Metaverse

Public Side Meeting at IETF 116

Hybrid, Mar 2023, IETF 116

Giuseppe Fioccola, Shuping Peng (Huawei)

Note Well

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- https://www.ietf.org/privacy-policy/(Privacy Policy)

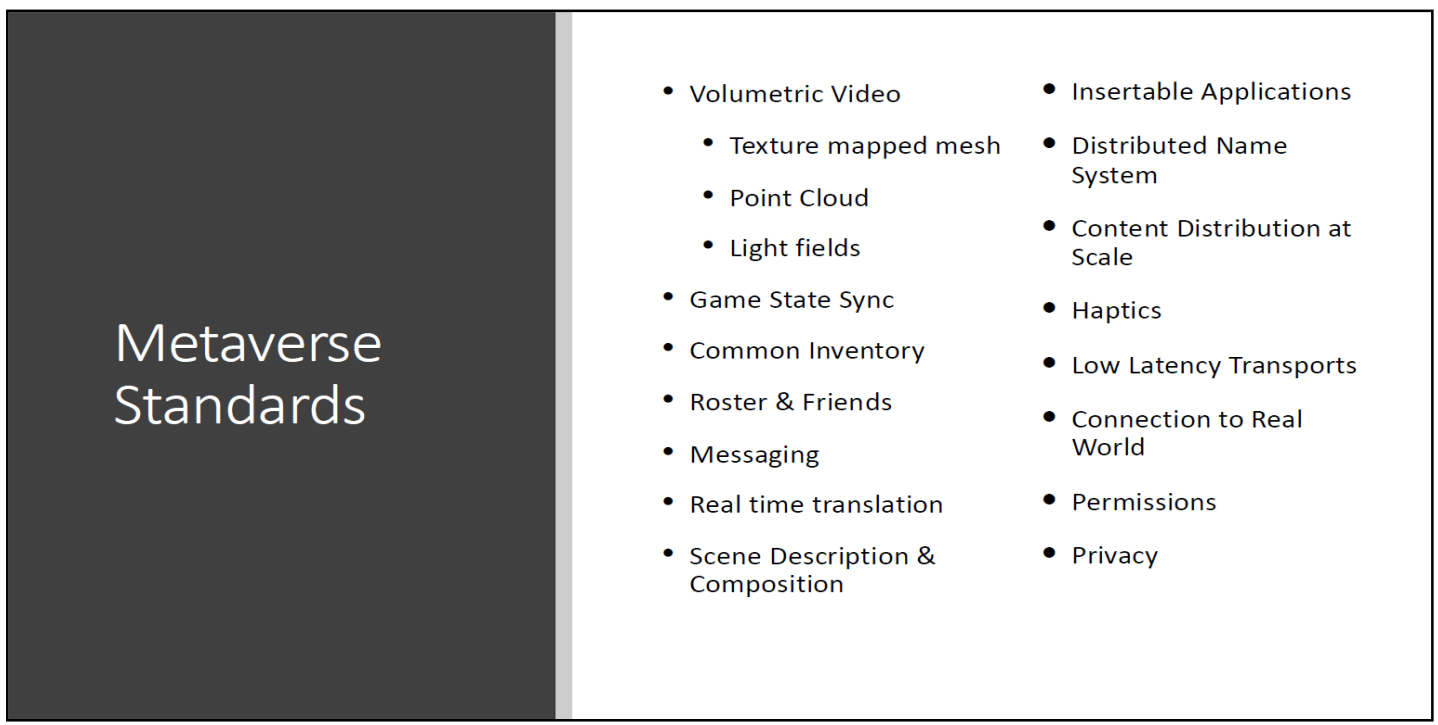
IETF 115 side meeting: Recap

There were around 20 participants onsite and 50 remotely.

Some experts invited to have a talk:

- Cullen Jennings (Cisco) introduced QuicR and metaverse,
- Dirk Kutscher (The Hong Kong University) presented ICN for distributed AR/VR,
- Koen De Schepper (Nokia) described L4S
- Robin Li (Huawei) reported network innovation proposals for metaverse (e.g. CAN, MSR6, APN).

It was agreed to continue the discussion on the mailing list.



Agenda for IETF 116

5) **3GPP activities on Metaverse in SA1 WG and SA2 WG** - Tianji Jiang, China Mobile - 10min

1) **Introduction and IEEE MetaCom Workshop on Metaverse as a network problem (MANP 2023)** - Giuseppe Fioccola/Shuping Peng - 5min

2) **Metaverse-focused IRTF ICNRG and IEEE MetaCom Workshop (DORM 2023)** - Dirk Kutscher, The Hong Kong University - 10min

3) **Network innovation and IETF standardization for metaverse** - Robin Li, Huawei - 10min

4) **ITU-T Focus Group on metaverse (FG-MV)** - Jungha Hong, ETRI - 10min

6) **Open Metaverse project in Linux Foundation** - Royal O'Brien, The Linux Foundation - 10min

7) **ChatGPT and metaverse** - Eduard Vasilenko, Huawei - 10min

8) **Blockchain and metaverse** - Mike McBride, Futurewei - 10min

9) **Open Discussion**

IEEE Metacom 2023

Workshop on Metaverse as a network problem: performance and enabling technologies

AR/VR applications need high throughput, high bandwidth with a high sensitivity to latency and dropped packets.

There are new challenges for the transport network to offer a consistent and possibly higher quality of service. Therefore, a close cooperation between client applications and network would be desirable.

The Edge Cloud is also becoming a promising technique since it benefits from the intensive computational resources in order to enable users to obtain a real-time immersive experience without equipping high end devices.

Organization Chairs

Giuseppe Fioccola, Huawei

Shuping Peng, Huawei

Technical Program Committee

Carlos Guimarães, ZettaScale Technology SARL

José Quevedo, Instituto de Telecomunicações and Universidade de Aveiro

Cedric Westphal, Futurewei

Antonio Pescapè, University of Napoli Federico II

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Zhenyu Li, Institute of Computing Technology, Chinese Academy of Sciences

Yong Cui, Tsinghua University

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Stefano Ferretti, University of Urbino

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Tao Sun, China Mobile

Luis Miguel Contreras Murillo, Telefonica

Amedeo Sapio, Intel

Fabrizio Granelli, University of Trento

https://www.ieee-metacom.org/

Summary and Next Steps

The scope is to continue the debate in IETF and eventually propose solutions in specific WGs

•Mailing list (metaverse@ietf.org) to discuss

Thank you