Case Study

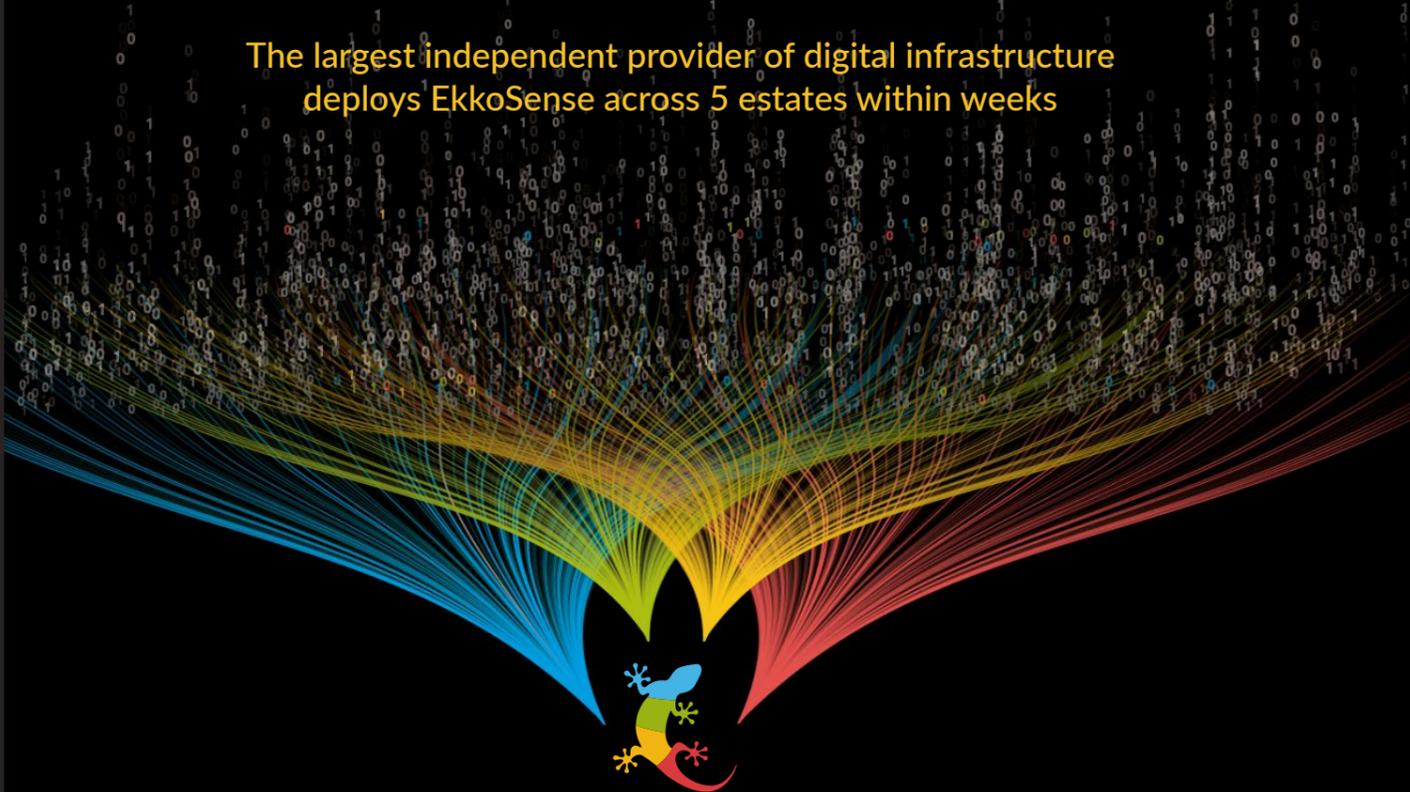daisy.

EkkoSense helps Daisy Corporate Services unlock savings of over £163,000 a year

The largest independent provider of digital infrastructure deploys EkkoSense across 5 estates within weeks

The EkkoSense® Effect

100%
Thermal Compliance

19%
Cooling Energy Saved

£163K
Energy Saved/Yr

daisy.

Daisy Corporates Services is the UK's leading independent provider of secure IT, communications and cloud services.

With a portfolio spanning Lines & Calls and Connectivity, right through to Unified Communications, Business Continuity and Cloud & Hosting, Daisy creates intelligent IT and communications solutions to help its customers in all industries to be more productive and successful, and plays an integral role in keeping the UK's commercial and public sectors operational.

Over many years, Daisy has invested in building and operating data center facilities to deliver a full range of cloud and hosting services, from colocation through to fully-managed environments. Daisy's data center infrastructure is mapped into the group's business continuity network and is secure, robust and resilient by design.

Improving data center thermal performance

Two years ago, in order to improve data center performance, Daisy selected EkkoSense's EkkoSoft Critical® thermal optimization solution to help manage the cooling performance of two of its critical facilities in Farnborough and Hamilton. Key factors behind this decision were Daisy's determination to make its expensive equipment cooling more cost-effective and also to unlock further cooling capacity.

Implemented within weeks, EkkoSoft Critical was deployed by the EkkoSense optimization team to provide Daisy with a real-time 3D view of both the physical and thermal cooling dynamics of its two data centers. Daisy was able to 'see' their thermal risks clearly and, because EkkoSoft Critical shows the data center thermal estate in real-time, could also immediately track the impact of changes being made to improve thermal performance.
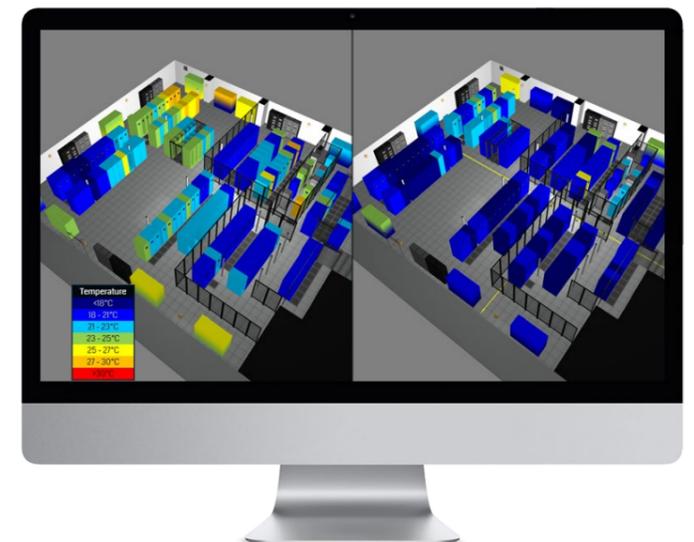
The results from this initial optimization process were impressive, unlocking an initial 19% saving in the data center cooling energy being used. EkkoSense also provided Daisy with a rapid return on its initial investment with the savings quickly covering the cost of the project.

In addition to these savings, EkkoSense also helped Daisy to secure improvements in:

- Thermal compliance – all data center 'hot spots' removed to ensure data centers complied with ASHRAE recommended thermal performance ranges

- Balanced air flow – EkkoSense optimization process helped Daisy to improve resilience and recover lost cooling capacity

- Cooling and air flow resilience testing – Daisy was able to benchmark its current cooling and air flow performance and safely test its cooling resilience to ensure uptime

"While the initial brief was to look at energy savings in two of our data centers, we were delighted that the solution also identified potential thermal risks from both over- and under-cooling. We worked with EkkoSense's Optimization consultants to make immediate long-term changes to our cooling strategy to eradicate this risk – preventing potential outages resulting from thermal inefficiencies and, at the same time, benefiting our bottom line by saving energy costs," Les Price, Head of Availability Services at Daisy.

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Unlocking further benefits with EkkoSense

Following the success of the initial project, Daisy then extended its engagement with EkkoSense to cover further primary data centers in Wapping, Aston and Romford. Again, the deployment of EkkoSoft Critical and EkkoSense's data center optimization service has unlocked efficiencies, delivering a further £77,000 annual cost saving thanks to reduced data center cooling energy costs.

Given this success, Daisy has also now engaged EkkoSense to deploy its software-led thermal optimization approach at its Reading and Birstall sites, as well as additional halls in the original Farnborough and Aston facilities. Collectively, EkkoSense has now helped Daisy to save £163,000 in annual data center cooling energy costs – representing over 200,000 kW of electricity and a significant carbon reduction.

These savings have been achieved by EkkoSense's provision of a multi-year Managed Service to help Daisy optimize its data centers' performance. In addition to the deployment of a comprehensive network of IoT-enabled sensors and the EkkoSoft Critical SaaS software, EkkoSense has installed and commissioned EkkoAir cooling duty sensors to provide real-time tracking of cooling duty loads.

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EkkoSoft® Critical

Key EkkoSense innovations that distinguish the company's software-based optimization approach from more traditional legacy DCIM approaches include:

- The application of machine learning analytics built right into the heart of EkkoSoft Critical. Based on PhD-level thermal expertise, data from 50m+ data points in critical facilities around the world, as well as real-time inputs from sensors deployed across an organization's entire estate – from Edge facilities through to the largest enterprise sites

- Unique Cooling Advisor functionality that provides continuous tangible optimization recommendations to deliver cooling energy savings up to 30% - your own virtual PhD expert continually optimizing your facility, and always on hand to help in-house data center teams to deliver the next best optimization outcome

- The application of EkkoSense's distinctive Cooling Zones capability that shows the real-time correlation between cooling units and IT racks to support optimization and provide very effective redundancy and resilience testing – providing organizations with a much higher degree of confidence in the ongoing resiliency of their cooling plant

- A Lightweight and easy-to-manage M&E Capacity management capability - meaning that you no longer need an army of people or huge costs to deliver an effective centralized capacity management process

- Use of the latest Web technologies – including gaming interfaces to provide data center teams with the most intuitive, easy-to-use and simplest to manage monitoring and management capabilities. By creating immersive Digital Twin representations of your data center, operations teams get to see all their current cooling, power and thermal conditions via a single, accessible 3D visualization

- Truly granular levels of sensing – taking advantage of EkkoSense's latest low-cost IoT wireless sensor technology to allow sensors to be deployed in higher numbers across the data center right down to rack-level – making true machine learning-based analytics and real-time thermal management of critical facilities a reality. This is typically complemented by our EkkoAir vendor-agnostic cooling unit smart meter that provides real-time cooling duty information, highlights unperforming units and helps predict potential failure points before they happen

The result is EkkoSoft Critical - an immersive, intuitive and effective M&E software platform that helps customers such as Daisy Corporate Services to:

- Become fully ASHRAE-compliant and remove thermal risk

- Identify unused cooling capacity and unlock potential capacity increases

- Directly support their green agenda & reduce carbon footprint in the quest for net zero

- Gain real-time monitoring insights from anywhere with full remote visibility

- Optimize cooling and gain energy savings of up to 30%

- Plan, predict and model M&E capital spending with confidence

Exceeding annual cooling energy savings

While improved thermal efficiency has enabled Daisy to secure significant data center cooling energy savings, applying EkkoSense's performance optimization has also been instrumental in delivering additional benefits in terms of improving capacity and reducing risk.

And with the introduction of advanced Capacity Planning functionality in the latest version of EkkoSoft Critical, EkkoSense is also opening up the potential for Daisy to take advantage of the software's ability to track key space, power and cooling capacity measures to enable true live capacity planning functionality. By providing full estate-wide or room-by-room Live 3D views of current space utilization, power usage and cooling capacity performance, Daisy will benefit from much greater control over its data center estate.

"Working with EkkoSense and taking advantage of EkkoSoft Critical's software-driven thermal optimization capabilities has helped Daisy to secure impressive cooling energy savings in its data centers. The success of this project has encouraged us to deploy EkkoSense performance optimization more widely, and we're now seeing EkkoSoft Critical as a solution that not only positively impacts our energy usage and thermal risk reduction, but also is able to play an important role in the ongoing capacity management of our UK data center estate," added Les Price.

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Bring the power of EkkoSense AI to your critical facilities

Discover more

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Request your free demonstration and experience the future of data center optimization, today.

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