

QGP-VPN: QKD enhanced VPN solution for general-purpose encrypted communications

Thursday 21 September 2023 16:20 (20 minutes)

Quantum-resistant encrypted communications is of particular importance in the context of recent advancements in quantum computing. Existing technologies such as Quantum Key Distribution achieve this, but are not suitable for general-purpose communication due to limited key rates. In this work, we propose a VPN solution enhanced by QKD for quantum-resistant encryption, we implement it using IDQ Cerberis XG QKD devices, and we test its general-purpose capabilities by performing an encrypted video-conference between two endpoints.

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Session Classification: Session A

Track Classification: Quantum Communications