

THE RISE OF EDGE COMPUTING

And What it Means for Data Center Infrastructure Management (DCIM)

EDGE COMPUTING IS ON THE RISE!

Why you may ask? Because enterprise organizations are now gaining a greater understanding of the advantages of decentralizing their computing power.

by Mark Gaydos

In essence edge computing refers to data processing power at the “edge” of the network instead of in the cloud, or a central data warehouse. Keeping this computing power as close as possible to the end user reduces latency, network strain and improves overall performance.

For example in a “smart” manufacturing facility, the edge can capture local data and analyze it to speed up decision making and response time – without the need for sending it to a large, distant warehouse. The edge can handle data that has a very short usable lifecycle, so there is no need to store it long-term in a data center, further reducing infrastructure and storage costs.

Retail stores make another good edge computing study. These organizations use edge computing to contact their shoppers in-store, at the point-of-sale, via mobile notifications. In addition, food and beverage companies use the edge to capture and understand consumer behavior so they can be more responsive to their needs.

With the growth of the Internet of Things (IoT), the more smart devices there are – houses, cars, roads, healthcare devices and trains – the more edge computing will come into play. In fact, smart locomotives are currently leveraging edge computing to gather and process real time track conditions to safely transport cargo.

The pending era of edge computing brings about another question to ponder, “How will edge computing impact the way data center managers

optimize facilities?” One answer can be found in effective, remote control of devices with Data Center Infrastructure Management (DCIM). With infrastructure at distributed locations, some of which are dark and have no permanent on-site staff, control from a virtual command center will become very important.

This virtual **Command Center** will enable data center managers to visualize all devices, manage CPU levels, power and cooling as well as report and control critical and non-critical systems remotely. This command center will also reduce the time commitment for remote location staff because many IT functions can be controlled from a central location saving travel expenses and mitigating risks. In addition, if this control is delivered via software, there are no expensive rack-mounted console servers or set up.

Edge computing should not mean added IT management hassles. The use of DCIM software brings the edge into centralized view, with drill-down device diagnostics that typically only an on-site technology can gather. As the edge bears more of the processing weight from large data centers, visibility and control into CRACs, PDUs, BMS, office lighting, alarms, cooling, power, even desktops and doors – from a central location – is paramount to efficient operations. The use of a DCIM will provide the key functionality to those in charge of edge facilities and enable them to deliver faster services without expensive, on-site human presence.

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