

#### **Applications and Use Cases for the Quantum Internet**

https://www.ietf.org/id/draft-irtf-qirg-quantum-internet-use-cases-04.txt

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### **Background of Present I-D v04**



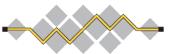
- (May 24, 2020) v00 was uploaded as RG document.
- (Jul 10, 2020) v01 was generated and presented in IETF 108.
- (Sept 18, 2020) v02 was generated to address the comments on v01 received from IETF 108. v02 has been shared for comments through the email reflector.
- (Oct 29, 2020) v03 made some updates 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**



### draft-irtf-qirg-quantum-internet-use-cases-04

- 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.