

Data Centre Infrastructure Management (DCIM)

If you do not measure you cannot manage

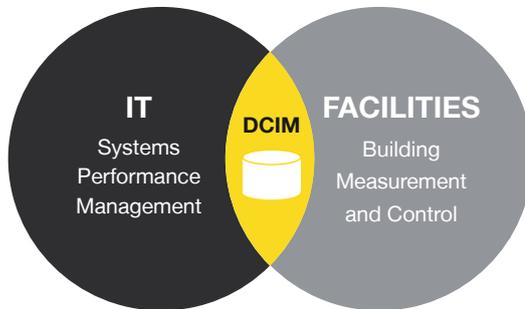


Figure 1. DCIM integrates the IT and facilities view

Five reasons why data centre operators adopt DCIM

1. Reduce energy consumption;
2. Optimise return on existing investment;
3. Reduce operations management costs;
4. Reduce risk (most down time is a result of human error);
5. Improve accuracy of scenario planning.

For corporate data centres, DCIM enables CFOs and CIOs to better understand the performance of their investment in data centres and demonstrate to the Board that the investment is being properly managed.

For Co-Location operators, DCIM is a key differentiator. It provides your customers with the information they need to make best use of the space and energy you provide and improves customer retention.

Reduce energy consumption

Cundall has an international reputation for developing some of the most efficient data centres in the world but that efficiency can be compromised by variable loads. The widespread adoption of virtualised systems only feeds through into energy saving if the data centre plant responds to real time demand. Traditional islands of control cannot regulate the plant sufficiently accurately. Dashboards show you what is happening but not how to close the feedback loop.

Optimise return on existing investment

Many data centres only ever achieve 70 percent of their design capacity. The balance of 30 percent represents a trapped value that cannot be realised and leads to building new (or renting more) data centre space earlier than anticipated.

Reduce operations management costs

Without DCIM the number of parties involved in adding new servers / storage to a data centre is excessive and time consuming. Without the ability to plan and accurately model changes every major change is an experiment. Naturally, those involved are cautious and conservative. In-house rules and change management documentation passing between IT and Facilities make adds, moves and changes slow and cumbersome.

Reduce risk (most down time is a result of human error)

As well as reducing the time take to plan and implement change DCIM reduces the risk of unforeseen problems such as overloaded power strips and PDUs, insufficient air flow, insufficient network / SAN ports or excess weight on the raised floor structure.

Improve accuracy of scenario planning

DCIM provides both IT and Facilities with a single view and a shared workspace to plan and implement change rapidly and accurately. Change options can be tested in the DCIM model before committing to any physical work on the floor. In the long term this minimises any trapped or wasted value in the original data centre.

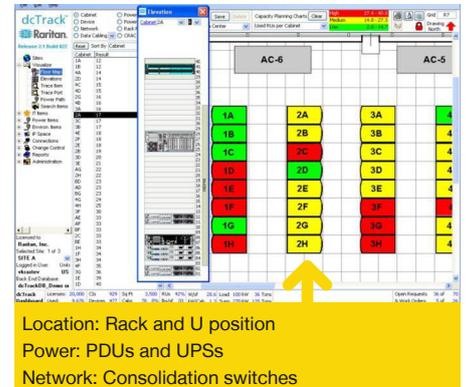


Figure 2. Floor management



Figure 4. Source iTRACS 2012

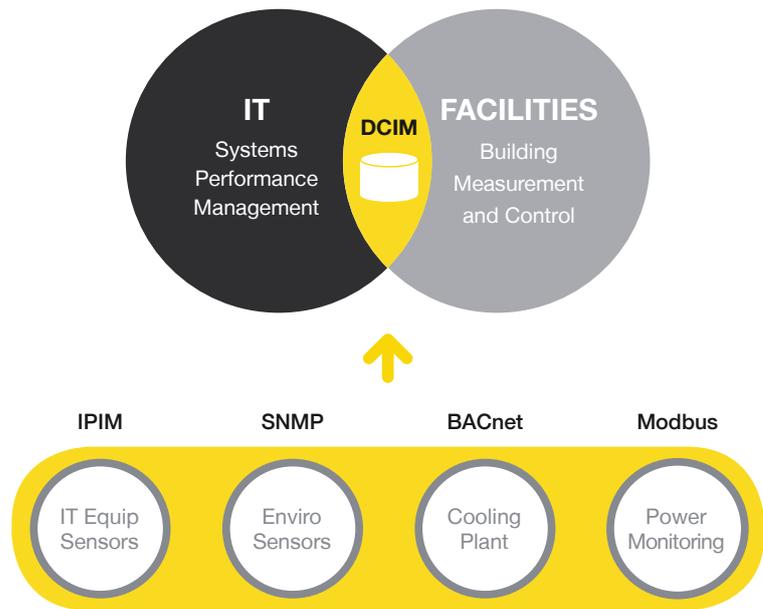


Figure 3. DCIM gathers building information

What does Cundall offer in DCIM implementation?

Strategic

Cundall can help you to develop a business case for investment in DCIM. It takes time and effort to establish a DCIM system in a data centre but a recent poll of organisations that have implemented DCIM, none wanted to revert to their former manual approach.

Tactical

Cundall can help you to scope and specify a DCIM system, obtain tenders from DCIM software suppliers and select the proposals that have the best match to your requirements.

Operational

Cundall can survey your existing data centre, rack-by-rack and shelf-by-shelf to populate a DCIM with accurate data. We have access to a database of real equipment loads and heat outputs that is much more precise than the information on manufacture's data sheets. We can also reconcile measured power and cooling loads with our database of manufacture's data and provide templates for future moves, adds and changes.

Where DCIM is being implemented in existing data centres, our data communications professionals can define how the DCIM will collect data from existing BMS, power monitoring and energy management systems to make best use of your existing investment and speed up implementation.



For more information please contact John Lane - Partner

D +44 (0)20 7438 1684

T +44 (0)20 7438 1600

j.lane@cundall.com