Title: Administrivia & Intro, WG organization & milestones
Time: 10 minutes
Description: Agenda, Note-taker negotiation and WG Progress Update
Presenters: Chairs

WG drafts status update.
Maintenance drafts status update.
Request for reviews from the group.

Title: Protocol for Forwarding Policy Configuration (FPC) in DMM
Time: 25 minutes
Presenter: Marco Liebsch
Draft: https://tools.ietf.org/html/draft-ietf-dmm-fpc-cpdp-08

Update from Marco.
Many clarifications and changes of the text (not content). Also, document side was reduced. More reviews are welcome.
Described the information model and its main substructures.
Planning to add examples to the document.
Next: continue clean up. Hope for feedback from the WG. Add examples.
Q Dapeng: Why the three policies substructures.
A: Policy container, configurable, Mobility.
Dapeng: Please change the naming
Marco: We can discuss that.
Sri: When can we start a review?
Marco: ---I did not get the answer.

Title: Optimized Mobile User Plane - Motivation & Goals
Time: 15 minutes

Presenter: Marco Liebsch
Draft: TBD
Next steps in Mobile Data Plane Solution:
Future challenges: Different type of devices with different characteristics. Not only mobile devices, Paging requirements, IoT, Mission critical (low latency, reliable, V2X, Healthcare).
EPS (4G) Control plane for signaling and data-plane (user data). PGW and SGW are involved in both. The centralized anchor is in the PGW.
PGW also performs metering, charging QoS enforcement…
There are various new requirements from the core NW:
Need to reduce coast and complexity
Per-packet overhead counts
Decouple control from user plane

Charlie: MIP had a very simple data-plane. 3GPP preferred GTP. IETF tried to support 3GPP, but they did not take it. GTP is not simple, so does 3GPP really want a simplified data-plane.
Marco: I agree – GTP is complicated. I do not want to discuss a particular solution. Simplification is required, but has its limitations due to the different requirements (Charging, QoS enforcement, etc)
There is a little more openness for new (non-GTP) solutions.
Charlie: My complaint was about 3GPP sticking to GTP and IETF was not aware of that when designing solutions. We need to learn from history.
Sri: GTP has history from 2G to 3G. The separation of control and user plane is an opportunity to introduce new technology.
Charlie: We have a protocol for that: IP. Over IP we need some tunnels and tunnels require IDs. I want to agree with you, but I am
Satoru: We hope that in the next CT4 meeting we will be able to start study work on SRV6.

[Charlie's clarification] My point that we have IP, was in reply to a comment about how we might go about

putting together networks with heterogeneous technologies.

Continue presentation:
Maintain optimal routs
Access network-independent data plane
Need for solution that enable data plane routing independent of mobile device IP address/prefix
Optimized operation between control and data plane.
(Low coast for data-plane setup/update/teardown.
Consider different expectation on IP address continuity).
Conclusion:
Simplification limits - Still need -

- Traffic classification and QoS mapping
- BW compatibility with legacy radio access
- Support non-IP adta
- Means for chargeable event monitoring and reporting
- Support dormant devices (outdated locator)
- Compatibility with IPv4 transport
- And more…

Prakash (Cisco): Need evolution from GTP. Are you working on some draft? If so, would like to join.
Marco: there is some work planned
Sri: let's discuss offline
Prakash: I have done some lab work. Can provide info on non-IP traffic support
Seil: Need more clarification about the problems and challenges. More examples.

Title: SRv6 for Mobile User-Plane
Time: 20 minutes
Presenter: Satoru Matsushima
Draft:

https://tools.ietf.org/html/draft-matsushima-spring-dmm-srv6-mobile-uplane-01
A new version of the draft.
Feedbacks from IETF99: What are the system impacts, what are the benefits? Nobody asked how SRV6 works for mobile user-plane.
V3 has addressed these topics.
Updates to V03:
Introduces “basic mode” user plane. No impact on control-plane but no advanced SRv6 features. Supports gradual migration to more advanced features.

Introduces a Use case “Stateless Interworking with Legacy Access”. No impact on current RAN in control-plane.

Introduces “Aggregate Mode” use-plane. Provides seamless deployment of service-chain, VPNs and TE within the mobile user-plane.

Next slide describes how the current control-plane can be leveraged for configuring the segments.

A slide that describes stateless interworking with legacy networks. IPv4 info can be stored in IPv6 IW field since it is shorter than an IPv4 address.

Next slide: Introduction of new SRv6 functions: End.TM and T.TMAP (Tunnel MAP).

Work in progress: QoS and Accounting support, E2E SR segment routing and NW slicing, IPv4 support and CT4 collaboration work

A few slide on the SRv6 basic mode (was presented in previous meeting).

Sri: What is the assumption regarding the starting point of the SRv6
Satoru: SGW

Seil: This focuses on data forwarding?
---Missed some comments from Seil and answer from Satoru----

Skipped some slides due to time limitation…

Summary: SRv6 is expected to simplify E2E operation and provide flexibility
…

Next step: Be a starting point for user-plane optimization work.

Sri: this is promising work and a right direction. A good number of people read the draft and are willing to support it.
Seil: Do we need a re-charter of the WG work?
Suresh: The WG charter supports this work but there are no milestones. Need to add mile stones and receive approval from the AD.
Seil: Still concerned about the charter.
Suresh: addressed the concerns
Dave (Ericsson): was that presented in spring
Satoru: Yes

[Satoru's Correction]
-> Satoru: Not yet.

FYI I had a chat with spring chairs to share what's going on with SRv6.
Maybe I'd request sprint chairs a slot to present SRv6 Mobile UPlane in next IETF London.

Anthony: This work is within the charter
Suresh to Dave: Yes, we need to align with Spring and 6MAN before WGLC.

(Chairs have issued adoption call)

[Sri] There is strong consensus for adopting this work. We will adopt this draft as a WG document; we will reconfirm the same in the mailing list.

Title: Distributed Mobility Anchoring
Time: 10 minutes
Presenter: H Anthony Chan
Draft:
https://tools.ietf.org/id/draft-ietf-dmm-distributed-mobility-anchoring-06.txt

Changes from 06 to 07. Minor changes as a result of comments. Added SRv6
Changes from 04 to 05. Condensed section 3.1, added reference to NW slicing and some editorial changes.
Changes from 03-04: Extended security section and some editing.
Sri: Thanks you Carlos for the review. Not happy with the favorable reviews. Need good and thorough reviews. Asking for volunteers for reviewers: Charlie, Marco and Satoru.

Title: On Demand Mobility Management Socket Extensions
Time: 5 minutes
Presenter: Danny Moses
Draft: https://www.ietf.org/id/draft-ietf-dmm-ondemand-mobility-12.txt
A quick review of the comments and changes. Ready for WGLC.
Chairs will review. Asking for more reviews.

Title: DMM Deployment Models and Architectural Considerations
Time: 10 minutes
Presenter: Seil Jeon
Draft: https://www.ietf.org/id/draft-ietf-dmm-

deployment-models-02.txt

Received feedback from the WG mostly editorials. Next step: AD review.
Sri: The document is in good shape.

Title: Network-based and Client-based DMM solutions using Mobile IP mechanisms
Time: 15 minutes
Presenter: Carlos Jesus Bernardos Cano
Draft (s):
https://www.ietf.org/id/draft-bernardos-dmm-distributed-anchoring-09.txt
A solution for DMM with PMIP. Was described before. This draft replaces a couple of older drafts for PMIPv6.
Two nodes:
(A/S)MAAR – Mobility Anchor and Access Router
CMD – Central Mobility Database.
Following is a description of the operation including registration procedures, Mobility event
After a mobility event, opened IP session will use the assigned IP prefix (in a non-optimized rout) and new session will use a newly provisioned IP prefix.
Danny: In some cases the existing IP session can switch to the new prefix to gain route optimization.
Carlos: True
Sri: Move discussion to the list.
SRI: With the user-plane and control plane separation, how is this supported?
Carlos: The CMD handles the control plane (PBU/PBA) and the (S and A)MAAR handles the user-plane.
Next steps: Ask for adoption.
Sri: Get more reviews and then ask for adoption.

Title: Mobility Capability Negotiation
Time: 10 minutes
Presenter: Jong-Hyouk Lee
Draft: https://www.ietf.org/id/draft-yan-dmm-man-02.txt

Received comments after Chicago and distributed a new version.
Skipped the examples (were presented in Chicago).
Sri: would like to see discussion on the list before adoption.

Title: Mobility Capability Negotiation
Time: 10 minutes
Presenter: Behcet Sarikaya
Draft: https://www.ietf.org/id/draft-sarikaya-dmm-for-wifi-05.txt
DMM for WiFi. The work is to understand how to use DMM work in WiFi networks.
This is a description of experimental work done in the academy.
---missed some description---
Comments are welcome.

Title: DHCP Extensions for On-Demand Mobility Management
Time: 10 minutes
Presenter: Danny Moses
Draft: https://www.ietf.org/id/draft-moses-dmm-dhcp-ondemand-mobility-08.txt
Indicated that the draft was presented in dhc and received comments. Draft was updated accordingly.
Asked for adoption.
Sri: How can the DHCP server support the different service types?
Danny: It does not, It interacts with the proper control function for that.
Sri: So the interface between the DHCP server and that control function is missing.
Suresh: It is not necessarily needed. 3GPP or others can do that.
Sri/Suresh/Danny agreed to discuss offline

11:55AM Adjourn