

BI-WEEKLY

# NEWSLETTER

[WWW.RSI-KK.COM](http://WWW.RSI-KK.COM)

[info@rsi-kk.com](mailto:info@rsi-kk.com)

(Tel.) 03-6672-6330 (Fax) 03-6388-9283

AZ Omori Building 5th Floor 6-19-8 Minami Ooi,  
Shinagawa-ku, Tokyo 140-0013 (Japan)

# RSI

Monday, July 1st, 2024

*Global News, financial analyses, data center related laws & regulations and further latest updates about technologies transforming the data center industry.*

NEWSLETTER N\* NEN12024062007



## EU and Japan advance joint work on digital identity, semiconductors, Artificial Intelligence

The EU and Japan held their second Digital Partnership Council in Brussels, chaired by Commissioner for the Internal Market, Thierry Breton, and Japanese Ministers Taro Kono, Takeaki Matsumoto, and Taku Ishii. Emphasising their strategic alliance in driving digital transformation while respecting fundamental rights, they reaffirmed commitment to collaboration on key technologies like AI, 5G, semiconductors, and cybersecurity. The EU and Japan signed a Memorandum of Cooperation on digital identities and trust services to streamline e-commerce, alongside announcements on 6G development, AI governance, submarine cables, and online platform regulations. The next council is scheduled for 2025 in Tokyo, Japan.

Source : [European Union](https://www.european-council.europa.eu/media/e3000000/press-releases/2024/04/30_en.pdf), April 30th, 2024

## The profound effects of technology over the future data centers

Undoubtedly, the technology is advancing at a rapid speed which requires the datacenters to change accordingly and adequately. The changes in technology will/should not happen separately from the datacenters (at least for the operation and computing needed in datacenters) in order to move at the same pace as the technology change. Adopting new technologies and strategies such as AI, Edge Computing, 5G, Quantum Computing and green technologies will help the datacenters to develop and become more efficient alongside the technology advancement.

For instance, machine learning will help analyze the pattern that happens more regularly like anomaly patterns and warn about a possible failure in near future or adjust the temperature and humidity based on the need of the computing areas. Plus, the integration of AI in datacenters will increase the security and integrity of the users' data; and the adoption of quantum computing can ease the ability to perform operations which are not possible with the most advanced super computers currently.

Source : [Datacenter](https://www.datacenterdynamics.com/en/news/2024/05/24/ai-quantum-computing-data-centers/), May 24th, 2024

01/05

## Artificial intelligence act: Council gives final green light to the first worldwide rules on Artificial Intelligence

The European Council has recently approved groundbreaking regulations for artificial intelligence (AI), marking the world's first comprehensive framework governing AI development and deployment within the European Union. These rules adopt a risk-based approach, categorizing AI systems based on their potential impact. High-risk applications, including those in critical infrastructure, healthcare, and law enforcement, will face stricter requirements. Transparency, accountability, and human oversight are key principles, while prohibited practices—such as manipulating human behavior or unauthorized biometric surveillance—

are explicitly banned. And a conformity assessment process for high-risk Artificial Intelligence applications before deployment. These regulations mark a crucial milestone in promoting responsible AI development, emphasizing ethics, and protecting fundamental rights. Developers must ensure data quality and bias mitigation, and a new European Artificial Intelligence Board will oversee implementation and enforcement. This landmark regulation underscores responsible AI development and may serve as a model for other regions.

Source : [Council of the EU](#), May 21st, 2024

## Nvidia CEO Says Dell Partnership Is Key in Its Push to Expand AI

Nvidia's CEO, Jensen Huang, has highlighted the significance of their partnership with Dell Technologies in expanding AI's reach. The collaboration aims to help businesses create their own "AI factories". Nvidia and Dell are providing a comprehensive solution that includes computing, networking, and software, driving the digital enterprise. This partnership is expected to spread Nvidia's technology across various sectors and increase demand for its products as businesses develop their own AI capabilities. Nvidia is also focusing on software tools, computer design, and AI models, while Dell has introduced a new line of AI-optimized PCs. The partnership is set to accelerate AI adoption and innovation, with the Dell AI Factory integrating Dell's AI portfolio with Nvidia's AI Enterprise software platform.

Source : [Dell Press Release](#), May 20th, 2024

## Hydrogen Powered Datacenters and the Future of Sustainable and Efficient Energy Sources

The surge in datacenters demands due to the technological advance creates a gloomy future for the datacenters power efficiency and needs. As a matter of fact, the datacenters are already under scrutiny for their energy and other resources application, in consequence, adding up the power-hungry technologies to the data center; for example, AI and machine learning, would require for much more energy.

The energy added to the grid for datacenter should come from clean and sustainable sources in order to match the goals set by the organizations and countries. One of the resources that can provide a clean energy and is getting more popular every day, is the use of hydrogen. The energy produced from hydrogen is through fuel cells and based on electrochemical which also produce water and heat as byproducts.

Apart from the energy produced by utilizing hydrogen being clean, it can produce energy without recharging unlike batteries, is capable to handle variable loads, can be applicable in a compact environment, provide a modular system for scaling up or down, and can be produced from various resources such as natural gas and water electrolysis.

Source : [Datacenters](#), May 20th, 2024

## Successful demonstration of long-distance data centre connections in the United Kingdom and the United States

NTT Corporation and NTT DATA Group Corporation showcased the effectiveness of IOWN All-Photonics Network (APN) connections between United States and United Kingdom data centres. These connections demonstrated communication with delays of less than 1 millisecond over 100 km, suitable for real-time AI and financial sector applications. IOWN APN integrates multiple data centres into one infrastructure, overcoming geographical challenges. Using NEC APN equipment, round-trip delays and delay jitter were measured, achieving less than 1 millisecond and 1 microsecond, respectively, at 400Gbps. These developments make NTT DATA's data centres ideal for global enterprises and cloud operators needing low-latency connectivity and real-time data processing.

Source : [NTT](#), April 12th, 2024

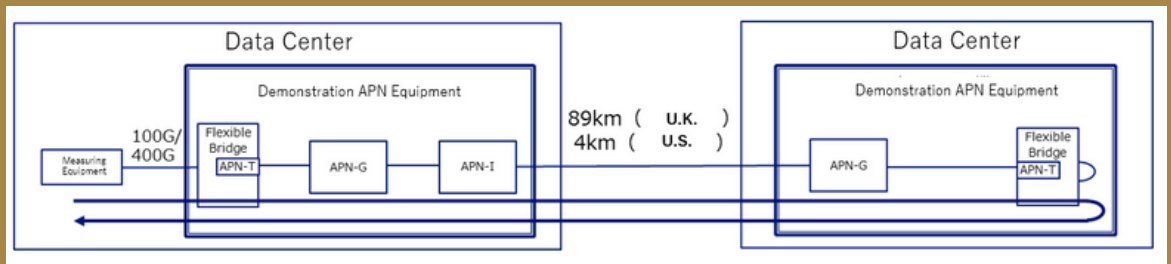


Image source :  
NTT Group  
Image title :  
Demonstrated  
Network Configura-  
tion

## High Bandwidth Memory (HBM) is closely tied to the rapid adoption of AI technologies

HBM (High Bandwidth Memory), as an AI technology, becomes more prevalent. It highlights that companies like Disco and TOWA are seeing a surge in shipments of related products, indicating expanding business opportunities in this sector. Companies like Disco are witnessing a surge in product shipments, while this trend also opens up significant business prospects for entities like TOWA. Key points include a projected 105% increase in annual HBM shipments in 2023, supply challenges due to new production lines starting in Q2 2022, and the preference shift toward HBM3. HBM3, with up to 819 GBps bandwidth and 16-Hi stacks, is expected to account for 50% of all HBM memory shipped in 2023. SK Hynix's HBM supply is sold out for 2024 and most of 2025, leading to delayed orders.

Source : [Kabushiki](#), April 28th, 2024

## Windows RECALL on COPILOT+ PCs : the latest best feature or a cause for concern?

The latest computers operating on a Windows OS come with built-in features that provide accessibility to AI, for example, Copilot, Recall, and Cocreator which is a new feature for the older paint application and turn a simple sketch into a picturesque digital art, provide live caption, translate, and turn it in to a video.

These computers which operate on Qualcomm chips and are integrated with Snapdragon X Elite processors can perform AI at 45 trillion operations per second. Though, the feature that might cause concern among enterprise owners' users and even ordinary users is the recall functionality of the new computers. This feature can help find a document or provide live caption to lower the language barrier, but it needs for the Microsoft's AI to capture what is happening on the screen. The intent is to store and encrypt the captured data on the hosting device in order to solve the concern.

Source : [IEEE Spectrum](#), May 23rd, 2024



# RSI's Container Data Center Solution

Together with our partner Shinohara Electric, we provide an all-in-one package container data center solution equipped with all functions as facilities encountered in the building-type traditional data center, with much more space, power, and cooling efficiency, optimized for edge computing. Our solution is a prefabricated waterproof and scalable package solution which is provided in multiple sizes with a various number of standardized 19-inch racks, according to your needs, arranged in cold aisle/hot aisle separation.

## Benefits of Container Datacenter

Energy efficiency

Floor space optimization

High-performance

Reduces cost

low carbon footprint

Flexible and scalable

## Components of RSI's Container Data Center

- Container with cabinets equipped with necessary network connectivity
- On-demand customized redundant UPS/battery rack as well as a backup generator
- Entire container system control, including environmental monitoring system, access control system and alerts application
- Fire suppression system
- Integrated cable management including power/network separation tray
- A safe and secure solution such as access control with dual authentication

## CONTACT US For implementation

We will consult with you on the design, construction, operation and maintenance of container data center.

Applications for AI have attracted a lot of attention in recent years. Due to the high power capacity required, container solutions are again beginning to attract attention as smaller, higher density data centers.

Contact us to discuss the possibilities of building AI infrastructures.

**+81 3-6672-6330**

**RSI**

5F AZ Omori Building 6-19-8, Minami Ooi,  
Shinagawa-ku, Tokyo 140-0013  
[www.rsi-kk.com](http://www.rsi-kk.com) / [info@rsi-kk.com](mailto:info@rsi-kk.com)

# Disclaimers

## Disclaimer

This newsletter is made available for informational purpose only to ensure that you are kept up to date with the latest developments, insights and trends about major data center and information technology likely to transform these industries. The newsletter covers topics specifically related to latest and future technology developments; financial reports & analyses and business mergers & acquisitions involving major global companies; laws and regulations in north American, European Union and Asia Pacific.

By using this newsletter, you understand that there is no legal relationship between you and the newsletter or our company. The newsletter should not be used as a substitute of competent legal advice or a licensed professional in your state or your country.

This newsletter may contain offers about our products & services or our partner's. However, we will not sell, lend or make your email available to any third parties. You will not receive emails from our partners directly as a result of the use of this newsletter. We will keep your email address on our database for as long as we run the newsletter service or until such a time that you unsubscribe. To unsubscribe to this newsletter, please drop us an email using the link available at the contact information below.

---

05/05

**RSI**

**+81 3-6672-6330**

5F AZ Omori Building 6-19-8, Minami Ooi,  
Shinagawa-ku, Tokyo 140-0013

[www.rsi-kk.com](http://www.rsi-kk.com) / [info@rsi-kk.com](mailto:info@rsi-kk.com)