Lenovo

Data Center Power and Cooling Services

By proactively managing data center power and cooling systems, you can improve reliability, reduce energy costs, and make the most of your existing facility and infrastructure.

Today's IT organizations are facing a multitude of challenges, including increasing workloads, evolving technologies, aging data centers, rising energy prices, and increased environmental concerns. In many data centers, the power and cooling infrastructure has not kept pace with the dramatic changes in the IT environment.

If a data center with 1,000 servers reduced CPU energy consumption by 20% this translates into annual savings of $175,000.[1]

According to research as much as 33% to 55% of a data center's utility bill goes to support cooling systems.[2]

Lenovo Professional Services provides data-driven insights on the critical issues surrounding power, cooling, and energy efficiency for your data center with advisory services led by Lenovo Principal Consultants and implementation services led by Lenovo Technical Consultants.

Lenovo Provides:

- Deep skills in cooling, power, and energy efficiency
- Insight into industry trends and technologies
- Leadership on critical issues surrounding power, cooling, and energy efficiency

Contact your Lenovo Sales Representative or Business Partner for more information or go to: www.lenovo.com/datacenterservices

(1) Buildings, Smarter Facility Management, "10 Ways to Save Energy in Your Data Center" (2) U.S. Department of Energy, Office of Scientific and Technical Information, "United States Data Center Energy Usage Report"

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Data Center Best Practices Workshop

You will receive an in depth site visit report with detailed observations and recommendations for improvements and next steps for your IT systems and data center infrastructure.

How do we get there?

A one-day, onsite or remote, interactive workshop to review power, cooling and energy efficiency associated with IT systems and data center infrastructure. We do a Data Center walk through to gather data and observe opportunities to address your issues and objectives.

Data Center Baseline Cooling Assessment

Establish the current cooling capacity and IT load of your data center and identify energy efficiency improvement areas which allow you to reclaim unused cooling capacity and defer capital expansion costs.

How do we get there?

Using handheld, quantitative devices and thermodynamic data analysis, we collect, compare, and analyze current data and verify that your data center has adequate cooling capacity for present and future IT plans.

Power and Cooling Resiliency Assessment

The ability to determine whether your data center power and cooling infrastructure meets your business' resiliency expectations

How do we get there?

We provide a detailed power and cooling infrastructure analysis for the server, rack, and data center and give appropriate guidance on power and cooling distribution options to ensure the level of redundancy meets expectations.

Dense/HPC System Thermal Modeling and Assessment

You will identify cooling or installation issues, define mitigation steps, and take advantage of lower cooling and operational costs through optimized cooling strategies.

How do we get there?

Through measurements gathered with handheld, quantitative devices backed by thermodynamic data analysis, we will visualize and understand the thermal profile of the data center and verify that the data center has the required cooling capacity and architecture required to support current and future plans for Dense/HPC IT systems.

Air Management and Control Assessment

Achieve higher powered systems in your data center and reduce your operational costs by becoming more energy efficient.

How do we get there?

We will evaluate efficient cooling options, deploy optimized containment cooling solutions, and will identify and resolve any leakage paths that generate energy losses in your data center.

Data Center Design and Build Consulting Services

Combined IT and facilities approach to optimize the data center design to meet the needs of today's IT equipment

How do we get there?

Our consulting team will provide end-to-end design consulting and build of new data centers or retrofits. This inside-out design approach is optimized for the Lenovo IT solution to prevent over-provisioning of power and cooling infrastructure.

For more information, contact our Professional Services team:
Asia Pacific: dcg_ps_ap@lenovo.com
Europe, Middle East, and Africa: dcg_ps_emea@lenovo.com
Latin America: dcg_ps_la@lenovo.com
North America: dcg_ps_na@lenovo.com