Take The Right Steps To Fully Utilize DCIM

Get Better Insight Into Your Operations & How Your Data Center Components Impact Each Other

QUANTIFYING THE VALUE of data center infrastructure management (DCIM) is not simply a matter of following a formula for success because the number of factors that can impact how you make changes to your system are as varied as the different types of equipment you're working with. This may come as no surprise. Considering there are so many nuances to DCIM implementation, it's important to consider the advice of the experts in this field so you can take the next best step toward choosing the most ideal DCIM solution for your data center operations.

What DCIM Really Is

As DCIM solutions continue to find their niche, it seems that with every new Google search, a different variation of a DCIM product appears. Steve Brasen, managing research director at Enterprise Management Associates, says everybody is trying to glom onto the DCIM name, but the reality is that neither an energy solution nor asset management solution counts as a DCIM solution. True DCIM is much more multifaceted in its application.

"In order for it to qualify as a DCIM solution, you have to have a holistic approach that takes into account all of the practices necessary for managing the entire data center infrastructure," says Brasen. "DCIM looks at the IT infrastructure as an ecosystem where any single element in the data center, whether it's hardware or software or environmental, can impact any other element in the data center as a true ecosystem."

A DCIM tool should help make managing data center resources—equipment, physical space, power, and cooling—easier and more efficient,



says Paula Alves, senior product marketing manager-DCIM at Raritan (800/724-8090; www raritanDCIM.com). In addition, a DCIM tool needs to be able to monitor and measure infrastructure resources continuously in real-time and analyze and present the information in easy-to-understand visuals, she says.

A DCIM solution should also be able to share information with other business and IT management systems, including BMS and ITSM, so that processes, such as change orders and incident reports, can leverage information gathered by DCIM and remove manual intervention. "A true DCIM solution provides data center monitoring and capacity and change management capabilities not just for IT resources, but for the assets within the facility as well," she says.

Are The Benefits Worth The Investment?

The value of organizing data and extracting applicable action steps may seem rather

Key Points

- DCIM involves more than just another software solution—it means you can monitor multiple systems under one management platform.
- Know that the benefits of DCIM are generally more indirect than immediate.
- It's up to the data center manager to customize a DCIM implementation for an enterprise's specific needs.

nebulous when you're talking about the capabilities of any given DCIM solution, but the key is to look beyond routine metrics and find ways to "simplify administration and improve performance in the data center," says Brasen.

To put it simply, Brasen says that there is direct value and indirect value, but the greatest value you get from DCIM is the indirect benefits or results that are difficult to quantify.

Get Started

In order to get a vision for the difference between standard infrastructure management approaches and DCIM solutions, you have to recognize that DCIM encompasses the management of the following data center components: assets, power, thermal monitoring, space, and access and control, according to Steve Brasen, managing research director at Enterprise Management Associates. "What DCIM does is it understands the relationships between all of these elements, and it's able to apply analytics against all of that data to holistically manage the environment for optimal performance," he says.

"The [benefit] that gets called up most frequently is power management—so energy savings and energy cost savings. And related to that would be thermal conditions—so cost savings related to reducing cooling requirements in the data center," Brasen says. "I think the reason it's called out is because it's one of the more quantifiable ROI areas that you can calculate."

Sarah McElroy, research analyst at IHS Technology, agrees that cost savings for better energy and cooling system management are a benefit most people think of when it comes to DCIM. However, another long-term (or potential indirect) benefit is "the time and resources that are saved when making decisions with adequate information." It's the guidance a DCIM solution can provide when performing maintenance and upgrading equipment that saves time and prevents accidents.

Make Goals, Monitor & Move Forward

As much as DCIM is about optimizing the organization and installation of your hardware components, McElroy says you must keep in mind that DCIM is fundamentally a software solution. "The essence of DCIM is the software that can communicate with sensors and monitoring equipment," she says. "Thus, an IT leader should not expect DCIM to be a worthwhile

or useful tool if they do not have their data center equipment fully outfitted with monitoring and sensing devices or built-in intelligence."

Alves says DCIM solutions are more than a tool or widget you simply procure and turn on. "They are process solutions, similar to a CRM or ERP deployment, requiring alignment of problem, solution, processes, and people. Successful DCIM deployments often take fundamental changes of process and work practice in the organization to be successful."

It can be difficult to fully grasp what efficiency issues need to be addressed now vs. how to plan for future infrastructure changes. To balance the two, Brasen recommends focusing on your immediate requirements, but then looking at your broader requirements and targeting a solution that

addresses both in an integrated approach. "You may see that you're having a performance degradation on your servers at a particular time," Brasen says. But the underlying reason for that could be a variety of issues, he says. "So it's like a domino effect. That's how things work in real life."

Action Plan

Get a grasp on what DCIM really does. You can continue to track your data center equipment separately and monitor the performance of components independently, but this is not DCIM. A DCIM product pulls together data collected from every critical system and helps you leverage the visual of that information to improve efficiency and performance.

Know what ROI you require. When you're ready to implement a DCIM solution, work with a vendor that can provide the return metrics that will give you feedback about your equipment's current capabilities and how you can scale out in the future.

Integrate DCIM with existing systems. How will you use a DCIM system to implement changes and what data will you be tracking and reporting? Managing DCIM is a tandem responsibility that happens alongside monitoring systems you already have.

Top Tips

If you choose DCIM, remain dedicated. One of the best ways to ensure that DCIM is worthwhile is to fully commit to it, according to Sarah McElroy, research analyst at IHS Technology, "I'm no expert in DCIM implementation, but from what I've learned, it's not worthwhile to halfheartedly deploy DCIM. The more equipment that is monitored and the more systems that are tracked, the more benefit DCIM can provide," she says.

Take advantage of DCIM modeling. According to Steve Brasen, managing research director at Enterprise Management Associates, more comprehensive DCIM solutions have an element of visual modeling. These types of solutions "are able to model the actual data center and then visually present it so that you can overlay. At a layer higher than that—what I would consider an optimal solution—it also does hypothetical modeling for modeling the potential configurations of tomorrow."