

Beyond energy: the holistic approach to efficiency with iTRACS[®]



Until recently, discussions about efficiency in the data center typically revolved around a single topic: energy. How do we reduce energy consumption and costs? How can we modify cooling strategies to be more energy efficient? How do we achieve and maintain PUE levels set by management?

But, in today's fast-moving data centers, this conventional definition of efficiency is rapidly evolving and expanding. With every OpEx dollar being critical, data centers can no longer afford to focus their efficiency initiatives solely on power and cooling.

Today, data center owners and operators must drive efficiency across all of their physical resources—including space, network connectivity, and IT assets—to unlock the true value of their data center infrastructure.

There is a growing awareness of the need to adopt holistic or whole data center approaches to data center efficiency that include both facility and IT teams.

In many cases, these resources are interrelated and interdependent. A change in one resource invariably produces intended and unintended changes in others—often with direct or indirect impacts on overall efficiency. If nothing else, each aspect of efficiency has a definite and measurable opportunity cost: you don't want to spend the same OpEx dollar twice!

THE ROLE OF DCIM

The rapid growth and acceptance of Data Center Information Management (DCIM) solutions has been instrumental in redefining efficiency to encompass all five key physical resources: space, power, IT assets, network connectivity, and cooling. DCIM has enabled data center professionals to view their entire physical ecosystem—all key resources across both IT and Facilities—in a single pane of glass in order to better understand and manage the complex and diverse interdependent relationships between them. With DCIM, decision makers now have an intelligent management tool that lets them pursue a holistic approach to efficiency rather than a fragmented one.

DCIM enables a more holistic approach, giving data center managers visibility into both IT and Facilities and helping them make more informed decisions regarding the best use of available resources and dollars.

THE COMPREHENSIVE VALUE OF ITRACS® DCIM

To optimize efficiency across the entire infrastructure ecosystem, a DCIM solution must be able to incorporate and present information from all functional areas of the data center. This is one of the unique strengths of the iTRACS software suite.

The iTRACS solution is a comprehensive, open software suite that provides the range of infrastructure management capabilities you need to manage your entire data center as a single dynamic and interconnected environment.

With this powerful tool, you are able to aggregate, manage, and visualize operational data from all functional areas of your data center within a single, easy-to-use interface. As a result, you're able to increase efficiency across the entire data center, not just in your power and cooling systems.



THE NEW DEFINITION OF EFFICIENCY

- **Better utilization of existing IT capacity:** iTRACS enables you to discover stranded (unused) space, power, switch ports, and other IT resources that you can reclaim and deploy in order to defer costly CapEx expansion.
- **Accurate and timely capacity planning:** Armed with a deeper understanding of how your infrastructure resources are actually being used, you are able to make decisions regarding capacity based on facts instead of assumptions. So you can accurately project when an expansion is necessary and what it should

look like. iTRACS can help ensure you don't waste money on overprovisioning and are committing CapEx dollars neither too soon nor too late.

- **Increased CPU efficiency:** iTRACS can track and map CPU utilization as well as power usage. Leverage that information to increase transactions per watt for better output—or use the system's hardware profiling capabilities to match the right server to the right application.
- **Improved space density:** Get all the information you need to safely maximize use of cabinets and enclosures. Increase server densities for higher revenues and productivity per rack.
- **Enhanced availability:** iTRACS provides real-time visibility into the operating status of all systems and offers deep-dive root cause analysis so you can identify and avert problems that can impact service levels. What-if scenarios help optimize planning by running predictive models in the safety of software before any work is actually done. This helps minimize human error—the most common cause of downtime in the data center.

TAKE THE NEXT STEP

The paradigm of the data center is shifting. Data center managers are wrestling with a whole new set of challenges: cloud migration, big data and the rising cost of everything. In this new reality, data center intelligence, agility and efficiency are front and center. And CommScope is there.

iTRACS: A vital part of CommScope's Connected and Efficient Data Center

The Connected and Efficient Data Center is a proven model for flexible deployment, infrastructure management and connectivity intelligence. It includes innovative solutions like our purpose-built Data Center on Demand™ modular data centers, AIM-based imVision® infrastructure management solution, and portfolio of industry-leading fiber and copper cabling.

As a core component of the connected and efficient data center, iTRACS DCIM offers you the visibility, insight, and integrated suite of tools to manage and optimize your entire physical ecosystem for maximum efficiency and minimum cost.

Efficiency in the modern data center—it's about energy and a whole lot more.

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