IOWN INTEGRAL

NTT R&D FORUM 2024

DEVELOPMENT

δ 03-05

IOWN APN/DCI Technologies for cross-border metaverse services

Allow cross-border users to join a metaverse virtual space to watch holographic shows and interact with each other through an all-photonics network and data-centric infrastructure

#Productivity Improvement #Well-being, Human Capital Management

///Technical Issue

For high-speed transmission of large amounts of data, computing resources and user sites must be located close to each other.

///Research Goal

High-speed transmission, low-latency communication via IOWN APN allows computing resources to be aggregated and distributed, even over an international distance of 3,000 km.

---Technology

- IOWN technology: APN/DCI (RDMA over IP)
- CHT's proprietary technology: Metaverse space sharing technology and translation technology (two-way display of video and audio).

---Applicable Business

Business Area: Entertainment
Use Cases: International Metaverse
Availability: Scheduled service delivery date: 2025

---Novelty

In commercial technology, RDMA connections are often made over short distances, such as within a data center, using Infiniband, and there is also a method for connecting via Ethernet using RoCE (RDMA over Converged Ethernet), but even the latter is not recommended for long-distance connections. This is because low latency and losslessness are required. This exhibit shows that the transmission quality guaranteed by IOWN-APN enables CHT's VR application to enable two-way communication between countries using RDMA over IP.

Related Exhibition=δ03-08 Exhibitors=NIPPON TELEGRAPH AND TELEPHONE CORPORATION Related URL=NTT Press Release

Contact URL