CA Data Center Infrastructure Management

At a Glance
CA Data Center Infrastructure Management (CA DCIM) captures detailed real-time information about energy use across your data centers and operational facilities, helping enable you to measure, trend, alert, and take action. CA DCIM also helps you visualize your data center environment in 3D and manage the space, power and cooling capacity of your environment to better meet your business objectives. The solution also provides a baseline from which you can measure cost savings, improvements in capacity, and operational reliability and performance, as well as deliver continuous information for ongoing improvement.

Business Challenges
Data centers are frequently challenged by capacity limitations. Power and cooling constraints limit the ability to deliver on new business requirements. Uptime and availability are lowered when power is not dependable. Service quality and SLAs are at risk. The lack of detailed insight into consumption leads to unnecessary costs.

Uptime and availability is at risk when power is not dependable. Systems fail due to power outages or other power-related faults. Agility is reduced when staff has limited insight into power and cooling in their data center. Systems experience downtime and SLAs are not met.

Capacity limitations for data center power, space and cooling. Staff doesn’t know which devices and systems are generating the load and it is not clear where spare capacity exists in the datacenter or where greater efficiency is possible. Expensive new data centers are built despite existing spare capacity, or IT is outsourced.

Increasing operational costs due to energy consumption. Increases in electricity bills with limited insight into the cause. If IT pays the bill, this substantially increases operational costs.

Differentiation among service providers and the provision of new and innovative services. Managed service providers often seek to create differentiation between their cloud and co-location services and those of their competitors. Energy is an area of innovation and differentiation, but traditional approaches to energy insight and energy chargeback are limited and labor-intensive.

Solution Overview
CA DCIM is a web-based centralized solution for monitoring power, cooling and environmental factors across facilities and IT systems in the data center as well as managing the use of space and lifecycle of assets which make up the data center infrastructure. CA DCIM encompasses three critical areas:

- Power and cooling
- Capacity and inventory
- IT management and business services

CA DCIM captures power and cooling information in real-time, helps manage and inventory physical assets for operational management, and helps manage the logical layer of applications and services to help you better deliver IT management and business services that are business-relevant.

Key Benefits/Results
- Enables data collection from multiple systems and protocols, reducing manual efforts.
- Provides monitoring and alarming for facilities, with visualization of power, space and cooling data for insight, analysis, and control.
- Enables capacity management for more effective use of data center infrastructure and planning.
- Provides visibility into space and power utilization, allowing for smart, real-time decision making.

Key Features
- Data collection. Combines data from various devices that communicate across a wide range of protocols including SNMP, Modbus, and BACnet devices.
- Calculation engine. Built-in formulas and calculations. Create elements that can calculate and store any user-defined variable data with every poll. Live reporting, trends and chargeback reports.
- Advanced alerting. Provides alerting and control functionalities for IT infrastructure and facilities devices via energy monitoring system (EMS) or building management system (BMS).
- Extensive integrations. With BMS and IT management applications.
- 3D visualization. View the data center in 3 dimensions for understanding of data center layout and inventory locations.
- Control. Actuation of control for both physical and virtual environments.
- Capacity planning. Future capacity planning with what-if capabilities.
- Asset discovery. Auto-discover a range of asset types.
Built on a proven and scalable platform, CA DCIM aggregates data from thousands of devices and hundreds of locations and display dashboards and trend charts to support smart decisions on improving data center efficiency.

With CA DCIM you can collect data from highly diverse devices and systems using SNMP or other protocols such as BACnet or Modbus and easily track assets within the data center and provide powerful 3D visualization.

**Critical Differentiators**

The CA DCIM solution is comprised of CA ecoMeter and CA Visual Infrastructure. The combination of the two products allows for monitoring and management of power, space, and cooling data through all your data centers.

Critical differentiators include:

- Streamline data collection from multiple sources and devices supplied by a very wide range of vendors.
- Create standard and custom metrics such as Power Usage Efficiency (PUE) to benchmark the data center, facilities equipment and IT assets.
- Measure and analyze power load and consumption across multiple devices, systems, buildings and data centers. Help to determine areas of high and low efficiency, spare and limited capacity, efficient and under-performing assets, consumption patterns, and waste.
- Decide where to place new racks by identifying where excess cooling and power are available, thereby continuing to efficiently manage energy and service costs.
- Identify problems and help reduce false alarms through intelligent alerting.
- Control both physical equipment and virtual environments, to help achieve greater savings.
- MSPs: Achieve service offering differentiation and enhance competitiveness by reporting and charging back more easily on end-user energy consumption and power demand.

**Related Products/Solutions**

**CA ecoMeter** captures detailed real-time information about energy use across your data centers and operational facilities, enabling you to measure, trend, alert, and take action.

**CA Visual Infrastructure** is a 3D application designed for real-time monitoring and resource management in areas such as space, power and cooling within data center and IT facilities.

For more information, please visit [ca.com/dcim](http://ca.com/dcim)