

APN connection between ultra-energy-saving data centers

Contributing to sustainability management by connecting
ultra-energy-saving data centers with APN

#Productivity Improvement #Green Transformation #Business Resilience



///Technical Issue

To promote DX in businesses using generative AI and GPUs, it is necessary to solve issues of server operation, such as dealing with the increase in heat generation, rising electricity prices, and flexibility installation environment.

///Research Goal

Contribute to continuous innovation by providing a computing platform that significantly reduces environmental impact.

---Technology

- DLC(Direct Liquid Cooling) with excellent power efficiency.
- Utilization of renewable energy.
- APN enabling low-latency and high-capacity communications.

---Novelty

- Approximately 30% reduction in power consumption with the adoption of DLC(Direct Liquid Cooling).
- Achieving zero carbon by utilizing renewable energy.
- Reduction of internal device processing delays by eliminating optical-electrical conversion through optical-electrical fusion technology.

---Applicable Business

Business area : Data Center Business

Use Cases : Achieving energy savings and virtually zero CO2 emissions with ultra-energy-efficient data centers. Realizing the placement of data centers in suburban areas with high power production via APN connections.

Environmentally conscious utilization of high-load servers such as GPUs.

Availability : Dedicated APN lines:Commercially released by NTT Communications , GreenNexcenter: Commercially release in March 2025 by NTT Communications

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