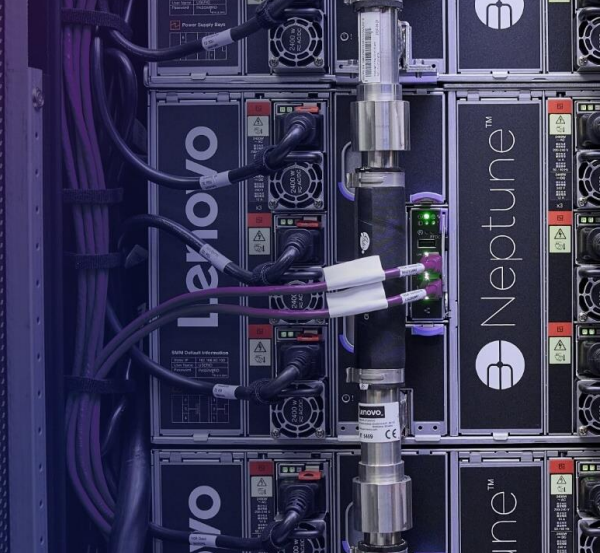


# Power and cooling Services for the Data Center



## Cooling the data center

For more than a decade, Lenovo has been a leader in power and cooling solutions, consistently setting industry standards with innovative technologies that enhance efficiency and performance. With a deep expertise in data center infrastructure, Lenovo's power and cooling services are tailored to meet the increasing demands of modern computing environments. Our advanced solutions are designed to optimize thermal management, reduce energy consumption, and support high-performance workloads.

Lenovo utilizes state-of-the-art cooling techniques, such as direct water cooling and rear-door heat exchangers, to ensure your infrastructure is ready to scale with evolving power requirements. By choosing Lenovo, you gain access to a comprehensive suite of services that not only improve operational efficiency but also pave the way for sustainable growth in the future.

## Run hard, stay cool, save energy

As system power consumption accelerates to keep up with next-generation CPUs and GPUs, customers will need alternatives to air-cooling. Lenovo Neptune™ direct warm water-cooled systems power through the most compute-intensive workloads, running the highest core-count, highest frequency, latest generation processors from AMD, Intel, and NVIDIA.

Neptune™ delivers whisper quiet high performance with lower power consumption in a compact footprint so customers can achieve higher density and more output from their data center infrastructure.



**98%+**  
Heat removal efficiency



**40%**  
Lower power consumption

Lenovo Neptune™ Liquid Cooling is HPC wire's Best HPC Server Product or Technology for 2023, one of HPC wire's Top 5 New Products or Technologies to Watch in 2023, CRN's Best Green Energy Product of the Year, winner of the 2024 SEAL Sustainable Product Award.



## Power and cooling technology for the Data Center

### Power and Cooling services

- Total Cost of Ownership (TCO) Analysis, Design, Planning, Installation and Implementation
- DTN (Direct-to-Node)
- Rear Door Heat Exchanger

### Power and Cooling Turnkey Deployment

- | • System Design   | • Deployment  | • Post Installation  |
|---|---|--|
| <ul style="list-style-type: none"> <li>- CDU selection</li> <li>- Secondary distribution</li> <li>- Guidance through all customer requirements</li> </ul> | <ul style="list-style-type: none"> <li>- Shipment of all components</li> <li>- Installation of CDU and secondary fluid distribution</li> <li>- Provision of treated water</li> <li>- Test &amp; commission</li> </ul> | <ul style="list-style-type: none"> <li>- Yearly CDU maintenance</li> <li>- Quarterly water testing</li> <li>- 5 years warranty on CDU and ancillaries</li> </ul> |

## Practice areas & capabilities

Developed for your business needs



Hybrid Cloud



Virtualization and VDI



High Performance Computing



Data and Analytics

## Services-led approach

Leading with Lenovo Power and Cooling Services

### Advise

#### Workshop

Provides an introduction into the Lenovo solution portfolio.

Delivers clear next steps to kick-start your business and digital transformation

#### Advisory

Leverage data-dependent tools-based analytical approach.

Experts analyze, assess and develop high-level architectures, execution strategies and timelines for delivering solutions



### Deploy

#### Design

High-level architectures are turned into low level designs and wiring diagrams, which are reviewed and approved prior to deployment

#### Implement

Use design documents to enable a structured, consistent, and efficient deployment; accelerating time to productivity and maximizing ROI

### Maintain

Ensures ongoing peak efficiency and reliability through tailored maintenance like monitoring, preventive care and troubleshooting



To learn more about Neptune Power and Cooling Services, please visit [New 6th-Gen Lenovo Neptune™ page](#)

Smarter technology for all

Lenovo