

Ensuring a Successful DCIM Project. What You Need to Know.

Paul Goodison
CEO, Cormant Inc.



Cormant DCIM and Interop

Cormant DCIM

- Company
 - Founded 2001
 - Delivering “Infrastructure Management” Solutions since 2003
 - HQ in San Luis Obispo, California.
 - Sales in over 20 countries.
- Product
 - **Cormant-CS** is our DCIM and Beyond Solution
 - Complete DCIM Suite; easy to use due to its very configurable, flexible and straight forward user interface.
- Deployments
 - Customers range from tens of racks to over 25,000 and include campus and non-DC environments
 - Over 250 customers, some going back to 2003

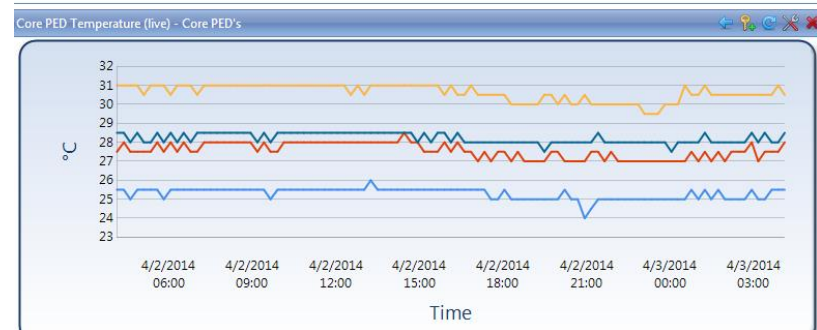
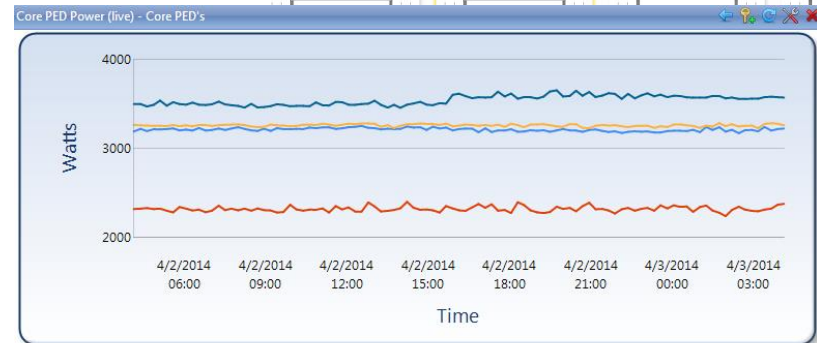
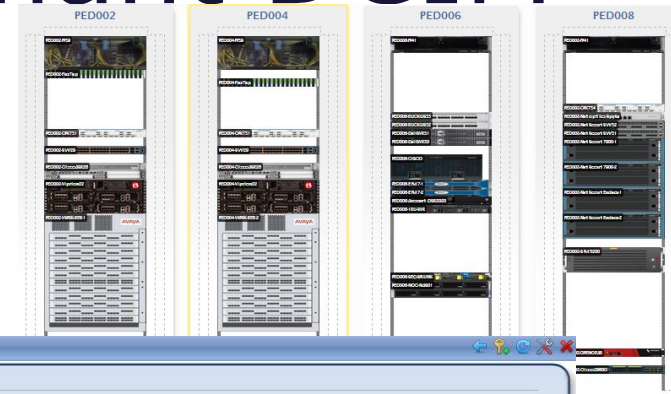
INTEROP[®] NET

The InteropNet is a temporary network that powers the Interop Las Vegas event, providing a reliable, high-speed network that serves the exhibitors, conference rooms and attendees at the event.

- Up to 260,000 sq. ft. of show floor
- Up to 350,000 sq. ft. of off-show floor
- Three Co-Location Facilities: San Jose, Denver, Newark
- Approximately: 2,000 IT Assets, 18,000 Connections, 90 Wi-Fi AP's
- Over 120,000 Infrastructure Attributes
- Two weeks to stage infrastructure
- Four days to deploy Las Vegas

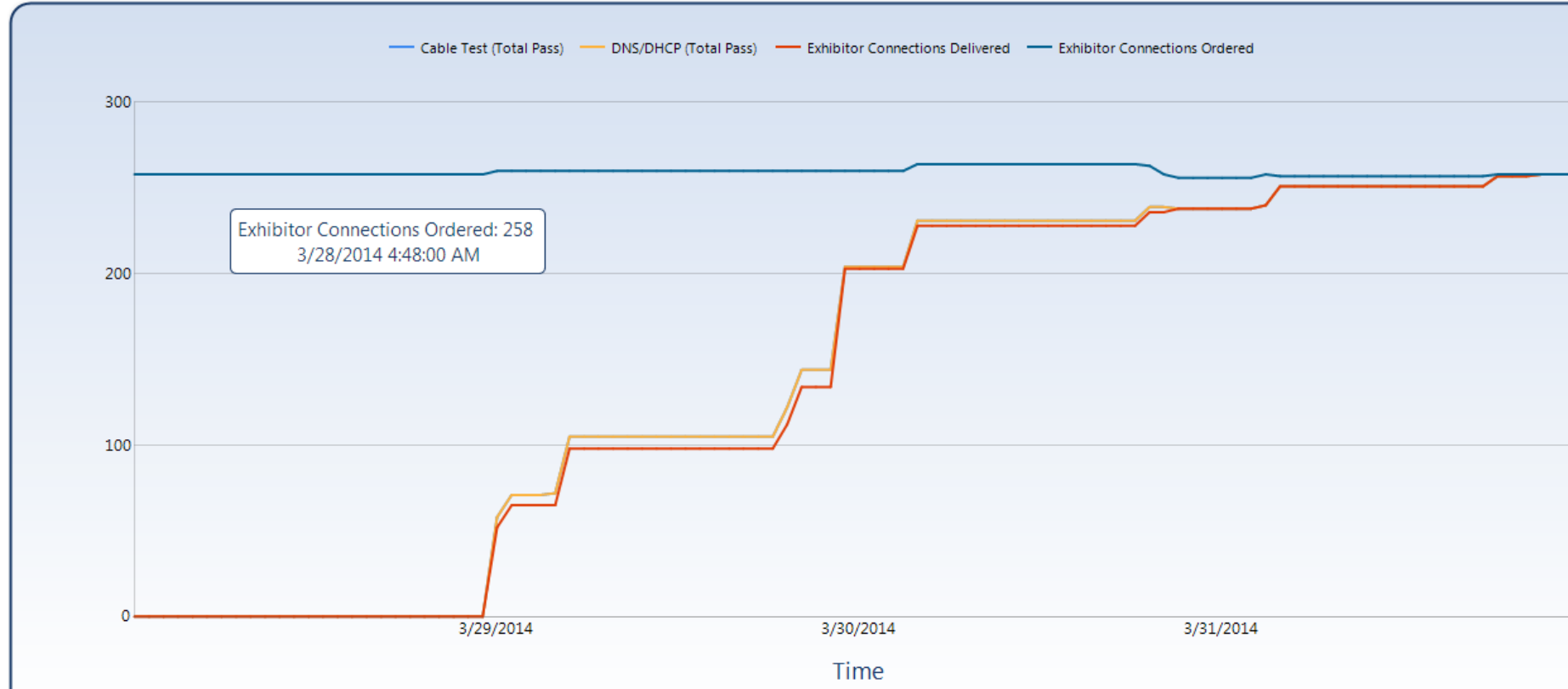
InteropNet and Cormant DCIM

- 7th Interop Show
- Document all assets & racks
- Manage physical capacity
- Monitor power and temperature in racks
- Manage and deliver show floor data network, including all connectivity
- Mobile, paperless deployment process and procedure
 - Used to be spreadsheet driven
- Used for troubleshooting during show



Interop Paperless Deployment

LV 14 Booth Deployment - Mandalay Exhibitor Booths



What is DCIM?

Myth - DCIM has one meaning

Reality

- The term DCIM is subjective in the eyes of analysts, end users and manufacturers.
- The term is so broad as to encompass so many different philosophies that apples to apples comparison between vendors is almost impossible.
- There is a difference between “DCIM” and “DCIM Enabled” technology. A thermal probe might be DCIM enabled but it is not a DCIM solution on its own.
- Over 100 vendors now claiming to be DCIM, but only about 10 vendors offer a true DCIM suite

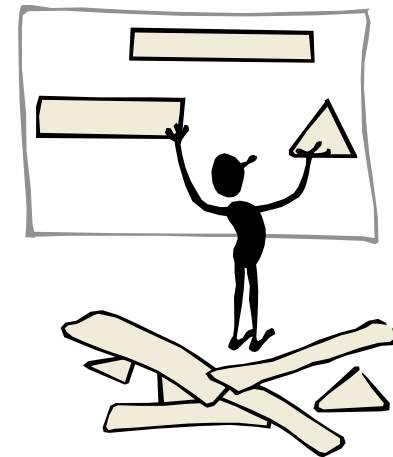
What is DCIM?

Data Center Infrastructure Management is the practice of Infrastructure Management within the walls of the Data Centre

Many organizations are coming to the realization that the Data Centre infrastructure and assets can not be reliably and efficiently managed with a spreadsheet.

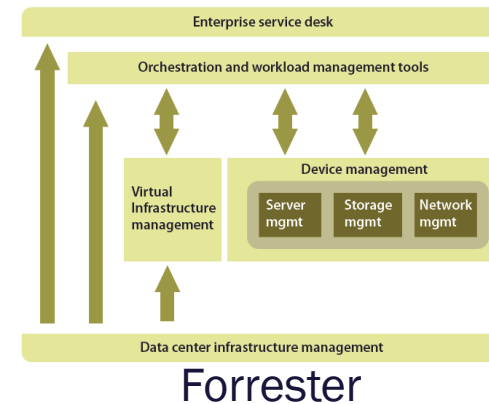
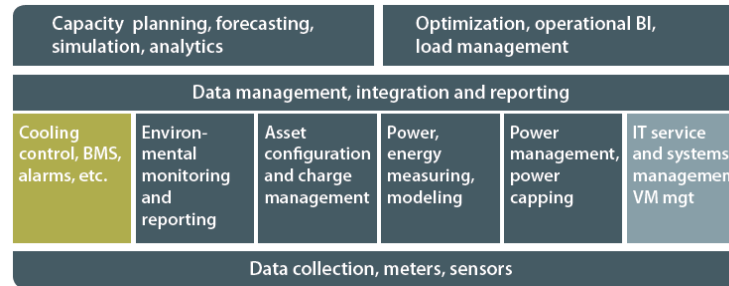
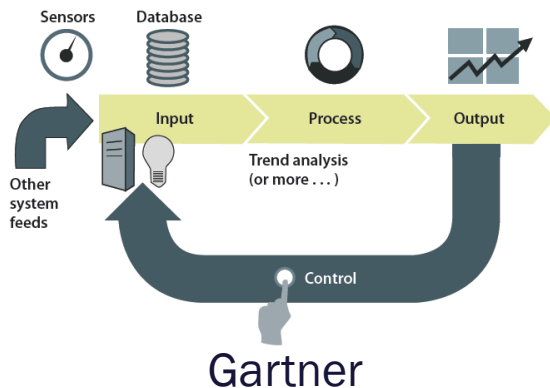
The increased demand for DCIM solutions is driven by 2 major considerations;

1. Data Centre space is very dynamic, managing change in multiple spreadsheets is inefficient and can become inaccurate.
2. Data Centre expense in terms of assets and energy represent an ever increasing amount of the available budget.



DCIM Models

While many any of the top analyst firms agree that Data Centre Infrastructure Management is crucial to the efficient operation of a complex environment, there is no consensus on the model such a DCIM tool should employ

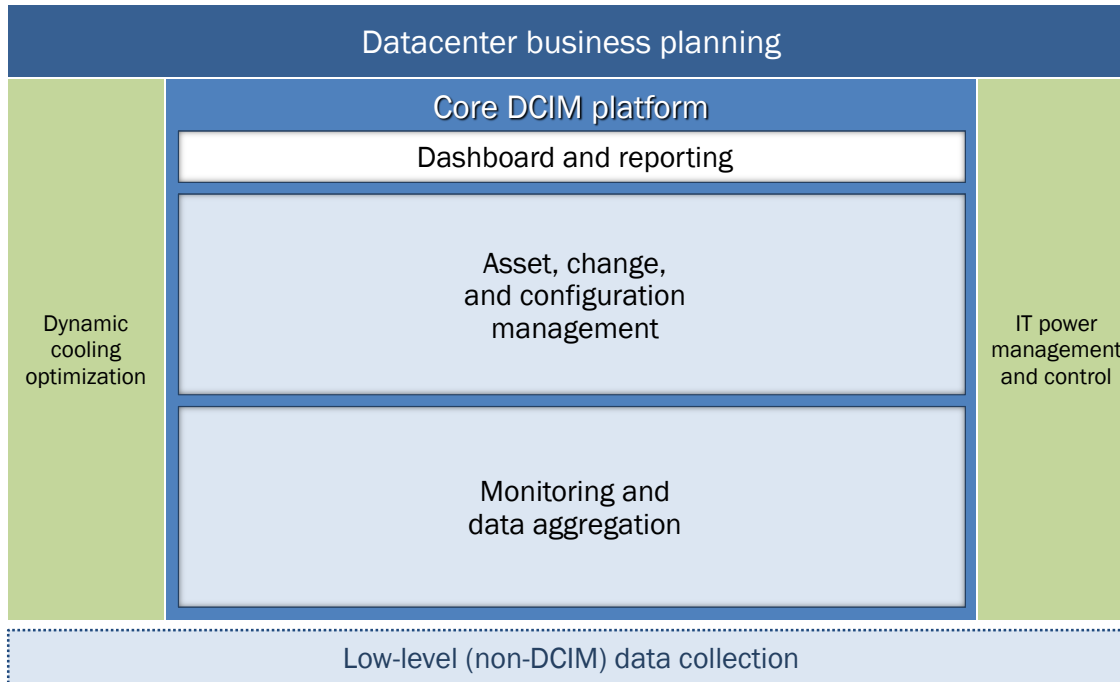


DCIM – not one size fits all

- DCIM solutions come in all shapes and sizes, often with specializations, including
 - Power
 - Asset
 - Space
 - Connectivity
 - Monitoring
 - Environmental
 - Work management
- Some solutions are better suited to specific organizational size from a single site to a global enterprise
- DCIM is not a replacement for
 - NMS
 - BMS
 - Ticket system (not entirely)
 - Server control
 - Load management
 - Process management



DCIM One System or Many?



Source 451 Group



How to Select a DCIM Solution

DCIM Procurement, Questions to ask internally before you start

1. Do I understand what problems I want to solve and their priority?
2. What systems/processes does the DCIM solution need to replace?
3. Do I have the will to enforce a single process?
4. What cross department buy-in is there for DCIM implementation?
5. How good is my documentation of what I have today?
6. Do I have an understanding of the effort involved in implementation?
7. Do I want on-going help to manage the solution?
8. What systems does the DCIM solution need to integrate with?



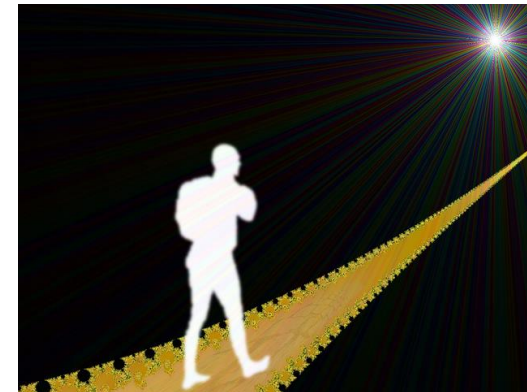
DCIM Procurement, Questions to ask the DCIM Vendor

1. Are the current customer base and type similar to yours?
2. Solution maturity, what version is it?
3. What parts of my problem set does the solution cover?
4. What implementation support is available? Ongoing support model?
5. For a given scope can you provide me a total price for the required software components?
 - What additional hardware is required (and cost)?
 - Is the Solution "all in one" or modular? Costs for additional modules?
6. Is mobility built into the solution – tablets, handhelds, etc.?
7. Is the product configurable (user managed) or require customization (developer managed)?
8. What interfaces does the solution have?



Start on the DCIM Path

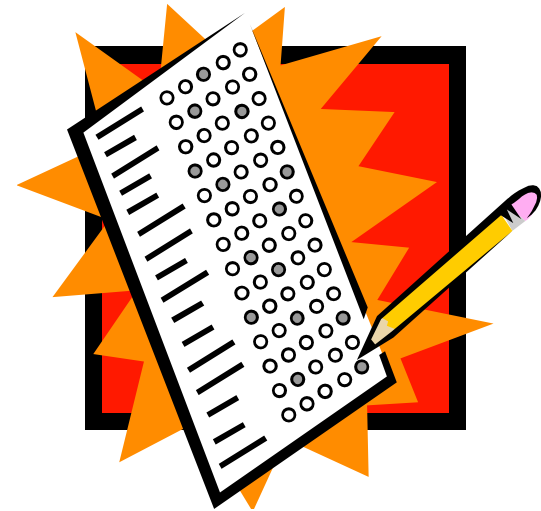
- Define your expected DCIM post-implementation process and how you expect to use the solution; share this with vendors
- Speak with facilities (M&E), make sure what you are planning does not overlap with their solutions
 - And if it does, what is the resolution?
- Factor in implementation costs, they can be substantial
- Goal
 - no XL
 - Common understanding of the infrastructure
 - Fix your top issues
 - A solution to grow with you



Remember: DCIM is not a magic bullet but part of an overall strategy

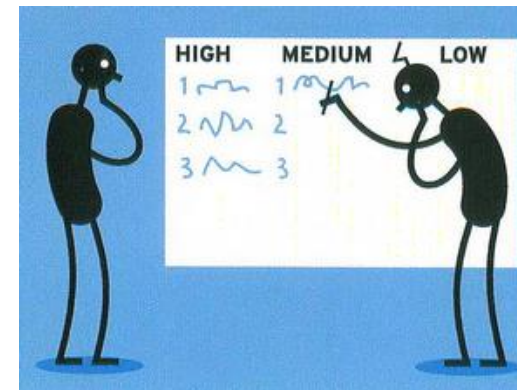
DCIM Selection Process

- RFP process is typical, but keep it realistic!
- Is a full version proof-of-concept possible
 - This is the best way to kick the tires.
 - If it's not, why not?
- Ease of implementation
 - A big cost and an understanding of what is possible needs to be part of the decision process.
- What is the expected ROI
 - How is that derived, do you believe it?



DCIM Proof-Of-Concept Evaluation

- Do 2 or 3 solution proof-of-concepts
 - Keep scope small and realistic. POCs are time consuming and expensive
 - Use some vendor services, but don't let them run it
 - Invest time in the process and involve all stake holders



What you will need to budget for

- Software license
- On-going upgrade assurance / technical support
- Hardware needed?
- Process documentation services
- Professional services for solution configuration, data import and interfaces
- Labor for audit
- Solution Training



Implementing and Effectively Using DCIM in your Data Center

What should drive DCIM Implementation

- Your Priorities
 - The things you defined 6 months ago when this project started
- Your Data
 - Spreadsheets, etc.
- Your Post Implementation Process
 - How will you use this solution?



***Only manage what your organization requires.
Keep it meaningful.***

Post Implementation Process

- Think about how DCIM needs to be used in the enterprise.
- Everyone is different, but using a DCIM tool will require process change.
- Defining your to-be process up front will make implementation much easier.



Where to start

- Keep the initial deployment simple: Money follows Success
 - Don't get too carried away with size, focus on solving some real problems
- Think Small (that may be 1,000 racks!) and geographically limited
- Look ahead: What areas may become issues in the future?
 - Equipment refresh
 - Power
 - Data center move
 - Consolidation, virtualization
 - Mergers and acquisitions
 - Green initiatives
- Think across the enterprise



DCIM Deployment

- Use the post implementation process to drive deployment
 - How will the infrastructure be maintained
- Use outside help to get going
 - Most people are too busy with the day to day
- Import existing data and then use audit to confirm it
- Use a maturity model approach
 - Get control of what you have
 - Start to monitor
 - Use the data for analysis and diagnosis



Why DCIM Implementations Can Fail

It's NOT Just Software

**DCIM SUCCESS =
SOFTWARE + PROCESS +
MATURITY**

DCIM Implementation Pitfalls to Avoid

- Too broad an initial project scope
- Collecting data that is of no use
- Expecting DCIM to solve problems without recognizing that process change is vital
- Choosing a solution that requires developer customization to be useful
- Not being clear on precisely how you intend to use the solution
- Not getting external implementation help



Disappointment: DCIM Myths

- “Your power bill will drop 20% once you have installed a DCIM tool.”
 - Unlikely, You will find savings and efficiency gains, but will offset them with growth.
- “Once you have implemented a DCIM solution your records will be perfect – all the time.”
 - Something like 30% of the success of any DCIM solution is process change/enforcement. Often missed entirely.
- “DCIM tools don’t need to be bought with services to implement them and really auto-discovery will do most of the work.”
 - Implementation by a professional, experienced company (that may not be the software vendor) is vital to make DCIM work. Big area of disappointment.
 - Auto discover is at best a validation tool, it’s not going to document most of your physical infrastructure, especially where things are.

Ensure DCIM Success

Ongoing Success

- Stabilize the initial deployment scope
- Fix issues
- Refine processes
- Plan further deployments
- Once initial goals have been achieved look to a phase two; what other problems can we solve?



DCIM: What Works?

What really works with DCIM?

- **Simplicity** - Aids adoption within core group, makes training easy, allows for turnover, further adoption as success is demonstrated
- **Accessibility** - If it's easy to get access to the data, it's far more likely to be used. Avoid solutions that license in a per seat or per session model. Seek solutions that include mobility.
- **Standardized** - Customization makes upgrades difficult and expensive
- **Flexibility** - The solution should be able to scale up as the organization grows and makes acquisitions
- **Vendor agnostic** - Avoid products that only work with specific manufacturer's hardware, the ideal DCIM solution will document all infrastructure regardless of manufacturer
- **Just enough management** - Solve the biggest problems first

DCIM Success = Software + Process + Maturity

Thank you

Paul Goodison,
Cormant Inc. Booth 1363

Tel: +1 805 776 3476
pgoodiso@cormant.com

