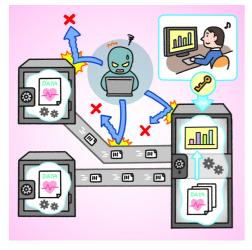
Achieve sovereignty over digital data and promote secure data sharing

IOWN PEC for sovereign hybrid cloud

IOWN Now

Next-Generation Computing Infrastructure

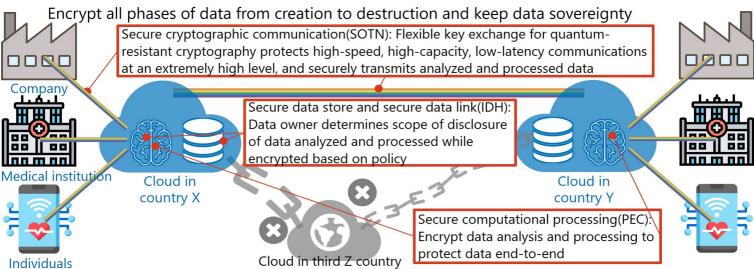


Background

In current data integration with cloud, data must be decrypted and processed in many phases through its lifecycle. This raises the potential of external leakage of sensitive data, that is key to coordination across companies and countries, due to internal fraud of operators or cyber attacks.

Summary

IOWN APN's high-speed, high-capacity data transmission provides an integrated computing space, protected by highly advanced encryption technology in all phases from data creation to data destruction, and allows only authorized entities to view content, even if they are administrators.



Features

- Developing an architecture that flexibly combines key exchange and authentication with post-quantum cryptography,
 enabling entire cypher communication in the lifecycle of data
- Protecting against unauthorized acquisition of data by developing a protocol that can process data and analysis programs owned by multiple providers while keeping them confidential
- Improving analysis accuracy while preserving privacy by applying federated learning across organizations and secure computation that integrates and analyzes while still encrypting

Future benefits

Processing sensitive data handled by medical institutions or companies while keeping data owner's sovereignty, and promote secure data collaboration across companies and countries.

Exhibiting Company

NIPPON TELEGRAPH AND TELEPHONE CORPORATION, NTT Communications Corporation

Contact

rdforum-exhibition@ml.ntt.com

APN: All-Photonics Network

PEC: Privacy Enhancing Computation