



# Intel® Data Center Manager (Intel® DCM) Field Card

Intel® DCM is a solution for out-of-band data center management. From monitoring and managing server status, to flexible and transparent firmware provisioning, Intel® DCM can provide truly comprehensive firmware update capabilities to Intel® Server Systems.

## The DSG Story

Intel® Server Systems are a comprehensive portfolio designed to meet the next generation of data-centric demands. Combine the latest data center innovations with Intel-backed pre-validation and a full stack of offerings.



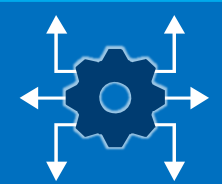
Select a purpose-built system for any workload—from entry level, to enterprise workloads, to performance sensitive mainstream applications and HPC.



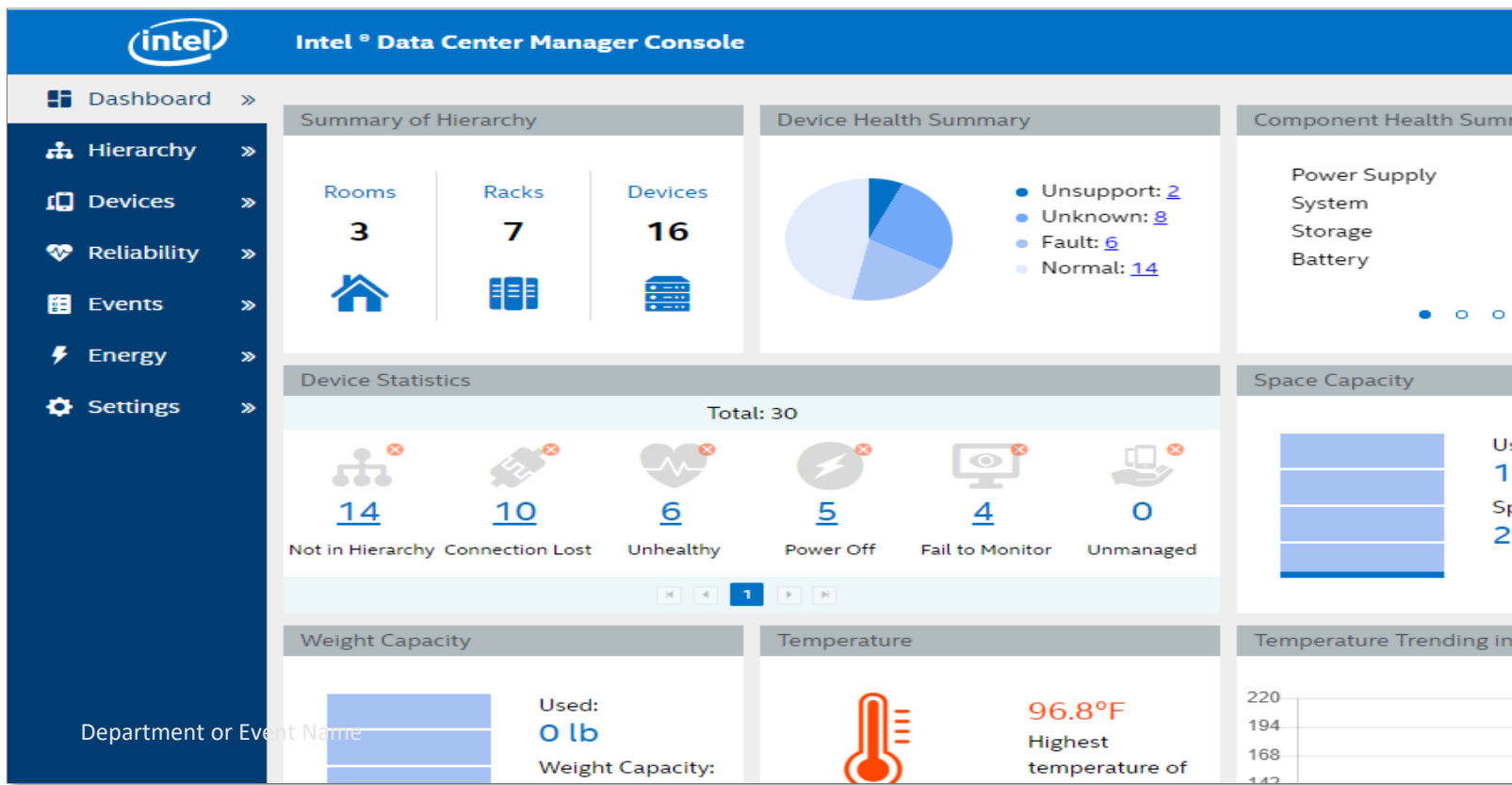
Reduce time-to-value and support lift through pre-validation, making it easier to build innovative solutions with pre-integrated Intel® Data Center Blocks, and ensuring customer satisfaction with standard warranties and robust global technical Intel support.



Draw upon Intel's unique processor-based performance and security features like high-performance and low latency networking, hardened Intel x86 architecture, support for technologies like advanced analytics.

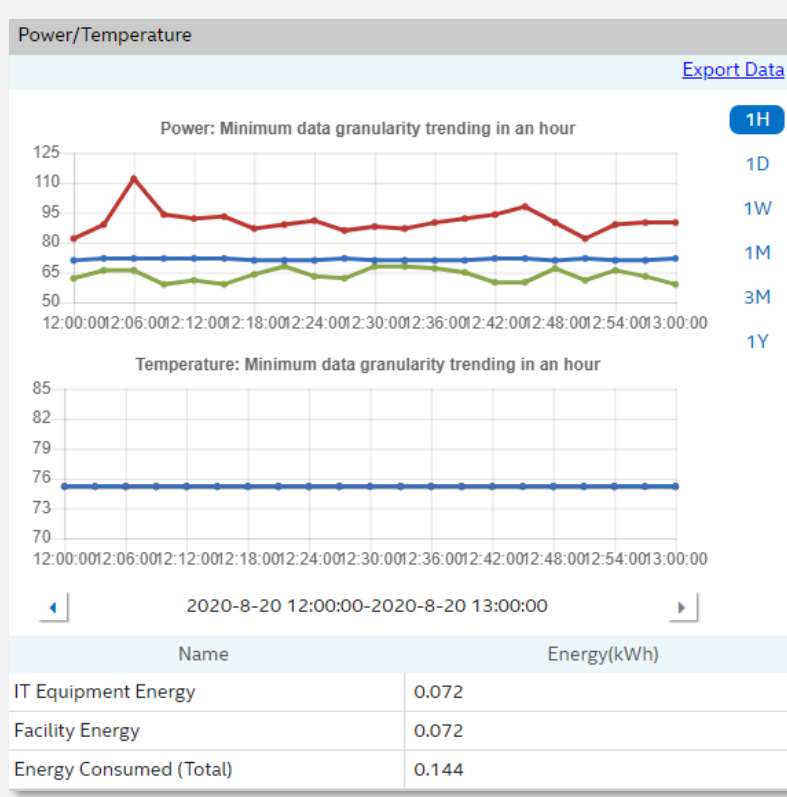
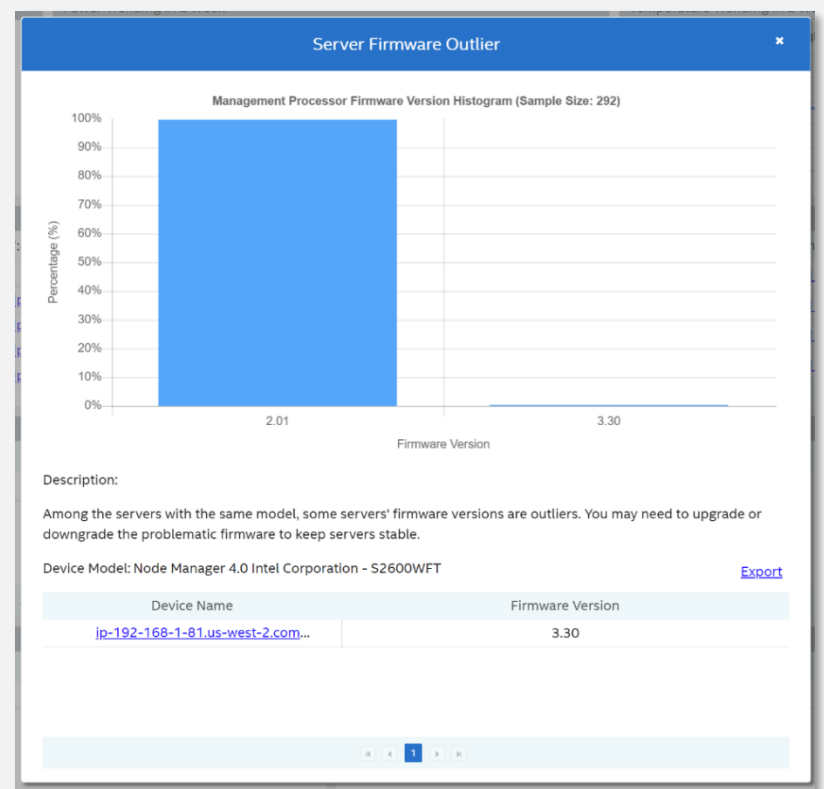


Scale across data center technologies with Intelx86 architecture software compatibility. Seamlessly support network solutions, breakthrough Intel® Optane™ Persistent Memory, Intel® Optane™ SSDs, and other adjacencies.



"Intel® DCM was *easy to plug in, and easy to get the data and analysis from our machines immediately.* The alerts and power limitations were *set up within a day.*"

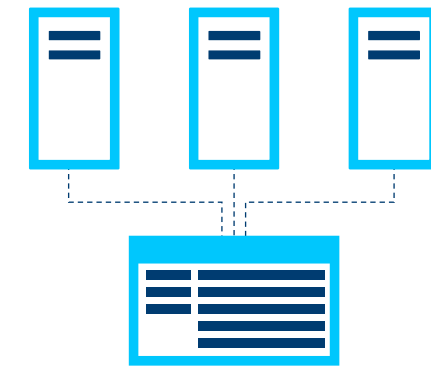
—Vern Harbers, Technical Project Manager, Infrastructure IHME, University of Washington



"Intel® Data Center Manager not only provided CERN LHCb IT staff with *accurate real-time power and thermal consumption data...* but promises to deliver *great value when deployed at our future site.*"

—Niko Neufeld, Deputy Project Leader at CERN

### Sales Guidance Summary



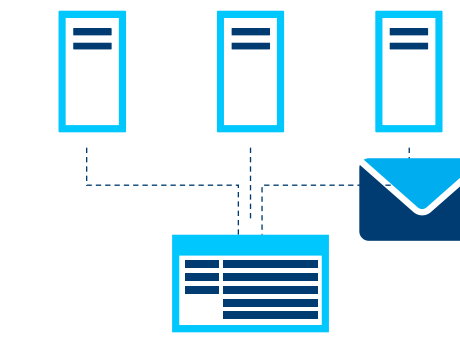
#### Highlight the value of Intel® DCM as part of the Intel® Server Systems Portfolio

Intel® DCM can enhance visibility and ease of management for a wide range of server systems. Intel® DCM also provides comprehensive remote firmware update capabilities for all Intel components on a server system, which is a major advantage for "all-Intel" server systems.



#### Choose the right competitive positioning

Intel® DCM is an easy-to-use server management and provisioning solution that also includes many Data Center Infrastructure Management (DCIM) capabilities as well.



#### Highlight firmware as Intel® DCM's strength

Intel® DCM excels in easily provisioning device firmware and identifying out-of-compliance systems—it is not a substitute for end-to-end device, OS, and network provisioning.

### Qualification



#### Company characteristics:

End customers using limited or no enterprise data center management software (small to medium-sized data centers)

#### Product replacement opportunity:

Target customers with systems using Intel® DCM's thermal and power management predecessor—the seamless expansion of Intel® DCM functionality is a major advantage.

#### Challenges:

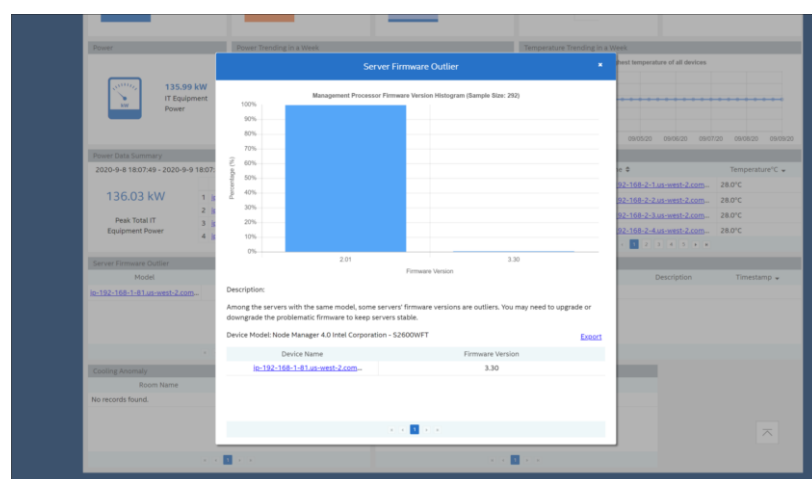
- Difficulty interpreting firmware fault information and monitoring health of larger server deployments (10,000+)
- Workload and resource costs associated with server-by-server manual firmware provisioning
- High cost of enterprise management systems
- Confusing user interfaces (applies to tier 2 data center management systems)



## Qualitative Differentiators

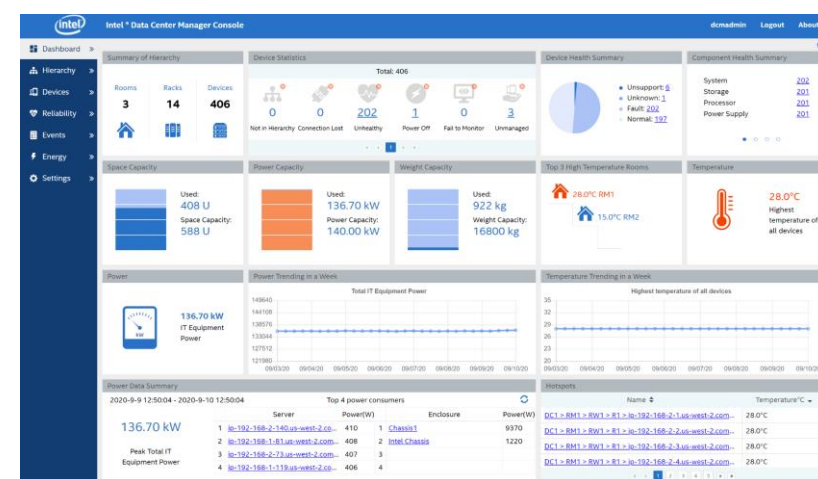
- **Increase the value of existing server offerings:** Intel® DCM integrates with all contemporary Intel® code-name Purley architecture systems, and serves as a free add-on with systems that features Intel® Remote Management Module AXRMM4LITE
- Clean, unified, easy-to-engage user interface
- Surpasses basic power and thermal monitoring capabilities by providing utilization monitoring, firmware provisioning, automated detection, and other enterprise features
- Enables comprehensive firmware update for all Intel® components on a system with the click of a button; view video [here](#).

## Use Cases



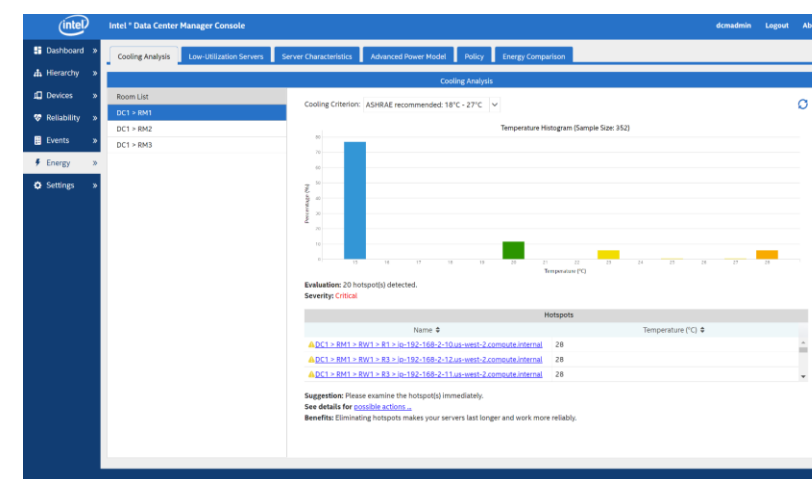
### Firmware Provisioning and Updating

- Provision with a combination of auto-detection and flexible .csv registries
- Update multiple systems in parallel from one user interface
- Update firmware across all Intel® Server components in the chassis



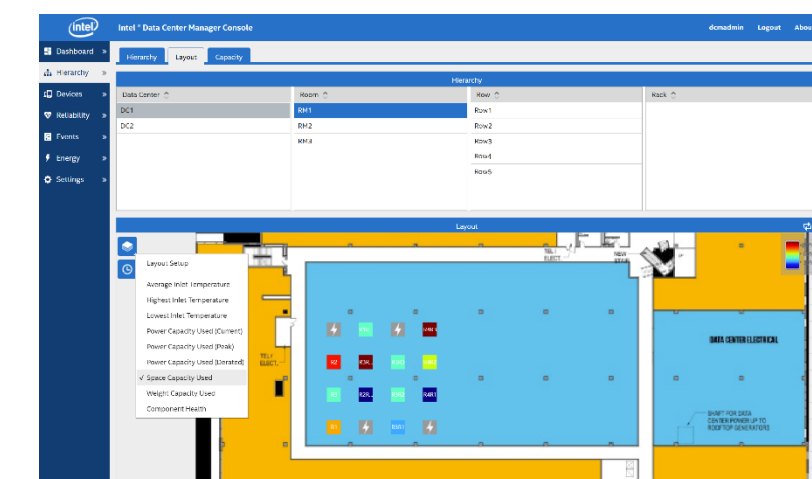
### Health Monitoring

- Detect version outliers/out-of-compliance devices in specified IP-ranges
- Locate hotspots and predict health issues
- Receive reliable and customizable alerts for all types of devices



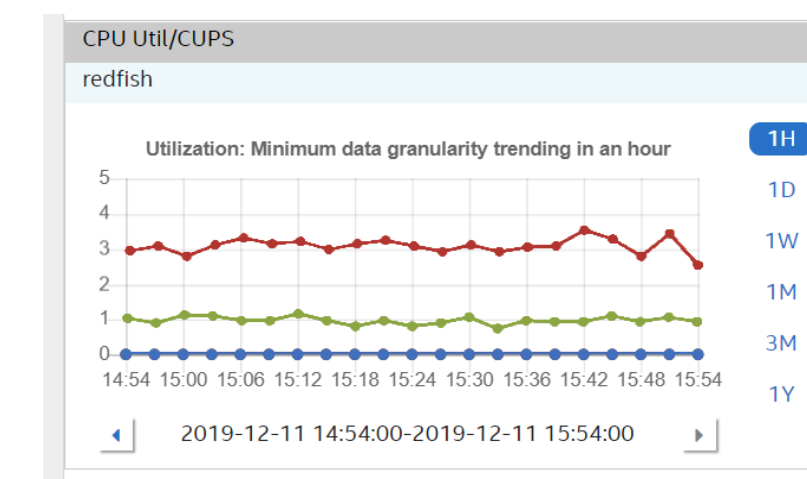
### Power and Thermal Management

- Monitor over-provisioning power and cooling
- Create granular thermal maps
- Monitor energy use per device
- Correlate metrics
- Enforce power capping



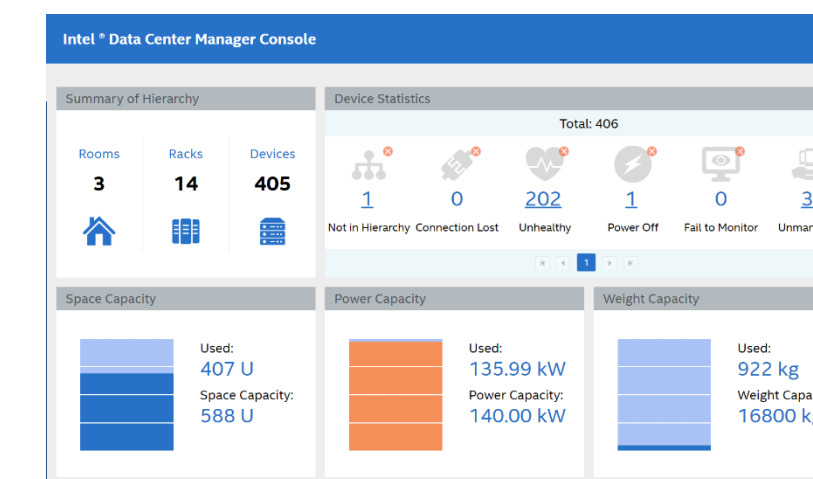
### Asset, Inventory and Infrastructure Layout Management

- Discover and track asset details on available systems and create visual layouts
- Aggregate info for the entire infrastructure



### Utilization Monitoring

- Monitor system utilization
- Identify unused servers
- Optimize applications and workloads
- Monitor across the network



### Capacity Planning for Any Data Center

- Easily identify where to place servers and optimize rack density
- Group by racks with rack-by-rack views of systems from one UI
- Manage and forecast power and space demands

## What's new in Intel® DCM v. 3.8?

Intel® DCM version 3.8 (which just launched) provides comprehensive firmware management and deeper visibility into asset status. It integrates DSG's Intel® Server Debug and Provisioning Tool (Intel® SDP Tool) to enable firmware updates, BIOS configuration and virtual media mounting for Intel® DSG servers exclusively.

## Objection

## Response

## Proof Points

Can Intel® DCM really handle large-scale enterprise data center deployments?

Intel® Data Center Manager has been tested for scalability for 20,000 IPMI nodes, and can greatly exceed this management capacity.



**Crowdstrike**, a leading provider of SaaS next-generation endpoint protection, threat intelligence, and pre-and post incident response services. They saw ~\$300,000 savings per year using Intel® DCM with a 5,000 devices, 5 rooms, 3 data center deployment. Read the public white paper, [here](#).

**CERN** saw significant reductions in cooling costs and power usage effectiveness (PUE) by safely raising the temperature of the server room based on Intel DCM's thermal and health monitoring. Read the public white paper, [here](#).

**Intel IT** used Intel® DCM to identify opportunities for consolidating and virtualizing underutilized servers. Besides saving power, this also helped conserve space. Read more about this in the public white paper, [here](#).

### Intel® DCM Instance Environment:

- CPU: Intel® Xeon® Processor CPU E5-2699 v3 @ 2.30GHz
- Memory: 64 GB
- OS: CentOS 7.7

- Browser: FF73
- Network bandwidth: 1Gbps
- Intel® DCM Configuration: 5 min sampling period, cipher suite 3

### Results:

- Average CPU utilization: ~5%, average Memory utilization: ~50%
- Average Network utilization: ~10%, storage space for 1-year worth of data collection: 400 GB

## How to Get Intel® DCM

1. Purchase the Intel® DCM Software License Key for one or more servers
2. Integrate the Intel® Remote Management Module AXRMM4LITE on an Intel® Server Platform; once the module is detected by Intel® DCM, that is managed for free.

## Sales Resources

To coordinate sales opportunities, contact:

[Brian Vandecoevering](#), [Ronald Pullis](#)

Intel® DCM Content:

- [Intel® DCM Product Details](#), [Intel® DCM Videos](#)

Partner Programs

- [Intel® Authorized Distributor](#)
- [Intel® Technology Provider](#)
- [Intel® Solutions Marketplace](#)

## Legal Disclaimers

Performance varies by use, configuration and other factors. Learn more at [www.Intel.com/PerformanceIndex](http://www.Intel.com/PerformanceIndex). Performance results are based on testing as of dates shown in configuration and may not reflect all publicly available security updates. See configuration disclosure for details. No product or component can be absolutely secure. Your costs and results may vary. Intel technologies may require enabled hardware, software or service activation. All product plans and roadmaps are subject to change without notice. Code names are used by Intel to identify products, technologies, or services that are in development and not publicly available. These are not "commercial" names and not intended to function as trademarks. Intel, the Intel logo, and other Intel marks are trademarks of Intel Corporation or its subsidiaries. Other names and brands may be claimed as the property of others. © Intel Corporation.