



# Eaton IPM Infrastructure in action

Simplified IT centric monitoring of data centre infrastructure



The adoption of new monitoring and management systems in data centers can be a daunting prospect.

Raising budget. Coordinating and executing the roll-out. Installation. Configuration. Integration. All followed by days or even weeks of training and familiarization.

Little wonder data center managers can be reluctant to make the transition.

That's why Eaton have created IPM Infrastructure. A solution that, unlike others, integrates into the data center operations suite without impacting the very systems it's designed to monitor; instantly displaying all the key data relating to power performance and environmental conditions.

Allowing IT management to monitor what matters most, IPM Infrastructure delivers radically simplified power and environmental management for IT rooms and data centers. From one end of the process to the other, and beyond.

**In theory that is. But what happens in practice?**

**To find out, Eaton engaged a select group of customers as Beta testers for the new platform and, based on their feedback, unearthed the top 5 features that make IPM Infrastructure such a genuinely disruptive solution for IT and data rooms.**



*Powering Business Worldwide*

## 1. SPEED, SIMPLICITY & CENTRALIZATION

From the very outset, the customers in question – who varied in both their industries and in the configurations of their respective data centers – quickly identified, and loved, the sheer simplicity delivered by IPM Infrastructure.

Initially impressed with its extremely short physical installation, configuration and commissioning window (just one and a half to two hours), the testers found that they were able to get IPM Infrastructure running and up to speed in no time.

Thereafter the overwhelming feedback was an appreciation of the convenient way in which the platform centralizes and presents key information via a single interface.

Customers noted in particular how the solution's combination of data on power consumption – both historical and present – overall capacity, and data center and IT rack information helped them gain insights and a more thorough understanding of the relationships between power and capacity.

They also saw immediately how such functionality would allow them to manage their data centers in a much more proactive rather than reactive manner.

## 3. DETAIL & GRANULARITY

Those taking part told us that arming their IT staff with such detail in relation to the organization's critical power chain, and how it is distributed across their IT racks, proved a major boom, and an even bigger step forward in their insights into and their understanding of their operational capabilities.

They also noted that, with IPM Infrastructure, the dashboard is only the beginning.

Presented with a complete view of their entire critical power chain (including the levels of power consumption per rack in their data centers), via IPM's next level of drill down, some were surprised at what they found.

In many cases this concerned their levels of consumption in relation to the amount of equipment installed in their racks, and the impact this was having, in particular, on UPSs (Uninterruptible Power Supplies) as regards phase balance. Whereas, prior to IPM Infrastructure installation, they had been able to determine the amount of power available (albeit via a manual calculation), they were unable to get an accurate measurement of what was actually being consumed.

**Power Chain  
monitoring**

**Environmental  
monitoring**



**IT Asset  
Management**

**Holistic  
reporting**

*Eaton IPM Infrastructure - main product functionality*

## 2. REAL-TIME INTELLIGENCE

Participants found that, because it provides information in real time, IPM Infrastructure could significantly reduce their Mean Time To Repair (MTTR). If something goes wrong it's apparent immediately, enabling a more rapid, timely response.

From the dashboard alone, customers could see the overall status of their critical power and environmental health. With the use of Eaton's preset values, based on industry standards in relation to environmental settings, they could tell instantly if they were within reasonable, safe parameters.

Another big win was that the customers could translate this information, normally viewed and managed by their building facility team, into terms that their IT operations staff could understand, relate to, and action quickly.

## 4. MORE INSIGHTS ACROSS MORE PROCESSES

In addition, while some testers had limited visibility of their UPSs pre-IPM, few had access to any data on their rack PDUs (Power Distribution Units) and little or no monitoring capability where temperature and humidity were concerned.

One customer using IPM to drill down to a rack-level view instantly discovered that, although it had ample capacity in terms of physical rack space and PDU power sockets, the power being consumed across the rack itself was much higher than had previously been estimated.

IPM Infrastructure collates the information from the PDUs and combines it with details recorded during commissioning process, presenting this data in an easily understandable format.

A key factor here again, was that, although much of this information had been available previously, it was difficult or impossible to access; then only by a limited number of people, and not via a single interface. This was having a direct impact on power outage related downtime.

In addition, some of the first adopters realized during the product testing period, that in order to gain the full benefits of IPM Infrastructure, it is important to consider intelligent rack PDUs. The option to fully integrate with IPM Infrastructure provides IT Managers with detailed information about the rack. This includes total power consumption per PDU, total power consumption per plug outlet; as well as the name and location of the IT device in the rack, and the PDU outlet it is connected to.



## 5. DIVERSITY, INTEROPERABILITY, TRANSPARENCY

As IPM Infrastructure is based on the 42ITy™ open source project, it enables Eaton to provide vendor-neutral data acquisition via the NUT open source engine. Multi-vendor device support is provided via the SNMP protocol.

Early adopters were also excited with a process of allowing community members to make use of, and contribute to Eaton work, as it allows them to take advantage of any secondary improvements made. Even those that have been tweaked and tailored for a specific data center manager's use may well have a wider audience and user base in the industry.

### The overall result?

**Total data center infrastructure visibility and control.**

**Minimal install, impact, disruption and time to value.**

**No need to rip and replace. No interruption to business as usual.**

## CONCLUSION

As the live customer feedback outlined above clearly demonstrates, Eaton IPM Infrastructure and the ways in which rapidly it collates, manages, and displays vital power management data are key to both its effectiveness and the delivery of important IT and business outcomes.

This feedback vindicates the IPM Infrastructure approach and is fundamental to Eaton's belief that such an approach is now vital for cohesive, intuitive data center management moving forward.

Clear, concise, easily actioned information that gives data center managers superior understanding and confidence in the all-important shift towards optimized data center services.



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**Eaton**  
EMEA Headquarters  
Route de la Longeraie 7  
1110 Morges, Switzerland  
[Eaton.eu](http://Eaton.eu)

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