

PROJECT PROFILE

Nlyte Energy Optimizer
Raising Managed Cloud Provider Temperature Safely

REAL-TIME THERMOGRAPH AND CO-LOCATION HELP KEEP TEMPERATURES UP, COSTS DOWN



The customer, a managed cloud provider, wanted to raise ambient temperature in its data center according to new ASHRAE guidelines, bring energy costs down, pass those savings on to its tenants, still meet SLAs, not take on any incremental risk of downtime and keep tenants comfortable with the whole transaction. The only way to achieve all those objectives was with real-time, easy-to-read thermal monitoring, available to individual tenants.

“We see favorable reactions when we tour potential clients and they see what we offer with Nlyte Energy Optimizer.”

10+

8,500

1 planned

1 present,

2.3 GWh in
energy consumption,
\$285,120 USD (€217,500)
in power costs, 2762 tons
of CO₂

4.2 months

Nlyte Energy Optimizer, a part of the Nlyte suite of data center solutions, is a software solution that helps all types of data centers—especially large environments—run at peak efficiency.

It provides real-time information about all the critical systems in a data center—both IT and Facilities systems—in an easy-to-use format that empowers management to make great decisions based on facts, not guesses. Users get the most out of the equipment and space available, reduce energy and cooling consumption and proactively plan for future expansion.

Nlyte Energy Optimizer was the first DCIM solution to offer features specifically for co-location facilities. With these features, including tenant-specific information availability and real-time heat mapping with a dynamic thermograph, large co-location facilities can make efficiency changes and still keep tenants happy.



Colocation Room – Data Center separated into zones for each tenant.

The decision-maker was familiar with Nlyte Energy Optimizer from another installation he had toured and wanted to introduce the software into his facility as an added value.

To save on cooling bills and pass that savings on to the tenants, the managed cloud provider wanted to raise the temperature in the data center according to new ASHRAE guidelines. However, this kind of change can make a tenant very tentative, because reliability is the priority.

Just a few degrees can make a big difference. According to DataCenter Knowledge, for every degree the temperature in a data center goes up, power consumption goes down by 4%.

The customer had to find a balance between the desire for cost savings and the risk level the tenants would accept.

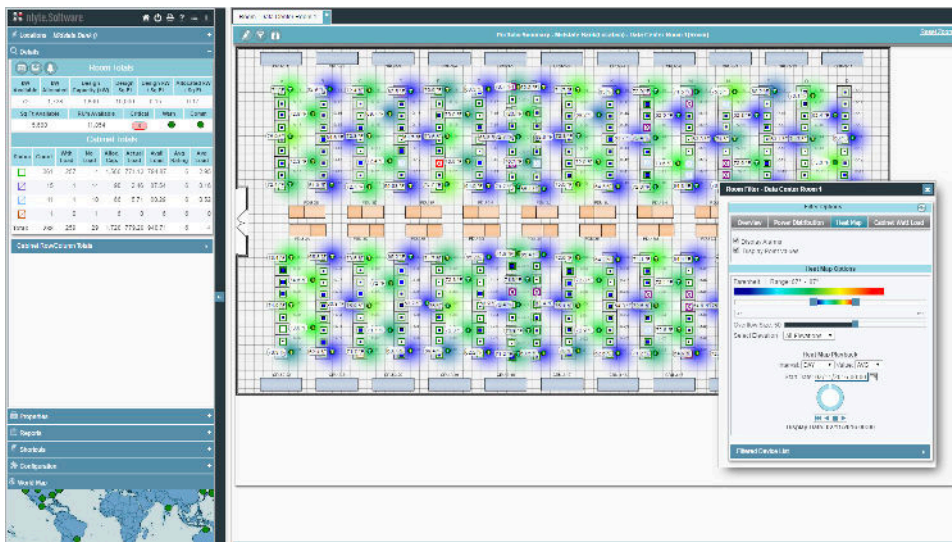
The cloud provider also realized that without transparency, it was difficult for his tenants to know if the provider was meeting SLAs. Nlyte Energy Optimizer makes it possible for individual tenants to have access to their specific power usage data, as well as temperature, humidity and branch circuit information without compromising the security of others.

Very gradually, the customer raised the temperature in the co-lo, 1 or 2° Fahrenheit (1/2 to 1° Celsius) every few weeks, and because the tenants could see the temperature changes in realtime, it gave them a comfort level to see that no harm was done. The increased efficiency had no impact on reliability. Heat tolerances were not exceeded.

All parties were happy with the results. The tenants realized cost savings every month and had at their fingertips the proof that the provider was indeed meeting SLAs. The cloud provider earned the goodwill of present tenants and could offer potential new clients added value plus more competitive pricing.

All told, the co-lo provider raised the temperature by 9° F (5° C) over a six month span at the chillers. Power consumption of the chillers went from 0.53 kW/ton to around 0.32 kW/ton. Annual savings of 2.3 GWh, \$285,120 USD (€217,500) in power costs and 2762 tons of CO₂ were realized.

Had the organization not been able to make this environmental improvement, overall energy consumption and their related costs would have been 15% higher than they are today.



The Heat Map provides a graphical look at temperature throughout the data center.

Nlyte Software helps teams manage their hybrid infrastructure throughout their organization – from desktops, networks, and servers to IoT devices – across facilities, data centers, colocation, edge, and the cloud. Using Nlyte’s monitoring, management, inventory, workflow, and analytics capabilities, organizations can automate how they manage their hybrid infrastructure to reduce costs, improve uptime, and ensure compliance with organizational policies.

Nlyte Software is part of Carrier Global Corporation, the leading global provider of healthy, safe, sustainable, intelligent building and cold chain solutions. For more information, visit [www.nlyte.com](#) or follow [@nlyte](#)

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