



Extending IT Visibility **BELOW** the Raised Floor

by Mark Harris

Today's Enterprise IT infrastructures are being re-imagined at break-neck speeds driven by the economy, rapid innovation, and the AI frenzy. And with all this wholesale infrastructure re-imagining underway, the ability to actively manage and optimize every component involved with delivering mission-critical business services is critically important to remain competitive.

A Google search for "IT Visibility" solutions will reveal hundreds of companies with over a thousand products and services to provide that visibility. But what may not be obvious from that search is how all that visibility is focused on the computing, networking, and storage hardware, operating system software, and business applications above the raised floor. In other

words, traditional IT visibility is limited to the scope of infrastructure on top of the raised flooring. But what about the essential foundation below the raised floor that enables all those components to operate?

Notably, AI has increased awareness among the Global 1000 CIOs about the critical need for highly inclusive visibility. They realize that problems "below the raised floor" will idle hundreds of millions of dollars of "above the floor" IT assets operating many of the organization's most strategic new applications.

With today's most advanced and AI-driven data centers consuming 100 megawatts or more, poor workload placement decisions due to lack of comprehensive visibility can also incur millions of dollars in needless

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energy costs and dramatically increase the risks to business IT service delivery.

For decades that “floor” has defined the chasm dividing the big IT picture. It is symbolized by the “raised floor” in terminology—even though many data centers may not contain raised floors any longer, the chasm is still there. While lots of attention has been paid to achieving extremely detailed visibility of everything on top of the raised floor, little has been done by the IT professional community to extend their view below the floor. That other half of the equation is typically referred to as “facilities” and has always been treated as a set of resources that “the facilities guys” need to maintain. Disappointing for sure since it is the space, power, and cooling that enable everything in IT to work!

Perhaps it's the roots of facilities based in real estate, the complexity of dozens of non-IP device communication protocols, the foreign vernacular of “BTUs” or “kilowatts,” the diversity of non-racked equipment types, or a combination of these. The net result is that historically the space, power, and cooling have not received anywhere near the amount of attention by senior leadership as the active IT components have.

But this is changing in the world's top organizations. These leaders realize that successful and defensible business service delivery requires a comprehensive strategy above and below the raised floor. They consolidate their responsibility to include these

additional components and embrace the technologies needed to complete the process. Real-time visibility includes everything—every watt, every BTU, every valve, CRAC, chiller, and vent. Ironically these devices are instrumented but have never been consolidated in a unified view. IT leaders have now realized that once both sides of the raised floor are visible and coordinated, they can make significantly more effective service delivery choices. A great example of this big-picture value leverages the ability to move application workloads dynamically, based upon any smart criteria available to orchestration layers.

Today, that orchestration only has operational metrics from above the raised floor. But imagine if the available data included time-stamped energy costs, cooling and power capacities, room temperatures, local weather conditions, and resiliency status. Using a much broader information base to make workload decisions, operational costs and risks decrease and optimal performance and resiliency goals become achievable.

Putting the two halves of the picture together provides a broader understanding of ways to optimize work processing, which simply makes sense in the fiscally responsible, performance-driven world we are now thrust into. It's not surprising that the top CIOs and IT leaders require their teams to design more informed operational plans that fully consider and leverage both sides of the raised floor!

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