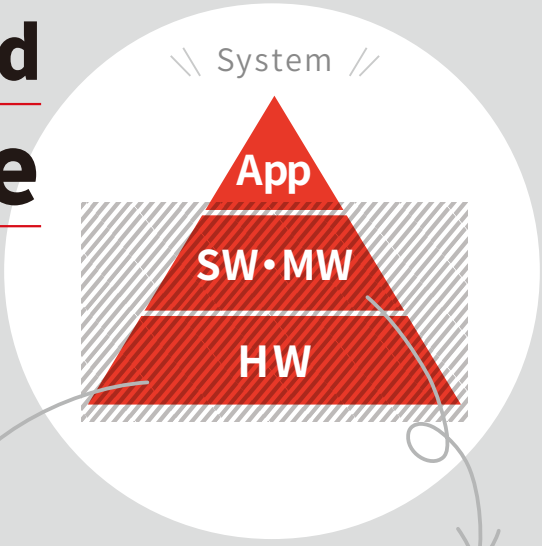
Customized & Optimized HPC Infrastructure



HPC is no longer limited to traditional research environments.
Through hybrid integration with AI and quantum computing, HPC has become the backbone of next-generation computational platforms.

AI or quantum — HPC is the foundation.
We design and deliver customized HPC infrastructure optimized for your specific workloads and future scalability.

Hardware:
End-to-End Support from Design to Delivery

- Custom system integration using your preferred servers (compute nodes / network / storage)
- Peripheral devices and facility coordination
- Operational support and system administration
- Maintenance services

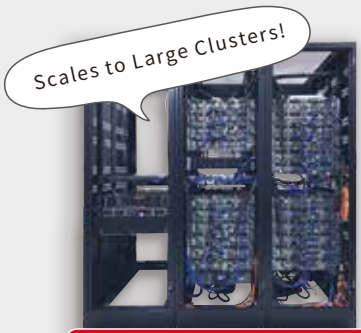
Software & Middleware:
Installation, Configuration, and Integration

- OS deployment and tuning
- Parallel computing libraries
- Job schedulers (PBS, Slurm, and others)
- Usage accounting and monitoring systems
- Virtualization platforms and containers

From a single workstation to large-scale clusters,we build systems tailored to your requirements.
(Images shown are examples.)

GPU Workstation

GPU Server



GPU Cluster

On-Premises / Cloud

We guide you in selecting the best option based on your needs, leveraging the strengths of both on-premises and cloud environments.

On-premises Secure the resources you need—GPUs and more

- Enhanced security
- Custom-designed to your specifications
- No network latency
- No external network connection required

Cloud Access real quantum hardware

- Rapid deployment at lower cos
- Dynamic resource management
- Access from anywhere
- Risk reduction through distributed management

Now Offering Data Center Services
Consult with us on location, environment,and resource requirements.

Data Center Solutions

Customer-Focused Services

We design, build, and configure hardware, operating systems, middleware, and software tailored to your needs—delivering a ready-to-use HPC environment that's up and running as soon as you power it on.

Hardware Assembly ▶ Software Preparation ▶ Optimization & Testing ▶ Ready for Immediate Use

In addition to system integration, we also provide support services such as initial deployment assistance and ongoing operational support.

Case Studies

HPC Systems Integrating AI and Quantum Technologies

[AI × HPC]

National Cancer Center Hospital East

"KASHIWARP" — An Advanced System Enabling Next-Generation Medical Care

The National Cancer Center is one of Japan's National Centers for Advanced and Specialized Medical Care, serving as a core institution for cancer treatment and research.
To support cutting-edge medical innovation, the Center implemented a cluster system designed for advanced healthcare applications.
The system focuses on AI-based medical image analysis and bioinformatics, and includes a multi-omics analysis platform where AI workloads run on GPU servers—enabling high-performance data analysis for next-generation medical research.

[Adding Quantum to HPC]

Marine Informatics Research Organization

A Practical System for Ocean Big Data Utilization in Suruga Bay

Based on the Suruga Bay Marine DX Advanced Hub Initiative—a collaborative project led by Shizuoka City and Prefecture together with Shizuoka Institute of Science and Technology, Shizuoka University, Tokai University, and other partners—the organization introduced a system to enable Marine DX through the utilization of diverse data collected from Suruga Bay.
With an eye toward future innovation, we also proposed the integration of various quantum computing frameworks into the HPC environment, preparing the platform for next-generation computational approaches.

For companies and researchers advancing algorithm development and proof-of-concept studies

Significantly Lowering the Barrier to Adoption
Compact Quantum Computer "Bell-1"

Bell-1
QUANTUM **SERVER**

Three Key Features That Lower the Adoption Barrier

- Space-saving installation
- Integrated cooling system
- Low power consumption

A Breakthrough in Silicon Quantum Computing

Bell-1, developed by Equal1, is a compact, silicon-based quantum computer designed for companies and researchers conducting algorithm research and proof-of-concept experiments.
By leveraging semiconductor chip manufacturing processes, qubits are integrated directly onto a silicon chip.
This approach enables low cost, low power consumption, and high scalability—significantly reducing the barrier to adopting quantum computing systems.

Authorized Distributor in Japan: Visual Technology,Inc. / Manufacturer: Equal1

Contact Us

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