

Sunbird's powerful DCIM software helps Vodafone drive sustainability in its global data centers.



The Situation

Vodafone is a telecommunications company that's trusted by more than three hundred million mobile customers, twenty-eight million fixed network customers, twenty-two million television customers, and six million business customers around the world. The company's focus is connecting people, places, and things through fixed and mobile networks.

Vodafone has a large and sprawling infrastructure consisting of many data centers. Consequently, Vodafone's data center professionals struggled to have a complete understanding of their environment and capacity to enable them to reduce their energy consumption and get the most out of their existing facilities.

They needed to know the temperature of their data centers to understand if they could raise temperatures to save energy. They also needed to know more about the power allocated to each rack, the power the rack hardware was actually consuming, the spare power capacity left in each rack, and the amount of spare physical space. It was also important to be less dependent on fossil fuels and find more energy efficient cooling methods.

"We wanted to gain insight regarding power usage, cooling, and data and power connections," said Andrew Marsh, Senior Manager for Infrastructure and Data Centers for Vodafone in the UK. "It was also important to us to be able to get rich business intelligence through an easy-to-read dashboard that would help with the day-to-day operations. We wanted that dashboard to give us all the necessary key performance indicators with charts while allowing us to drill down to get the details behind each chart."

Related to this need was having access to detailed reports, according to Andrew. "We wanted to know what costs are associated with electrical costs and cooling. We wanted the ability to project how much spare real estate we have from a space and power perspective, and we wanted a comprehensive asset list so that when we deploy a new asset, we can make a more educated guess about where to deploy it." *(continued)*

"We're building solar power farms and wind turbines, implementing free air cooling and cold aisle containment, and raising the minimum cold aisle temperature to save a lot of power."

Andrew Marsh | Senior Manager for Infrastructure and Data Centers
Vodafone United Kingdom

Customer

Vodafone is a telecommunications company that's trusted by hundreds of millions of customers around the world.

Situation

Vodafone had sustainability objectives to reduce the carbon footprint of their data centers. They needed a powerful and reliable DCIM software that would enable them to increase energy efficiency and maximize the utilization of their existing facilities to defer building new ones.

Solution

Sunbird's DCIM software provides Vodafone with the ability to measure, document, and plan their data center operations to dramatically increase sustainability. Vodafone is also building renewable energy sources, leveraging free cooling, and implementing cold aisle containment.

Results

Vodafone enjoys better data center energy efficiency to help meet their sustainability objectives.

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The Situation *(continued)*

Vodafone began a search for a platform that possessed four capabilities: visualization, an easy-to-use dashboard, a comprehensive asset inventory, and in-depth reporting capabilities. That led Vodafone to Sunbird's DCIM solution.

"We looked at several products in the marketplace and did a couple of proof of concepts," said Andrew. "The thing that sold me on Sunbird was the fact that it was an out-of-the-box solution, which means I didn't need to do lots and lots of development to get the look and feel that I needed. Also, there were a number of preconfigured dashboards to help us make intelligent decisions."

The Solution

Sunbird's DCIM gives Vodafone all of the capabilities it needed, including asset management, capacity management, change management, environmental monitoring, power monitoring, 3D visualization, and BI and analytics.

Vodafone uses Sunbird's DCIM to collect, trend, and report on the data from their temperature sensors. Sunbird transforms this data into actionable information that enables them to visualize and understand where they are overcooling so they can raise temperatures. Vodafone deployed more sensors, going from 16 to 800 sensors in a single location.

Sunbird also allows Vodafone to evaluate rack space and equipment across its facilities in real time. Users can instantly identify rack capacity, as well as every device's precise location, technical specifications, and connections to other assets. Now, deployment and management decisions are made faster and with much less effort.

Vodafone leverages Sunbird to measure and track power usage in real time throughout all of its facilities. This allows users to see power utilization trends and capacity levels across the facilities' power paths.

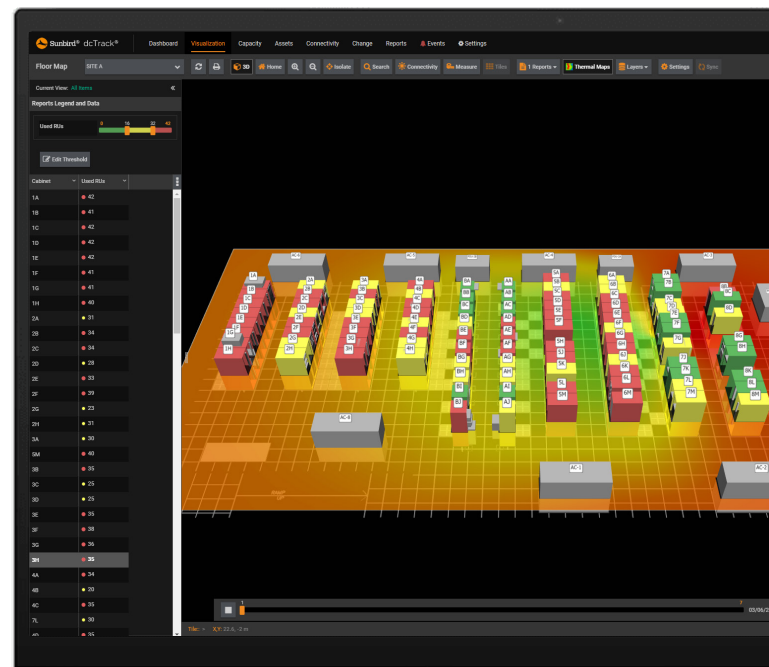
"Today, we are deploying rooms of 200-300 servers every couple of months" said Andrew. "Even though I have a small team, everything is going very well thanks to the excellent training that Sunbird conducted. The solution is very intuitive, and support is always there when we need it."

Vodafone is also building solar farms and wind turbines and leveraging free air cooling to reduce their carbon footprint.

Thanks to Sunbird, Andrew's team can make much more informed decisions about the sustainable deployment and usage of assets within its data centers in a way that they never could before.

"We're placing temperature sensors at the top, middle, and bottom of every rack. We're using Sunbird to measure the individual temperatures so we can see the Delta T. That allows us to raise temperatures which saves us a large amount of money."

Andrew Marsh | Senior Manager for Infrastructure and Data Centers
Vodafone United Kingdom



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The Results



Greater Power Capacity Management

"Because we're getting real power readings, we don't have to go off of the device nameplate ratings," said Andrew. "We're getting better densification in our data centers which prevents us from having to build more facilities. In one room, we were able to do a 4-to-1 server consolidation exercise so we're saving 75% power. It's only by measuring things using Sunbird that we're able to do that."



Monitoring That Enables Energy Cost Savings

"Sunbird provides the ability to measure, monitor, and document what is actually happening in our data centers. Then, we can implement things to keep the costs down," said Andrew. "We can actually measure the individual temperatures in a cold aisle so we can see the Delta T. That allows us to raise the temperatures in the cold aisle which saves us a large amount of money."



Amazing Support

"I had two new rooms that I wanted to be deployed, so I sent the Sunbird team pictures, and they got back to me the same day," said Andrew. "I've always had a great experience with their customer support team. For me, that's one of the massive pluses of working with Sunbird."

Call 732.993.4476 or visit SunbirdDCIM.com

Sunbird Software is changing the way data centers are being managed. With a focus on real user scenarios for real customer problems, we help data center operators manage tasks and processes faster and more efficient than ever before, while saving costs and improving availability. We strive to eliminate the complexity they have been forced to accept from point tools and home grown applications, removing the dependency on emails and spreadsheets to transform the delivery of data center services. Sunbird delivers on this commitment with unexpected simplicity through products that are easy to find, buy, deploy, use, and maintain. Our solutions are rooted in our deep connections with our customers who share best practices and participate in our user groups and product development process.

Based in Piscataway, NJ, Sunbird serves over 1,850 DCIM customers worldwide. For more information, please visit SunbirdDCIM.com.

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