 (19%)

- Q3: Is there interest to participate in this work?
  A. Yes: 25/46 (54%)
  B. No: 1/46 (2%)
  C. Abstain: 10/46 (22%)
  No response: 10/46 (22%)

Next steps:

- Set up mailing list for discussion
- Minutes and presented materials to be sent after the mailing list is set up