

CASESTUDY



Increased global and remote visibility over power for Belgacom International Carrier Services

Racktivity has helped Belgacom International Carrier Services (BICS), a major international communication service provider to increase visibility over power and environmental factors underpinning its critical global network. With Racktivity, BICS is able to improve its troubleshooting and proactive maintenance while ensuring that it is receiving agreed level of service for co-location site providers.

With revenues of over 1.65 billion euros, BICS delivers best-in-class international wholesale solutions to any communication service provider worldwide. Through its Mosaic portfolio, a comprehensive, flexible and innovative suite of solutions designed to be used individually, or collectively, BICS meets the existing and future requirements of the global telecoms industry.

From teams located in Brussels, Bern, Dubai, Singapore and New York, BICS serves more than 700 customers including over 400 mobile data customers and is a top 4 voice carrier delivering over 28 billion minutes per year. BICS has a global infrastructure backed by a Tier 1 network with over 100 points of presence (PoPs) in 55 cities and 33 countries.

.BICS figures

- › Established 1997 as a Carrier & Wholesale business unit at Belgacom
- › Headquarter in Brussels with offices in Bern, Dubai, Singapore & New York
- › More than 700 customers, including over 400 mobile data customers
- › World leader in mobile data services
- › 400+ employees
- › 1.65 billion euro revenues
- › Top 4 voice carrier with over 28 billion minutes in 2012



.problem

BICS is a highly respected international telecommunication provider serving customers that rely on its services to conduct billions of euros of business each year.

As a major wholesaler of carrier services, BICS has a widely distributed network both within its own data centres and through racks of equipment hosted within locations across the world.

Many of these locations are within co-location facilities which offer highly resilient systems and connectivity backed up by service level agreements from the site owners. However, BICS still takes its responsibilities to both manage and monitor all elements within racks.

This includes ensuring that SLA's are delivered and so it can quickly detect any problems and enact proactive and preventative maintenance to avoid outages.

Power fluctuation is an issue that can potentially cause service outage and BICS decided that it needed to gain better visibility over the power profile underlying all of its distributed network elements. Senior managers within BICS also felt that accurate power inspection and longer term trending would help it both with fault diagnosis and preventive maintenance tasks.

.solution

However, the organisation has a wide range of equipment from multiple vendors as well as several operational systems which it wanted integrated into a single view. In addition, BICS also wanted to gain visibility over both AC and DC based equipment down to a port level at over 200 PoP across the world.

BICS looked at a number of power management and monitoring solutions as Geert Bisback, International Field Engineer co-responsible for the technical selection and operational deployment explains, "Uptime and remote control is essential in our industry and after thorough investigation we selected Racktivity as technology partner to develop and implement this project."

The Racktivity EnergySwitch Family has been developed to measure, monitor and control the power consumption of servers and appliances in the data center rack.

Unlike other so-called "Smart PDUs", EnergySwitch is able to measure and calculate true power consumption using a higher sampling frequency on a per outlet basis for both Voltage and Amperage.

This level of detail is essential for accurate power management within the data center and allows for a better monitoring, in-time warnings and actions to deliver higher uptime by enhancing disaster prevention and recovery strategies.

"Aside from the advanced technology Racktivity offers it also demonstrates the right "can do" attitude, pre point of sale and after. It wants to be a trusted partner bringing real value, without compromise.

When discussing the project and to this day Racktivity is keen on developing and maintaining a dynamic dialogue, tailoring their core business expertise to suit our needs.

This is a continuous process of discussing and mutually learning from each other to get to the best possible outcome. This level of flexibility and customer centric approach is another key element that led us to select Racktivity."

- Geert Bisback, International Field Engineer co-responsible for technical selection and operational deployment

.conclusion

To evaluate the potential of the Racktivity solution, BICS ran extensive testing of the product family at three sites in Belgium.

This project allowed Racktivity to integrate its Data Center Performance Manager (DCPM) software within BICS own monitoring platform including the creation of thresholds and custom alerts based on specific thresholds and trends.

The success of the testing and system integration gave BICS the confidence to roll out Racktivity across its distributed infrastructure. A “flying team” is currently following a schedule to deploy Racktivity devices at sites across the world.

Typically, each site consists of one or more EnergySwitch Smart PDU’s. In addition, many of the sites also have DC²Sensors and AC²Sensors to provide accurate monitoring of all current conditions of both alternating and direct current. Each installation has the ability to include optional sensors for temperature, humidity and sensors to determine if a rack has been opened to enhance remote security.

Aside from the advanced technology, Racktivity also demonstrates the right “can do” attitude, pre point of sale and after. This is a continuous process of discussing and mutually learning from each other to get to the best possible outcome.

“Today we are in the process of deploying this solution worldwide. It allows us to get in-time power and environmental warnings from all over the world into our Brussels based NOC, preventing outages or limiting downtime to an absolute minimum.”

- Geert Bisback, International Field Engineer co-responsible for technical selection and operational deployment

.about Racktivity

Racktivity, an innovator in next-generation power, energy and environmental management solutions offers the industry's only integrated hardware and software for critical infrastructures.

The DCPM suite, a Service Provider Infrastructure & Data Center Performance Management System, measures, monitors and manages power across distributed data centres and gives customers full visibility and control of their energy consumption while integrating seamlessly with other applications and PDU appliances.

Racktivity's EnergySwitch family of smart Power Distribution Units (PDUs), and sensors equips infrastructures with the most advanced metering, switching and predictive analysis capabilities available on the market today.

.why Racktivity

Unique features in both software & hardware components:

- Electronic fast-fuse protection
- Inrush current protected relays
- Automated server start-up
- Both AC and DC power management & environmental metrics

Unique saving opportunities

Link power statistics with CPU statistics to identify and eliminate inefficiencies, demand response automation capabilities

Open APIs, MIBs to integrate in or with third party hardware and software

Scalable over remote and distributed facilities

A flexible, experienced and committed team at your service, to fulfill your specific business needs