

Architectural Principles of a Quantum Internet

<https://datatracker.ietf.org/doc/draft-irtf-qirg-principles/>

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Recap

- First version of draft prepared and presented at IETF 104 in Prague on 26 March 2019
- Motivation is to address charter point:
 - *An architectural framework delineating network node roles and definitions, to build a common vocabulary and serve as the first step toward a quantum network architecture.*
- Also want to create a good starting point for people with no quantum background

GitHub

- A GitHub repo is maintained at <https://github.com/Wojtek242/draft-irtf-qirg-principles>
- A more convenient way to share updates at a finer granularity than datatracker allows
- However, all discussions are still done on the mailing list so no fancy CI/CD

Overview of changes (since 109)

- Control/data plane alignment with Use Case document:
 - Basically say that control plane may also want to access qubits.
 - But do not propose split into classical/quantum control plane, just leave the possibility open.
- Rodney's feedback summary:
 - Mostly clean up, clarifying fixes
 - Some concern if document is consistent with some uncommon proposals for QI
 - WK opinion: even if they're not 100% compatible this is not a standard so evolution and deviations should not be a problem

Next steps

- Is the draft ready for RG last call?
- Latest updates have all been minor
 - In general feedback is good, but at this point it is very minor in the grand scheme of things