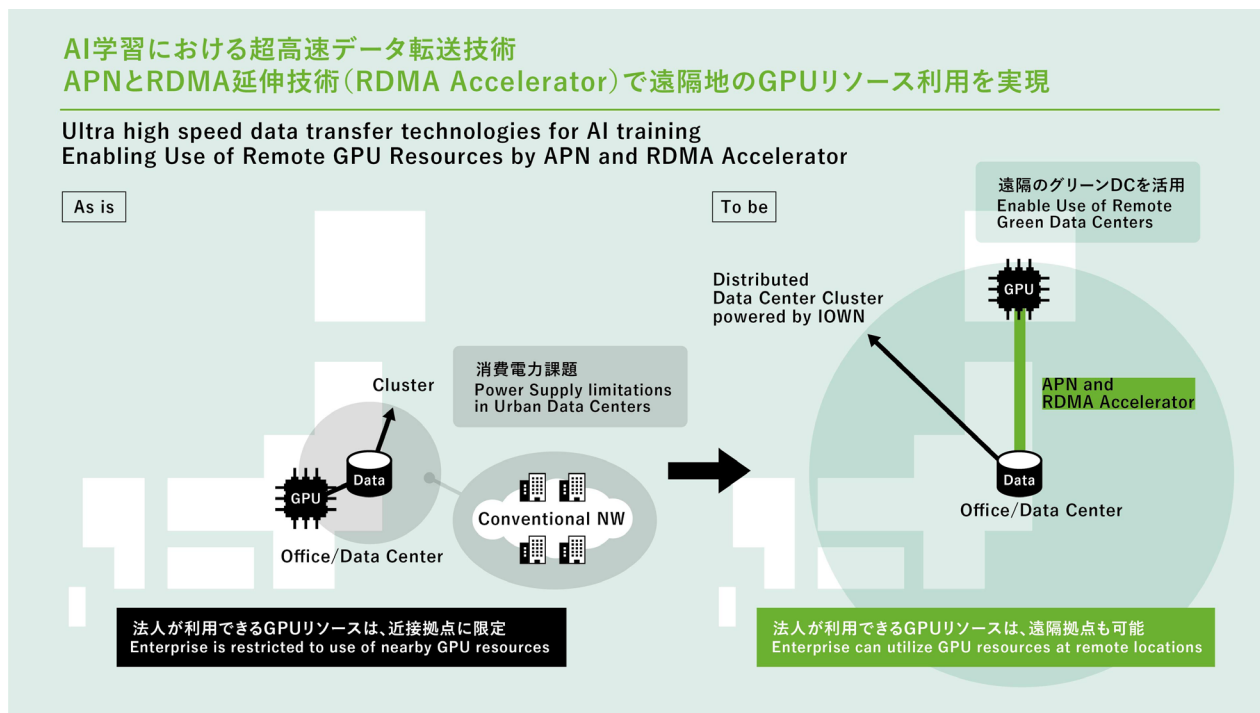


Eliminating geographical constraints in AI training by leveraging remote GPUs Accelerating data transfer for remote GPU training

Background and Technical Challenges

As AI demand grows, power usage is increasing and more data centers are being built in cities, which has become a social issue. When AI training is executed in a distributed environment that spans multiple data centers, degradation of data transfer performance is problematic, and AI training in a distributed environment is difficult.



R&D Goals and Outcomes

It improves degradation in data transfer performance, which is a problem in AI learning in a distributed environment.

Key Technologies

01 Core Technologies

- RDMA stretching techniques to improve data transfer performance degradation in long – distance distributed environments
- The APN (All-Photonics Network)

02 Key Differentiators

It reduces performance loss during long-distance data transfer. When the distance is over 100 km, throughput drops by 90% with traditional TCP/IP networks, but only 36% with the APN and RDMA stretching techniques.

Use Cases Energy
Multi-Industry

R&D phase Development

Technology Schedule FY25-26

Commercialization Schedule FY27-29

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