

Data center efficiency evaluation

We're creating the highest possible value

Initial situation/customer challenges

After a state-of-the-art data center has been built, following all the relevant local rules and regulations, operators tends to forget about infrastructure improvement measures to continuously optimize operational expenditures (OPEX). This overhead can be extensive, because nearly half of the lifecycle costs of a data center are energy costs. Most of the energy services on the market today are reactive in nature. Overall transparency is lacking, and the most efficient investment options can be hard to identify. In addition, IT hardware efficiency, performance, and asset utilization change over time and require continuous optimization. That's where the joint efficiency evaluation approach by Atos and Siemens helps you identify areas with optimization potential to improve the overall efficiency of your data center.

Data Center Efficiency Evaluation helps you to identify areas with optimization potential to improve the overall efficiency. It is a standardized, joint approach by Atos and Siemens, end-to-end from IT to facility infrastructure.



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1	Quick-check validation (Checklist with trigger questions)
2	On-site assessment (Checklist for discussion and on-site inspection)
3	Conclusions – identify potential projects to improve performance and/or efficiency
4	Creation of evaluation report
5	Present and provide report to customer – discuss next steps

Joint five-step approach

The five-step approach helps you identify inefficiencies and recommends improvement measures. It is standardized and end-to-end, from IT to facility infrastructure.

Possible recommendations on IT infrastructure side

- Replace inefficient servers
- Virtualize servers to reduce their physical footprint and power requirements
- Virtualize applications to provide more granular workload management and reduce IT development costs
- Migrate workload, shifting low-risk servers to the cloud, freeing up vital space for business applications that require private hosting
- Optimize storage by consolidating SAN arrays or leveraging more costeffective options to reduce required SAN size
- Modernize the network to provide greater architectural flexibility

Possible recommendations on facility infrastructure side

- Replace inefficient chillers to improve PUE, save on energy costs, and reduce carbon footprint
- Thermal optimization measures, including optimizing rack inlet temperature and repositioning IT components, for safe, secure, and reliable operation and reducing energy costs
- Create transparency and awareness, define your goals, and achieve your energy, sustainability, and system performance targets with our powerful cloud-based Navigator platform

- Employ engineering software tools to optimize equipment placement and energy consumption and at the same time increases the availability and longevity of the infrastructure
- Use power monitoring and analytics to help identify efficiency strategies, stabilize your operation, and increase the reliability of power distribution
- Utilize demand flow to maximize efficiency, increase nominal capacities, and simplify the operation of water-cooled plants
- Consider energy procurement and supply services, which offer access to the best contract terms and product structures in the market – and therefore reduce energy costs and risks and provide certainty
- Get help with utility bill management, because complex tariff structures make it hard to verify your energy bill: On average, one out of 18 bills is inaccurate, and this digital service helps you find errors in your bill

This is how you'll benefit

The Atos-Siemens joint holistic approach helps identify where changes in the facility infrastructure can offer greater benefits in the IT domain – and vice versa, where IT can open the door to greater optimization of the facility infrastructure. This results in time savings, zero duplication, and increased overall efficiency.

We work to increase the competitiveness of our customers' businesses by delivering enhanced IT and energy performance, greater operational efficiency, and sustainability solutions for their buildings and infrastructure.

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