modius®

OpenData
Five Reasons Collocators Need DCIM

Considering DCIM for your collocation facility? This white paper highlights the top five reasons you shouldn't wait to start providing DCIM functionality for your facility and collocation customers.

Companies looking to reduce data center operating costs or avoid costly expansions of existing facilities have long considered using collocation as viable option for reducing the OPEX and CAPEX costs of operating an in-house data center. This rise in popularity has created higher levels of competition between collocation operators seeking to on-board new customers quicker and keep them longer, based on value-added services.

Traditionally, collocation operators have used a combination of CAD or Visio drawings, multiple monitoring systems, spreadsheets, building management systems, and home-grown applications to manage their physical resources (power, cooling, and space) as new clients are added. However, these silos of information are detrimental to the on-boarding process and don't contain enough detail to provide the Real-time Operational Intelligence (RtOI) required to dynamically optimize facility resources and the data required to support the additional services needed to gain the competitive edge.

On the other hand, Data Center Infrastructure Management (DCIM), empowers operators to optimize the management of their facilities by consolidating all the information needed to make smarter, faster decisions - both for infrastructure planning, and for the day to day management of hosted equipment. DCIM solutions like OpenData collect real-time data from facility infrastructure and IT equipment, providing operational insight into resource capacity planning as new customers are added, and the ability to share this management information with customers as a value-added service.

Read on to discover the 5 key ways DCIM lets you differentiate your company in a competitive market.

I. COLLOCATION MARKET

As the economy improves, companies are ramping up IT projects and new applications to drive revenue and provide an edge over their competition. Although the future looks bright, many companies still remain wary and are not willing to bet the farm on significant investments in expanding existing data center facilities and taking on additional operating expenses to support new IT initiatives. These factors have made collocation a viable and increasingly more popular alternative to expanding corporate owned data centers to deal with IT growth.

As the demand for collocation services has grown, so has the number of operators and providers. DataCenterMap.com's most recent list reports nearly 1,500 collocators in the U.S., creating a very competitive environment with providers looking for ways to differentiate themselves without continuing to erode margins by reducing their prices.

So what does a collocation customer want? They usually want the lowest cost for hosting their equipment, but they expect all the benefits of using a quality service provider; high security, Tier certifications, redundant systems, "five nines" uptime, quality power, and a knowledgeable staff to support them.

So how does a Collocation provider compete against all the other companies offering the same basic service without getting into a price war? By providing services above and beyond the basics and providing value above their expectations with technologies like DCIM.
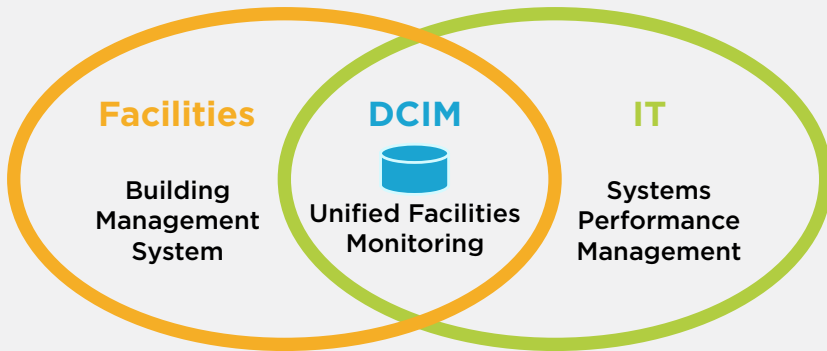
"There are thousands of measured and calculated datapoints within a data center which, without DCIM, are nearly impossible to effectively analyze. We now have the ability to gain insight at a high-level or granular basis into the state and performance of every piece of equipment supporting customer service with a few mouse clicks"

Val Milshtein, VP of Technology, Cologix
Data Center Knowledge

DCIM: AN INTRODUCTION

DCIM technology has evolved over the years to include multiple features and functions related to better management of the assets in the data center and the infrastructure supporting those assets. In the past, collocation providers used a number of applications and tools to manage their facilities, from CAD and Visio drawings to keep track of the physical space, BMS systems to monitor the building infrastructure, spreadsheets to manage the assets, and discrete systems to monitor and measure power and cooling.

DCIM systems were designed to provide a unified application that allows both facilities and IT support groups the information and tools they need to plan and execute operational changes with high regard to the optimal use of data center resources, (i.e., power, cooling and space). DCIM provides a common platform for facilities and IT support to work together to insure efficient best practices and reduce the risk of unplanned downtime as operational changes are made.

DCIM fills the "**Analytics Gap**" between OT and IT

Facilities

Building Management System

DCIM

Unified Facilities Monitoring

IT

Systems Performance Management

> "There are potentially ongoing savings of 20% to 30% and operational benefits to be attained through more rigorous management of the physical environment."
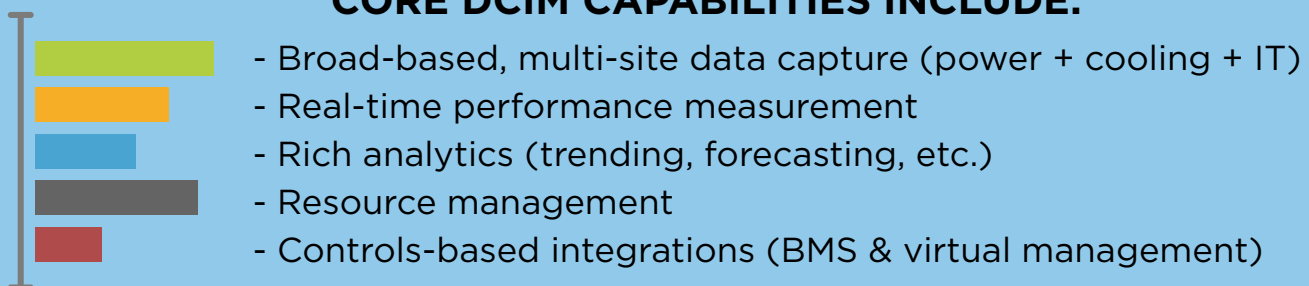
Dave Cappuccio
Gartner

The good news for collocation operators is that DCIM's benefits can be used to improve operational efficiency and provide a number of value-added services that can spell the difference between winning new business or losing out to a competitor.

Delivering both high-level and granular real-time performance information, DCIM systems like Modius OpenData gives operators the confidence to reduce data center costs and energy consumption while maintaining uptime SLAs. Five key DCIM benefits for Collocation facility operation efficiency and Customer added-value include:

1: Faster customer onboarding

2: Faster MTTD and MTTR response times

3: Superior capacity planning and management

4: More flexible billing options

5: Customer visibility for collocated equipment

DCIM systems like OpenData deliver these benefits by collecting and normalizing real-time performance data from all infrastructure. This data is combined with other sources of information, (BMS, financial systems, ITSM, CMDB, etc.) to provide a rich selection of analytics to help collocation operators and their customers make informed decisions for data center operations and the equipment being hosted.

CORE DCIM CAPABILITIES INCLUDE:

- Broad-based, multi-site data capture (power + cooling + IT)
- Real-time performance measurement
- Rich analytics (trending, forecasting, etc.)
- Resource management
- Controls-based integrations (BMS & virtual management)

modius

TOP 5 REASONS COLLOCATION PROVIDERS NEED DCIM

1: Faster customer onboarding
The faster a collocation provider can on-board a new customer, they faster they can begin billing that customer. Without DCIM, this becomes a very time-consuming and difficult process. If physical changes to the facility are required, for example, a security cage is needed, the CAD drawings must be consulted and updated to reflect the change. Instead of weeks, DCIM systems allow for quickly updating the facility's floor plan, building a virtual cage on the allotted floor space. Racks can be added to the cage and floor tiles changed to support hot and cold aisles. As equipment is virtually moved in, the impact to power and cooling subsystems can be monitored to insure that nothing is overloaded causing an unplanned service outage.

For example, using DCIM to help facilitate the process of adding a new customer can shave time from weeks to days. With a list of customer equipment planned for collocation, a collocation provider can build-out the correct number of racks, order the rack mounted PDUs and network equipment, and make any modifications required to support the power and cooling demands. Using DCIM to virtually build-out this configuration before any construction starts can eliminate doubts and provide a blueprint for the operational teams to review and execute.

2: Faster MTTD and MTTR Response Times
Every minute counts when equipment goes down and applications or websites stop working. In many cases, collocation service providers must offer their customers some form of Service Level Agreement (SLA) stipulating that adequate power, cooling, and network connectivity will be maintained at the levels specified. To ensure those levels are maintained, collocation providers use multiple systems to monitor the health of the infrastructure. DCIM's ability to monitor both the facility's equipment and the IT systems housed within provides a significantly quicker response to detecting and repairing equipment failures, or preventing them altogether.

For example, DCIM monitoring may pick up an anomaly in the motor RPM of a chiller on the roof of the facility. The DCIM application can also determine that this chiller is either serving the Facility breakroom, or the zone of servers of your best customer. In either case, the DCIM system can expedite an emergency repair, or let you know to schedule a repair during the next maintenance service. Because DCIM can also provide the collocation provider and customer with alarms and alerts from the IT equipment, both parties can share data to ensure that repairs can be made quickly, to the right equipment, in an expedited manner.

For the collocation customer, having a view of the available rack space and knowing the total capacity of installed equipment can be very valuable information as new equipment is planned for installation. Having this insight can be very valuable, to avoid showing up onsite to install new hardware and not realizing that you need an additional network switch to finish the installation.

3: Superior Capacity Planning and Resource Management
Collocation providers rent capacity in their facilities, so the smarter they manage this capacity, the more revenue they can generate. Unfortunately, they must also balance capacity and resource allocation with prudent guidelines and contractual obligations to ensure the customer's equipment is supported correctly. Before DCIM, most data centers would grossly over-provision their resources to insure that any downtime was not related to inadequate capacity. But for collocation operators, excess capacity is money down the drain.

modiius

Many DCIM installations were justified on the promise of helping companies close the gap between capacity demand and availability. This core capability of DCIM plays a significant role for collocation providers by allowing them to make "virtual" operational changes to assess the impact on available capacity. For example, a collocation provider can use DCIM to assess the space impact of switching from 48U to 72U cabinets in the facility only to realize that one of the existing 3 phase power legs will fail if the entire load was switched over. The cost of upgrading the power capacity was added to the cost of the new cabinets and then evaluated against the number of new customers and revenue that could be added in the existing space.

4: More Flexible Billing Options

In a highly competitive market like collocation services, price becomes an important decision point for potential clients as they consider their options for equipment hosting. In some cases, collocation providers would offer half or full cabinet bundles at a monthly fixed price or private cage rentals for significantly more money. These monthly fees would factor in averages for power, cooling and space overhead, manpower to provide local on premise support and security, and other support systems like fire detection and suppression. Most of the collocation providers offer the same level of secure audited data center environment, standard services and SLAs for power and network uptime, so price and value-added services become key differentiators to determine who is getting the customer's business.

With DCIM, the ability to collect detailed data on power consumption for individual equipment supports flexible billing options for customers that don't require - or want to pay for - a half rack to support their three servers. Using measured power and custom configurations based on total required U-space and network connections, a collocation provider can offer significantly lower prices while still maintaining healthy profit margins. DCIM also provides a level of visibility for the customer by measuring and reporting on power consumption so workloads can be adjusted to run during off-peak hours to save additional money.

5: Customer Visibility for Collocated Equipment

A highly desirable, value-added service for customers considering collocation is the ability to remotely monitor and access their hosted equipment. Without remote monitoring, equipment failures are harder to detect and downtime is significantly increased. The successful Collocation operator keeps their customers happy by providing not only the tools needed to ensure their equipment is properly managed, but also the information they need to make better decisions about placing additional equipment in the facility.

DCIM can provide a level of visibility beyond Visio, spreadsheets and CAD drawings, so both the collocation operator and customer can work together to insure the equipment is properly managed and maintained. For example, an alarm that a key process on a server has stopped can trigger a SNMP trap to the customer's DCIM console. After evaluation, a remote boot on the server is attempted, but fails. Rather than drive to the collocation facility, the customer can call the service desk and tell them exactly what server needs to be physically rebooted, with both parties using the same DCIM software. DCIM can also be used by the customer to plan for adding new servers to their rack(s), by creating a reservation and checking to make sure there are enough resources to support the new equipment. This feature of DCIM can significantly reduce the time required to on-board new equipment and insure that nothing falls through the cracks.

CONCLUSION

DCIM can manage and monitor every aspect of the IT and facilities infrastructure, from IT assets to power and cooling infrastructure. For collocation providers, DCIM not only addresses the critical requirements of power, capacity and cooling management, it can also help them distinguish their offerings with attractive value-added services.

Whether your organization is a collocation provider, a managed service provider, an application cloud-based service provider, or all of the above, the need for complete and accurate visibility into infrastructure is the key to successfully managing costs, capacity and availability. Because DCIM solutions like OpenData provides real-time data collection and analytics for intelligent capacity planning, all types of service providers can benefit. DCIM makes it possible to optimize the profits derived from your facilities by identifying and freeing stranded capacity, increasing the productivity of your service staff, and insuring that all your SLAs are achieved.

Bottom line, every data center can benefit from DCIM: let Modius show you how easy it is to get started.

ABOUT MODIUS

Modius is an independent software vendor based in San Francisco, California. Founded in 2004, Modius develops intelligent measurement systems for mission critical facilities that improve business continuity, energy performance, and carbon management. Modius solves the challenge of integrating both IT and facilities management information into a single, comprehensive measurement system. Modius empowers 'smart' data center management through:

1: Widespread, practical, low-cost collection of all physical-layer performance data

2: Trustworthy and reliable analysis tools based on comprehensive data and rich analytic capabilities

3: Useful and actionable intelligence through highly-configurable business logic

4: Customized workflows, **delivering the right intelligence to the right people at the right time**.

TECHNICAL SPECIFICATIONS

Modius OpenData is a software application that can be installed on-premise or hosted in the cloud. Some customers choose to run the application within VMWare ESX. Software platform requirements are as follows:
• **Windows Server** - 2008, 2008 R2, 2012
• **Database** - Express, Workgroup (Up to 2012) and MS SQL Server 2008 - 2016

CONTACT YOUR MODIUS REPRESENTATIVE FOR MORE INFORMATION ABOUT HOW OPENDATA CAN FREE UP TRAPPED CAPACITY IN YOUR DATA CENTER, SIGNIFICANTLY REDUCING OPERATING COSTS.

modius®

71 Stevenson Street, Suite 400, San Francisco, CA 94105 USA
sales@modius.com   www.modius.com   (888) 323-0066