Sun℠ Eco Services Suite

Is your datacenter overheating your energy budget?

CTOs and IT managers are under growing pressure to increase operational efficiencies throughout their datacenter lifecycle. Some companies are reporting they are in danger of running out of power in their datacenters within the next five years[1]. Datacenter floor space is growing around 10 percent per year for large corporations, and compute power is growing even faster, which is driving the need for high-density, more power-consuming products. As energy usage continues to climb, so does the cost to power and cool systems. In fact, the cost of power to run a datacenter may become greater than that of the IT equipment contained within the datacenter. The Sun℠ Eco Services Suite helps customers address these issues by exposing, mitigating, and implementing changes within the datacenter infrastructure to meet current business needs and plan for future growth.

Highlights

- Lower energy consumption to meet current power needs and plan for future growth
- Save on annual power and cooling costs with a more efficient datacenter infrastructure
- Help maximize energy utilization and system availability in your mission-critical datacenter
- Reduce risk and improve value through Sun's partnerships with industry leaders and services based on proven methodologies
- Help prevent potential business-impacting outages before they occur
- Take advantage of flexible services ranging from point-in-time to the ongoing monitoring of your IT environment

Sun℠ Eco Services Suite: Improving datacenter energy efficiency

Sun provides a suite of Eco-related services for site assessments, cooling efficiency design, and Eco infrastructure optimization to assist with problems that may arise in a complex and dynamic datacenter facility. The Sun Eco Services Suite offers a set of comprehensive onsite services for the evaluation, measurement, and trending of the physical environment of your datacenter, including air conditioning, electrical system, temperature, humidity, and air distribution conditions. Consultants also provide written recommendations for correcting actual and potential environmental problems.

Sun experts can help implement corrective action plans to build you a more efficient infrastructure and provide ongoing resources for optimal system performance. Remote technical support is available for specific projects, and may include assistance with tasks such as cabinet selection, future planning and layout, hardware requirements or installation guidelines, contaminant concerns, coordination with vendors, or other factors related to facility improvement or maintenance.

The Sun Eco Services Suite can help optimize your space, power, and energy savings. From initial assessments to ongoing monitoring and support, Sun can help you lower your power consumption and reduce temperature output through four flexible service offerings:

Sun Eco Assessment Service for Datacenter, Basic

This service evaluates a targeted group of equipment to determine how to maximize power and cooling efficiency in the IT infrastructure running Web-based services. You receive a recommended plan for improving key environmental and space issues through a comprehensive review of energy consumption, rack design, space utilization, cooling system, and air distribution.

Sun Eco Assessment Service for Datacenter, Advanced

This is a comprehensive service designed to help you establish a baseline of key existing environmental conditions, identify areas in need of improvement, and provide a plan for optimizing energy usage, cooling, and general environmental conditions at your facility.

[1]According to AFCOM, an association of datacenter experts.

Equipment heat loads continue to increase in both density and overall demand and energy costs are skyrocketing. Getting the most out of your existing infrastructure while planning for the future is more challenging than ever. The Sun Eco Assessment Service for Datacenter, Advanced provides a technical evaluation of your datacenter energy use, cooling capacity, rack placement, air distribution, and other environmental factors that can impact operational costs and reliable service. You also receive recommendations for improving key environmental and space planning issues.

Sun Eco Cooling Efficiency Service for Datacenter

Is your goal to address new high-density heat loads, evaluate current air conditioning needs, or achieve energy savings? Regardless, the optimization of your existing air conditioning infrastructure and air distribution is a critical — and often overlooked — first step. This service can help you recover misused capacity and redirect it to other areas of your infrastructure to improve hardware cooling and increase redundancy, helping reduce your capital and operating costs.

Sun Eco Optimization Service for Datacenter

This service provides both practical and direct assistance with the implementation of corrective actions outlined in the Sun Eco Assessment Service for Datacenter offering. You also receive an ongoing resource who helps address both existing issues and future planning needs for Eco optimization. The Sun Eco Optimization Service for Datacenter provides multiple site assessments, technical support that includes rack cabinet selection and layout, hardware requirements, vendor coordination, and other options relating to facility improvement and maintenance. You can more effectively plan and implement long-term changes to your datacenter infrastructure while keeping up-to-date with changes in the industry and the newest energy-efficient technologies.

Eco-friendly services help optimize power usage and IT budgets

Sun takes a holistic approach to improving and managing methodologies by reducing power consumption while helping improve system availability. Sun's model combines expertise, best practices, and proven methodologies to help you to:

- Identify interrelated environmental factors toward improving operating conditions
- Reduce long-term recurring operational costs through fine tuning of the infrastructure
- Measure, monitor, and reduce carbon footprint to help reduce gas emissions
- Choose either fixed service/fixed price models or custom site pricing
- Leverage Sun service knowledge capabilities to provide in-depth environmental assessments and optimization
- Maintain operational control of the work and activities in your environment

Sun leverages unique relationships with leading industry partners who have years of experience helping customers achieve energy efficiencies in their datacenters.

Did you know?

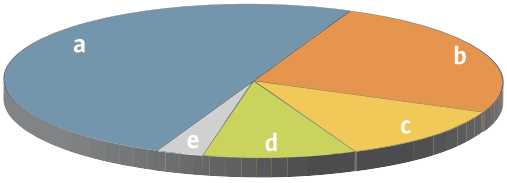
- IT equipment takes up to 50 percent of datacenter power consumption
- Heat density is the biggest IT issue
- Datacenters have 2.6 times the cooling equipment required, but still have hot spots on 10 percent of floor space[2]
- Datacenters doubled in size from 2000-2005
- 25 percent of the typical IT budget is consumed by energy costs

Take the next step

To learn more about how the Sun Eco Services Suite can help you improve energy efficiencies, contact your Sun Sales Representative or Sun Authorized Reseller or visit: www.sun.com/service/eco

Major contributors to power consumption in datacenters

Studies show that only 50 percent of datacenter power is used by IT equipment itself. The Sun Eco Services Suite takes a total solution approach by optimizing the other 50 percent of power consumption due to cooling, air flow, lighting, and other power-related issues. By optimizing your datacenter power, space, and cooling, you can help the environment while you improve your bottom line.



a IT equipment 50%
b Cooling 25%
c Air movement 12%
d Electricity transformer/UPS 10%
e Lighting, etc. 3%

Source: EYP Mission Critical Facilities, Inc. San Francisco

Why Sun?

The Sun Eco Services Suite is part of Sun's preemptive approach to maximizing datacenter energy utilization. Sun leverages best practices and proven methodologies to deliver energy and Eco-related solutions that are good for your budget and good for the planet.

[2]According to the uptime institute

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