IETF 113 Quantum Internet Research Group 22 March 2022

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IETF 113 Vienna hosted by



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- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (<u>https://www.ietf.org/contact/ombudsteam/</u>) if you have questions or concerns about this
- See <u>RFC 7154</u> (Code of Conduct) and <u>RFC 7776</u> (Anti-Harassment Procedures), which also apply to IRTF

Goals of the IRTF



- The Internet Research Task Force (IRTF) focuses on longer term research issues related to the Internet while the parallel organisation, the IETF, focuses on shorter term issues of engineering and standards making
- The IRTF conducts research; it is not a standards development organisation
- While the IRTF can publish informational or experimental documents in the RFC series, its primary goal is to promote development of research collaboration and teamwork in exploring research issues related to Internet protocols, applications, architecture, and technology
- See "An IRTF Primer for IETF Participants" <u>RFC 7418</u>

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In-person participants

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Remote participants

- Make sure your audio and video are off unless you are chairing or presenting during a session
- Use of a headset is strongly recommended



Quantum Internet Research Group QIRG @IETF113 Vienna 22 March 2022

Chair slides

Rodney Van Meter Wojciech Kozlowski

Agenda

- Administrivia + RG Status + hybrid meeting issues (5 min)
- draft-irtf-qirg-quantum-internet-use-cases (10 min) Kaushik Chakraborty
- Quantum Network Explorer: application programming for the quantum internet (20 min)
 Bart van der Vecht
- Discussion (15 min)
 - What would you like in an online platform for experiments on real quantum network hardware à la IBM Quantum?
 - Open floor

Document Status

- draft-irtf-qirg-principles
 - Reviewed by Marie-Jose Montpetit in December
 - Comments have been addressed in January, currently in re-review
- draft-irtf-qirg-quantum-internet-use-cases
 - \circ Active, will be discussed today

Seminar Status

- On 2 February 2022 Marc Kaplan from VeriQloud gave a seminar titled "Building Quantum Networks at the Local-Area Scale"
 - Recording available at https://www.youtube.com/watch?v=D_Nb43-uicY
- Next seminar TBD (aim for Sept/Oct)

Other RG Updates

- QIRG is mentioned in a recent pre-print publication about the standardization efforts for quantum technologies:
 - "Towards European Standards for Quantum Technologies": <u>https://arxiv.org/abs/2203.01622</u>