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through the heart of your business environment

Welcome to CDC

 Intelligent Solutions

Powered by **Integra™**

Intelligent Data Centre Management

 intelligent building solutions

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Overview

The challenge is to provide a solution that can communicate with, and control, the physical facilities supporting the 24x7 operation of the data centre; by introducing an integrated management system to monitor, control and respond to the demands of the day-to-day operation of the data centre.

The CDC Intelligent Data Centre Management solution overcomes the problems of integrated control of physical data centre operations. It provides a hardware independent open system capable of monitoring and controlling the disparate sub-systems and proprietary communication protocols evident in data centre operational control environments.

CDC Intelligent Data Centre Management solution provides for the first time an integrated management solution that adapts to the design, configuration and matrix of facility equipment options used in data centre operations. The solution operates across, and groups together, management solutions for:

- Rack and Power systems.
- Heating, Ventilation and Air Conditioning (HVAC).
- Environmental Monitoring and climate control.
- Energy management and carbon reduction.
- Physical and site access security.
- CCTV and Digital CCTV recording.
- Fire, Life and Safety systems.
- Lighting and shade.

The CDC Intelligent Data Centre Management solution is powered by CDC Integra™ software - a uniquely flexible interface and control system, designed to allow for integrated communication and operational control between the different sub-systems that support the operation of any type of facility.

CDC Intelligent Data Centre Management solution is provided by CDC, an employee-owned company specialising in the application of intelligent building solutions since 1988, with offices in London, Dubai, Istanbul and Beijing.



Data Centers

Significant achievements have been made in data centre design and management over the past two decades to ensure that the data centre provides the flexibility and scalability that business demands.

Most designs concentrate on the configuration architecture, rack density, network security and process continuity. Operational data centre management services have developed alongside these designs to provide integrated control solutions to simplify the management process.

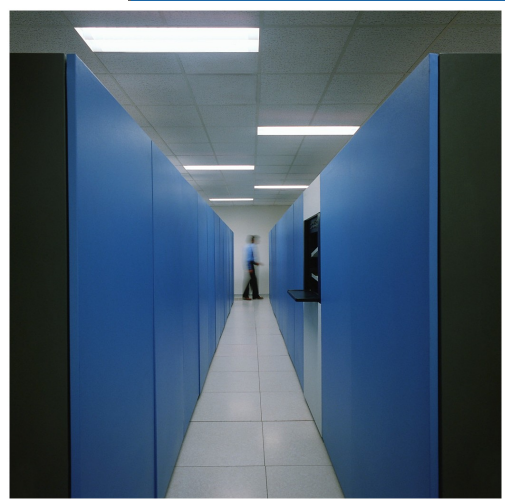
However, of equal importance is the management and control of the physical facilities supporting the 24x7 operation of the data centre. More and more organisations are now recognising that the supporting data centre facilities need to be incorporated into an integrated data centre management solution.

Solutions to date have, of necessity, encouraged “best of breed” point (or sub-system) solutions in areas such as:

- Rack and Power system management.
- Heating, Ventilation and Air Conditioning (HVAC).
- Energy management and carbon reduction.
- Physical and site access security.
- CCTV and Digital CCTV recording.
- Fire, Life and Safety systems.
- Environmental Monitoring and climate control.
- Lighting and shade.

The problem is that many of these “best of breed” point solutions demand proprietary management and control systems, often introducing multiple machine-to-machine (M2M) communications protocols, separate control systems and thus increased operational complexity.

The challenge is to provide a solution that can communicate with, and control, these disparate systems; providing an integrated and intelligent management system to monitor, control and respond to the demands of the day-to-day operation of the data centre.



CDC Intelligent Data Centre Management solution

The CDC Intelligent Data Centre Management solution meets the challenge of providing an integrated and intelligent management system to monitor, control and respond to the demands of the day-to-day operation of the data centre.

The CDC Intelligent Data Centre Management solution operates across, and groups together, management solutions for:

- Rack and Power system management.
- Heating, Ventilation and Air Conditioning (HVAC).
- Energy management and carbon reduction.
- Physical and site access security.
- CCTV and Digital CCTV recording.
- Fire, Life and Safety systems.
- Environmental Monitoring and climate control
- Lighting and shade.

The CDC Intelligent Data Centre Management solution is unique in its design philosophy – providing the capability to identify any unit (or group of units) as a managed “zone”. Each zone may have its own management and security characteristics. All data centre sub-systems contained within the zone may be controlled by an established set of rules and plans.



Key features

The CDC Intelligent Data Centre Management solution overcomes the problems of integrated control of physical data centre operations by providing:

- A hardware independent open system capable of monitoring and controlling the disparate and proprietary sub-systems evident in data centre operational control environments.
- A distributed processing capability for collecting operational sub-system information and alarm events.
- A solution that can be extended to manage multiple data centre operations.
- A rules based centralised management system that allows for “management by exception” with the ability to group together separate sub-systems for optimum performance management.
- Response plans and event management guidance for data centre operators.
- A complete audit trail of all sub-system performance for management reporting, service level monitoring and performance analysis.

CDC Integra™ software platform

The CDC Intelligent Campus Management solution is powered by the CDC Integra™ software platform-, a uniquely flexible interface and control system, designed to allow for integrated communication and operational control between the different sub-systems that support the operation of any type of facility.

It offers a flexible workstation interface that allows communication between different manufacturers' sub-systems and presents information and control facilities to the campus operator in an easily comprehensible graphical format.

CDC Integra™ is designed to monitor field equipment over an IP network and other transmission media (e.g. PSTN, ISDN, and WAN data services).

CDC's approach is to integrate the building sub-systems at the "front-end" (user-interface end), so that the functional autonomy of the individual sub-systems is unaffected. This preserves confidence in the independent operation of all the sub-systems.

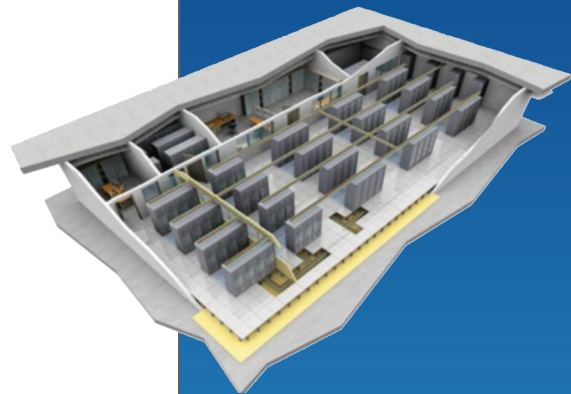
CDC Integra™ Interface Library

Versatility is the key to the CDC Integra™ concept. The CDC Integra™ Interface Library provides Satellite Communications Drivers for connection via Network Interface Units (NIU) to the hardware connected to each of the building sub-systems. The satellite communication drivers are internally based on the OSI ISO Communications Model framework, and certified by the sub-system manufacturer or issuing software house where appropriate.

Benefits

CDC Intelligent Data Centre Management solution for the first time provides a solution that adapts to the design, configuration and matrix of all facility equipment options used in data centre operations. Its major benefits are:

- Data centres can be designed to include “best of breed” physical facility control and security systems and associated equipment; secure in the knowledge that they can be monitored and controlled from a single management service.
- The service can be extended to manage more than one data centre, thus allowing for existing data centres to be incorporated into the management solution. (i.e. different specialist sub-systems can be used in different locations or phases dependant on each functional requirements or physical limitations).
- The rules based management capability incorporates data centre operating policies and procedures; and builds into an automated facility management system.
- The ability to “group” together control of disparate sub-systems simplifies operation and hence operator skill and training requirements. It also reduces the cost and number of controlling workstations for each specialist sub system.
- The ability to incorporate response plans within the design is a major contribution to business continuity and disaster recovery operations.
- The high reliability, secure transmission path to and from sub-systems provides an integrated audit trail which can be examined in detail for historical trend analysis and incident forensics.
- Information gathered from the facility sub-systems is normalised and presented ready for interrogation by ERP and other types of corporate management systems, thus contributing to planning, forecasting and governance processes.

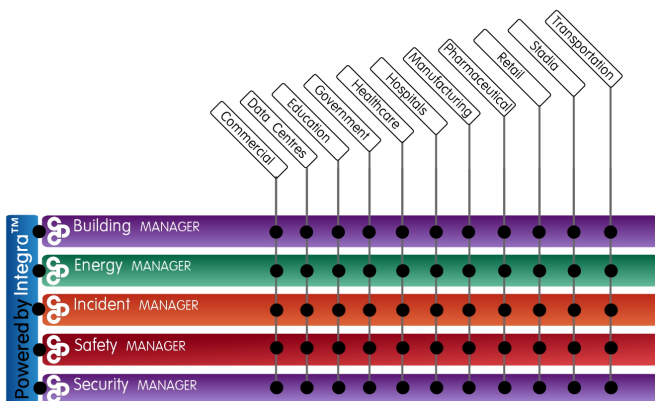


Integra™ applications

The CDC Integra™ Manager applications build upon the Integra™ software platform to provide an interconnected suite of feature rich applications designed to monitor, control and group together disparate building sub-systems. The main CDC Integra™ applications are:

- Building Manager
- Energy Manager
- Security Manager
- Safety Manager
- Incident Manager

Additional CDC Integra™ Manager applications are also available for specific operational solutions such as Vehicle inspection & parking management and Production control & automation. Transportation, National & Local Government and Education.



About CDC

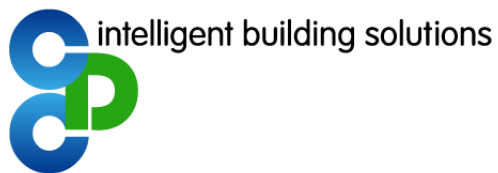
CDC is one of the pioneers of the intelligent buildings concept and has been a market leader since its inception in 1988. An international network of offices in London, Dubai, Istanbul and Beijing supports our activities as a leading authority in existing and new build projects.



CDC solutions are used in over a 1,000 global locations and we are solution partners with many of the world-renowned organisations in the provision of intelligent building solutions.

A founder member of the Intelligent Buildings Group, CDC also continues to invest in R&D at leading universities to help drive the market and develop new technologies.

CDC provides many intelligent building management solutions covering sectors such as Healthcare & Hospitals, Retail Malls, Commercial, Industrial, Pharmaceuticals, Transportation, National & Local Government and Education.



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