

Applications and Use Cases for the Quantum Internet

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Background of Present I-D v04



- (May 24, 2020) v00 was uploaded as RG document.
- (Jul 10, 2020) v01 was generated and presented in IETF 108.
- (Sept 18, 2020) v02 was generated to address the comments on v01 received from IETF 108. v02 has been shared for comments through the email reflector.
- (Oct 29, 2020) v03 made some updates based on the email discussions and feedback from Patrick Gelard and Wojciech Kozlowski on v02. v03 was presented in IETF 109.
- (Jan 22, 2021) v04 incorporated comments and feedback raised during IETF 109 meeting and the ones after the meeting from Alvaro Gomez Inesta, Wojciech Kozlowski, and Joey Salazar.

Major Updates since IETF 109 (in v04)

- 4.2.3: Updated "Figure 1: Examples of Control vs Data Plane Classification
- 5.1: Additionally described "QKD Post-Processing"
- **5.1:** Classified on user identity and privacy in QKD
- 5.2: Added more description on Blind Quantum Computing (BQC)
- **5.2:** Updated "Figure 3: Secure Quantum Computing with Privacy Preservation "
- 5.3: Added more description on Distributed Quantum Computing
- **11**: Added more references resulted from above changes.

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Next Steps



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- v04 is stable now.
 - v03 has been reviewed and discussed through the email reflector.
 Comments and feedback on v03 have been addressed in v04.
- Do Chairs think that the draft v04 is ready for RG Last Call?
 - This question was raised in the last IETF 109; as a result, detailed reviews have been completed for v03.
 - Comments from detailed reviews have been addressed in v04.