

The world's leading data center management software.

Sunbird Software Is Changing the Way Data Centers Are Managed.







Our Technologies Are Used All Across the World

Since 2007, Sunbird products have been used globally by 1,600+ customers across hundreds of thousands of racks to manage millions of assets and monitor billions of data points every day. From colo to owner operated, medium to large, private to public and non-profit, you can find Sunbird solutions helping customers improve availability, drive efficiency, and better utilize their data center assets.



We Passionately Listen to Customers

Sunbird is the product of a commitment to create superior solutions that resolve real business needs. As an early player in the DCIM market, we've grown into an international industry leader because we listen. Through user groups and deep customer interactions, Sunbird delivers software that just works. We pride ourselves on creating the highest quality products with unwavering support to the people who use them.



Based in the United States, Sunbird Software serves over 1,600 customers globally.



Our Team Works Hard With Your Success in Mind

We do more than create solutions tailored to each customer. We build lasting relationships by understanding customers' needs, delivering the right solutions, and providing the industry's best support before, during, and after each sale. Our employees strive to delight customers. We're humbled by our customer's willingness to become references and advocates.



Our DCIM Software Is Proven

Sunbird's DCIM solution has been battle-tested in real-world environments to streamline and accelerate data center operations. Our software improves uptime and capacity utilization, drives efficiency, and boosts people productivity through monitoring and management of intelligent devices, data collection for business intelligence and visual analytics, third-party integration, and more.



Something great is happening here, and it starts with <u>our people</u>.

With a focus on real user scenarios for real customer problems, we help data center operators manage tasks and processes faster and more efficiently than ever before, while saving costs and improving availability.





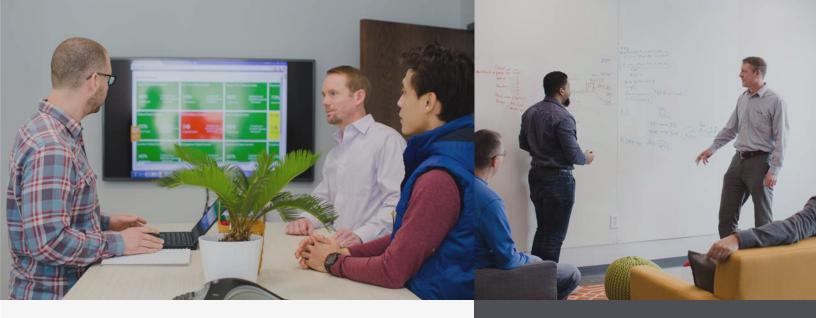
Simplicity.

We strive to eliminate the complexity our customers have been forced to accept from point tools and home-grown applications, removing the dependency on emails and spreadsheets to transform the delivery of data center services. Sunbird delivers on this commitment with unexpected simplicity through products that are easy to find, buy, deploy, use, and maintain.

Customer-driven.

Our solutions are rooted in our deep connections with our customers who share best practices and participate in our user groups and product development process.





Our office is unique, open and connected...

Providing for greater communication, collaboration, and flow of ideas among employees.



"My experience from the cradle has been top notch and unbelievable."

Brian Jackson - Power Infrastructure Project Manager

Department of State



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What Is DCIM?

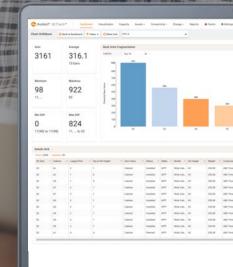
DCIM software is a new class of software that gives data center operators the ability to run efficient data center operations and improve data center infrastructure planning and design.

It typically replaces Excel®, Visio®, and home-grown databases. DCIM software can bridge information across organizational domains—Data Center Ops, Facilities, and IT—to maximize utilization of data center resources.

What Are the Benefits of DCIM?

The benefits of a DCIM solution can be found in time savings, people productivity, and cost savings. Employees no longer need to be on-site to identify what assets are in the data center and what space, power and cooling is available. Data center managers can have access to accurate data in real time at a click of a button.

- Understanding asset details and their physical power and network connections enables highly accurate capacity planning, down to the single port or 1 rack U level.
- Critical path capacity points are automatically and easily identified, reducing the risk of failure.
- Reservations, moves, adds, and changes are accomplished with ease.
- Employee productivity and morale dramatically increase as processes and workflows are implemented to ensure high quality changes in the data center.





Get a Degree in DCIM.

Visit www.sunbirddcim.com/resources to access our entire DCIM content library.



What Problems Does DCIM Solve?



Asset Management

What do I have?

How is it configured and connected?

Where is it located?

Who owns it?

What's the maintenance on it?



Energy Management

How can I save energy?

What is the cost of it?

Who's using it?

Who is meeting their saving goals?

What can I bill back?



Capacity Management

How much do I have?
When do I run out?
How can I budget it?
Where can I put stuff?
How do I better utilize it?



Environmental Monitoring

How can I better manage hot spots?

Am I overcooling my data center?

How can I better manage free cooling?

How do I maintain a safe environment for IT equipment?



Visualization

Can I navigate my data center in 3D as if I'm there?

Can rack elevations be automatically updated so I no longer need to update Visio?

How can I visualize power, temperature, and humidity sensor readings across my data center floor at a glance?



BI & Analytics

How can I easily analyze the information needed to make data-driven decisions?

How can I track KPIs most important to my organization?

How can I share my dashboards and reports with my management and team?



Change Management

How do I manage moves, adds, deletes?

What is the impact?

Who does the work?

When is the work done?

How do I know it's done?



Power Monitoring

How much is being consumed?

How much is available?

How do I ensure uptime and reliability?

How can I accommodate high density?



Security

How can I secure my data center against physical threats?

How can we control who has access to cabinets and cages?

How can we track and audit who was in a cabinet?

How can I restrict access to users or tenants through role-based permissions?



Connectivity

How are my assets connected to network, power, and storage?

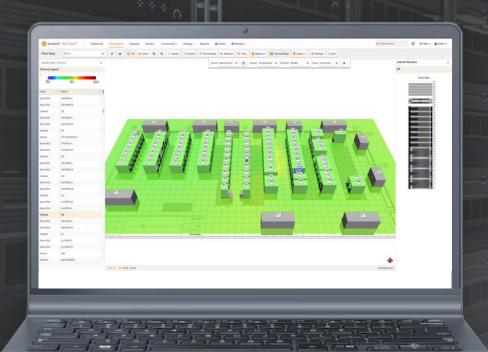
How can I easily know physical port capacity?

How can I easily document structured cabling?

How can I visualize copper and fiber cabling and cable trays across my entire data center floor?









All of the Features That You Need to Manage Your Data Center With Ease











One Searchable Database

Manage Data Center Assets

Custom Dashboards

Intelligent Monitoring

DCIM Made Easy

Sunbird's Product Offering.



Asset Management

Accurately track all assets across all global data centers



Power Management

Reduce downtime and find stranded capacity with complete power monitoring



Capacity Management

Quickly see space, power, network connectivity, and cooling capacity



Visualization

See 3D views that display everything from a bird's-eye view of the data center floor



Change Management

Manage, validate, and report on change requests and work orders



Security

Secure cabinets with electronic door locks, auditing, surveillance, and role-based permissions



Energy Management

Boost energy efficiency, reduce costs, and drive energy-saving initiatives



Data Center BI & Analytics

Explore zero-configuration dashboards and visual analytics that work right out of the box



Environment Management

Maintain uptime, avoid overcooling, and ensure a safe environment for IT assets



Connectivity Management

Manage power and network connectivity with visual trace routes, cable measurements, and port connectivity

Welcome to Second-Generation DCIM

Second-generation Data Center Infrastructure Management (also known as DCIM G2) refers to the class of software emerging from traditional DCIM products to dramatically simplify data center management.

This next generation of DCIM addresses many of the pain points experienced with legacy DCIM tools and provides specific capabilities and features designed to help data center managers make smarter operational decisions.

What Is Driving Second-Generation DCIM?



Massive volume and variety of data requiring significant compute and transactional data center resources



Increased affordability of iPDUs and other smart devices, with more sensors collecting more data



Increased competitiveness in the colocation market



Data center consolidation, virtualization, edge and cloud computing



Data center management software market consolidation



Integration of new technologies into DCIM solutions to replace aging or outdated tech



Increased consumer education based on previous experience with DCIM tools





What Sets Second-Generation DCIM Apart?

Today's data center managers have moved beyond Excel, Visio, and traditional data center management tools. They expect solutions that meet the requirements of modern data center environments and leverage new technology to maintain uptime, drive efficiency, and boost productivity. They need second-generation DCIM that is fast, easy, and complete.



Super-Fast Deployment Time



Complete Suite of Features and Capabilities



Zero-Configuration Analytics



Automation Through Integration



Compatibility with What You Have



Extreme Scalability



Ease of Use



Data-Driven
Collaboration



Al and Machine Learning Innovation



Sunbird: A Leader in Second-Generation

Sunbird is ahead of the curve when it comes to second-generation DCIM. While other DCIM software providers are charging for every module, our focus on real customer problems has enabled us to overcome the pain points of legacy DCIM tools in our elegant, modern software. We refine our features and build our roadmap based on feedback from our users, so there's no bloatware, no additional modules to purchase—simply fast, easy, and complete DCIM software that just works.



Easy, Accurate Asset Tracking.

With an overwhelming number of IT assets to monitor, asset tracking in data centers has become a difficult process. Multiple Excel® files and Visio® diagrams, and home grown systems can be hard to use, hard to maintain, and error prone. As a result, your current solution might not be able to deliver the information you need, when you need it.



Asset Management on Steroids

Track detailed information on all your data center infrastructure assets and even add your own custom fields.

- Extensive detail and asset information including servers, networking, and storage
- · Instantly get a picture of what assets you have, who owns them and where they are located
- Report auditing and compliance of your assets
- Quickly search for assets and get detailed information with a click



With Smart Models, We've Done All the Hard Work for You

Our Models Library is updated monthly and includes detailed model info like U space, dimensions, weight, power requirements, and port information like power, network, storage, serial, and VGA ports for:

- 30,000+ Smart Models
- 450+ Makes
- 250+ Data and Power Port Connectors
- 13 Categories of Physical Media
- 10 Protocols and 25+ Network Speeds

With Sunbird's Asset Management Features:

- Ensure an accurate single source of truth for all data center assets, eliminating the challenges of spreadsheets
- Leverage the Models Library and Auto-Discovery to get up and running faster
- Keep track of assets and their configurations without having to waste time on trips to the data center



Say Goodbye to Manual Audits, Say Hello to Auto-Discovery

- Discover virtual machines, servers, blade systems, network devices, rack PDUs, and all other SNMP-enabled devices simply by entering an IP address
- Rapidly identify and correct inconsistencies between deployed assets and devices managed by Sunbird's DCIM solution for a 100% accurate database
- Automatically add and update metadata, such as system name, description, system network interfaces (ports), virtual memory, disk storage capacity and percent used
- Discover and track multiple vSphere hosts and virtual machines as assets in the software, even virtual machines on individual blades



High-Res Cabinet Elevations Save Time on Trips to the Data Center

You don't have to visit the data center floor to see what type of configuration you have in any cabinet...



- Drag-and-drop assets within a cabinet to reorder them
- See front and rear images based on Sunbird's Models Library, or upload your own images
- View name, make, model, rail usage, and other information for each device
- Inspect each cabinet to see cabinet-level power, heat output, weight, number of items, available RUs, largest contiguous RUs, available ports and type of media

Get Real-Time Information on Every Asset

Maintain accurate inventory of data center assets and real-time views across your entire data center, including equipment in racks like servers, storage, networking equipment, rack PDUs, patch panels, and even applications. See infrastructure devices like floor PDUs and branch circuit panels, UPSs, and CRAC units. Map physical relationships between all devices so you can easily see how everything in your data center is physically connected - from structured cabling down to individual port level.





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"I really like the sort and filter functionality as well as the import/export feature that can be used with Microsoft Excel. A built-in Models Library is very helpful and has saved us a bunch of time."

Tyler Kauffman - Systems Administrator





Manage Data Center Resources at the Speed of IT.

How do you know how much capacity and power you have in your data center? Where is the best place to deploy new IT equipment? When will you need more power or space? Technology trends like big data, Internet of Things (IoT) and artificial intelligence (AI) are generating massive amounts of data that enable organizations to drive business innovation. Yet the benefit to the business often comes as a heavy drain on IT resources, and today's data center managers are struggling to address this increasing demand with responsiveness and agility.



Find the Optimal Place to Deploy New Equipment in Minutes

With Sunbird's Intelligent Capacity Search, you can easily find capacity for new equipment. Simply select your location and criteria, and Sunbird's DCIM solution does all the searching for you.

- Search by make and model or RU height, cabinet grouping, type, or function, and data and power connectivity
- Results are validated for data and power port compatibility, including quantity of ports, connector, media type, nameplate and budgeted watts, phase, and volts
- Instantly reserve cabinet space or place items once you've identified the location



With Cabinet Live Charts, See Real-Time Power Readings

- Monitor power trends over select time periods and view corresponding events for any cabinet in your data center
- Trend average, minimum, and maximum active power over the previous month, week, or day
- View rack power reading totals at the cabinet, rack PDU outlet, rack PDU breaker, and rack PDU inlet levels
- Improve capacity utilization by comparing actual, budgeted, and stranded power totals

With Sunbird's Capacity Management Features:

- Accurately manage space, power, network, and cooling to optimize capacity utilization
- Simplify how you find, place, and reserve capacity for asset installations
- Intelligently manage your data center resources to make more informed capacity planning decisions, use power resources more efficiently, and save on operating expenses



Get a Cabinet-Level View of All Devices

You don't have to visit the data center floor to see what type of configuration you have in any cabinet.

- See front and rear images based on Sunbird's Models Library, or upload your own images
- · View name, make, model, rail usage, and other information for each device
- Inspect each cabinet to see cabinet-level power, heat output, weight, number of items, available RUs, largest contiguous RUs, available ports and type of media, rack PDU details, and branch circuit feeds



Understand the Net Impact of Projects on Capacity with What-If Analysis

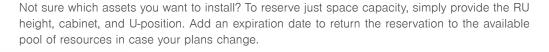
What-if analysis allows you to understand the potential net impact of changes in your data center so you can predict the future and ascertain if you can postpone costly capital expenditures. With Sunbird's what-if analysis dashboards, you gain the capability to:



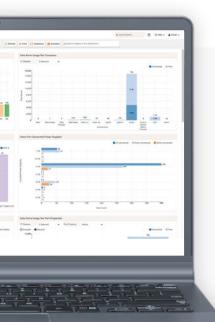
- View space and power budget capacities on a per-project basis at the cabinet, rack, or aisle level
- · Account for decommissions as well as additions in your capacity planning
- Provide a visual, bottom-line summary to management that clearly justifies your need to purchase or ability to defer

Reserve Space, Power, and Cooling Automatically

Reserving space, power, and cooling resources in Sunbird's DCIM software is just as easy as booking a hotel room. Once an item is planned for installation, the required space, data connections, and power connections are automatically reserved.







"The new dashboard provides an accurate bird's-eye view of capacity and health and lets us easily drill down to details. The DCIM-generated reports on capacity and assets have been invaluable for managing assets and resources and save us hours of effort each week."

Laura Mechler, Manager, Global Hosting Resources

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Moves-Adds-Changes Made Easy.

How do you manage moves, adds, and changes in your data center? How do you monitor the progress and productivity of change orders? How do you ensure the job is done with quality and on time? There's a constant stream of devices being added, removed, repurposed and reassigned at any given moment. And until now, it's been challenging and cumbersome to quickly provide accurate answers to these important questions.



From Creation to Completion, Seamless Work Order Automation

Our built-in work order management system enables you to automatically track status through each step in the change management workflow:

- Item Planned to Be Changed
- Request Issued
- Request Approved
- Work Order Issued
- Work Order Completed
- Asset Record Updated in DCIM Database



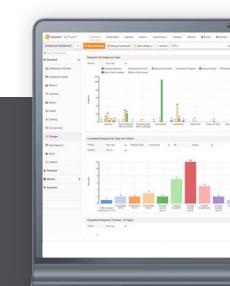
Manage, Monitor, and Report on Every Detail of Changes and Work Orders

Sunbird's change management capabilities enable you to track granular details of your requests and work orders so you'll always know what's changing in your data center:

- Request stage and status
- Request deadline and priority
- Request submitter, approver, and parties to be notified
- Assets details, including site location, cabinet, U-position, and the desired changes
- · Request and work order histories

With Sunbird's Change Management Features:

- Create requests and work orders with customizable task details and deadlines to ensure work is done accurately and on time
- Use role-based, granular permissions to ensure compliance with corporate requirements and ITIL guidelines
- Track the real-time status of all work activities to improve the productivity and efficiency of data center staff



Make Sure the Right Job Is Done and Done Right, Every Time

- Populate requests and work orders with information directly from your DCIM database to reduce inaccuracies and missing information
- Specify who should be notified as each request progresses through the change management workflow
- Eliminate unnecessary steps, duplicate requests, bottlenecks, and delays resulting from manual efforts
- Validate changes to ensure consistency and accuracy in your DCIM database



Manage Remote Hands in Colo Facilities

Sunbird's DCIM software ensures easy and accurate adds, moves, and changes - even when you're not on site.

- Automatically populate requests and work orders with cabinet elevation views so technicians know exactly where to install equipment
- Aggregate multiple requests into a single work order to decrease the number of trips to the data center
- Track history of each request to measure workflow effectiveness, achieve target intervals, and maintain a record of the work completed for future reference



Integration with Your Existing Ticketing Systems

With Sunbird's Open Web Services API, you can easily integrate your DCIM to work with your existing ticketing system. Gain additional benefits from your DCIM deployment by integrating DCIM with your ITSM:



- Save time and increase productivity of IT and Data Center operations staff
 Synchronize data and maintain CMDB accuracy
- Dramatically enhance audit speed and accuracy
- Improve cross-functional teamwork and transparency





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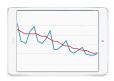
"Because dcTrack covers the entire lifecycle of an asset — from the point it is placed in the rack to when it is moved — it captures all the key information necessary to support asset, capacity and change management in a data center."

Keith Bott, Service Manager, Equipment & Facilities



Save Energy. Reduce Costs.

How do you measure PUE (Power Usage Effectiveness)? Do you have a need to create energy cost reports for customers? Can you easily identify power, energy, cost, and environmental trends? To effectively manage energy efficiency initiatives, you need to be able to view energy consumption trends, understand what is drawing energy in your facility, and find ways to save on usage – while maintaining a safe environment for your IT equipment.



Real-Time PUE Is Now at Your Fingertips-It's Automatic

- Collect data from building feeds, IT loads, and non-IT loads
- Calculate and trend PUE across all your data center sites
- Immediately see the impact of energy efficiency initiatives
- Track and compare PUE at monthly or daily granularity across a specific timeframe or the past year, month, week, or year to date
- Get PUE data at a glance via gauge charts for specific sites or line charts for comparisons



Accurately Allocate Costs Across Your Organization

Sunbird's DCIM software enables you not only to better understand the exact amount of power used and which devices are using it, but also to know who is using it through easy-to-read billback reports.



- Understand costs by data center, business unit, service, or application
- Accurately bill back costs to the appropriate departments or customers
- Determine which customers will be most affected by outages and downtime
- Drive energy-efficient behaviors
- Recover lost allocated charges
- Save time and money

With Sunbird's Energy Management Features:

- Monitor and measure all the energy usage in your data centers via dashboards and reports designed to help you identify opportunities to drive savings and efficiency
- Ensure compliance with green data center initiatives, government mandates, and other sustainability initiatives
- Increase data center temperature without risk to avoid overcooling and reduce costs



Ensure a DCOI-Compliant Data Center with DCIM

Whether you're managing a federal data center or simply want to learn more about boosting data center efficiency, understanding the Data Center Optimization Initiative (DCOI) and its metrics can help in your own optimization efforts. Sunbird's DCOI Executive Dashboard comes preloaded with widgets that track the five DCOI optimization metrics for easy, one-click access to fast, focused data analysis. It works without additional user configuration so you can immediately review and analyze your data. View the latest readings for a current snapshot or trend your data over time to track your progress on your efficiency objectives. Act on your insights and see the effects of your changes—all within the same interface.



Utilize Power and Cooling Resources Efficiently

- Leverage free cooling with patented electronic psychrometric cooling charts that help you keep cabinets in the ASHRAE® allowable environmental ranges for potential cost savings
- Maintain uptime, ensure compliance with manufacturer and industry-accepted recommendations, and achieve project cost savings by increasing the temperature set point
- Identify, consolidate, decommission ghost servers and other unused equipment with reports that measure active power at the device level



Support Corporate Sustainability and Green Initiatives

Sunbird's DCIM software is standards based and monitors building meters, UPSs, Floor PDUs, RPPs, intelligent rack PDUs, and environment sensors. It consolidates information into actionable reports, enabling you to save power and money, calculate Green Grid's PUE Level 1, 2 and 3, and drive your green data center and sustainability initiatives. Integrate with enterprise sustainability systems to drive accurate data energy consumption information. Easily support government regulations and other carbon cap and trade initiatives. Monitor and measure energy savings to collect energy rebates and carbon credits.





"We use Power IQ to generate monthly energy-trend reports that provide customers with actual usage levels by server and IT device....it enables us to provide our customers the ability to run their own reports and to securely power cycle their equipment via a Web interface. Our customers [are] able to take a more active role in managing their servers and their energy utilization."

Dustin Phillips, Co-Location Operations





Maintain Uptime and Ensure a Safe Environment.

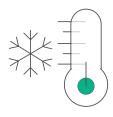
With servers generating more heat than ever and rack densities on the rise, hotspots and other environmental issues are a natural by-product of the demands of modern data centers. As a result, you may not be getting the alerts you need when conditions exceed pre-set limits, potentially resulting in costly, unexpected downtime and unsafe conditions for your IT equipment.



Enterprise-Class Polling Engine for Massive Amounts of Environmental Data

Collect environmental data from all your data centers, with scalability to over one billion data points a day:

- Temperature
- Humidity
- Water/Leak Detection
- Airflow/Pressure
- Contact Closure
- Smoke/Fire
- Door Lock



An All-in-One Environment Management Solution for Your Data Center

Sunbird's environment management solution brings together the power of:

- Data center monitoring of intelligent PDUs designed to work with plug-and-play environmental sensors
- A full data center management software suite, including operations and monitoring software, with configurable dashboards, alerts, cooling charts, and tools to calculate savings from increasing rack temperatures
- The industry's best data center power management software, compatible with many third-party rack PDUs

With Sunbird's Environment Management Features:

- Avoid overcooling your data center and paying for more cooling resources than you need
- Identify hotspots and other environmental issues before they become problems so you can maintain uptime
- Maintain a safe environment for your IT equipment to extend the life of your hardware



Interactive Data Center Health Map

- Keep an eye on your environment using a real-time, interactive data center floor map with a color-coded, bird's-eye view of key environmental data, including temperature, humidity, air flow, differential pressure, and events, on a per-cabinet basis
- Instantly see data center problems based on user-definable threshold settings
- Prevent downtime by quickly addressing critical alerts
- Pinpoint the source for threshold alerts and alarms with detailed event notifications sent via email or JSON
- Display on a large NOC screen for at-a-glance visibility



Easily Visualize and Identify Environmental Issues in Your Data Center

- · Leverage floor map reports for at-a-glance information on temperature and humidity
- Quickly identify hotspot formation and cooling issues with thermal and pressure maps with time-lapse videos
- See perforated tiles and their percentage open on the data center floor to better manage airflow
- · View trends over time to identify and address problem issues and ensure sufficient cooling



Patented Electronic Psychrometric Cooling Charts

Configure our patented cooling charts to display your data center's humidity and temperature readings on the same psychrometric chart as ASHRAE's recommendations. Start with an entire data center or focus on smaller sections within a facility, such as a room or rack. Ensure compliance with manufacturer and industry-standard recommendations or specify your own custom target operating zones. Leverage free cooling and project how much energy and cost you can save by increasing room ambient temperatures. Operate in the most energy-efficient mode and still achieve the reliability required by your customers.





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"Sunbird DCIM software is easy to use and easy to read. I have been able to easily keep an eye on all power, temperature, and humidity statuses for all my hardware locations."

Jason Stallings, Data Center Technician





Power Monitoring That Won't Break the Bank.

Can you tell your customers how much power they are using? What power capacity is available? Are you being asked to ensure power uptime and reliability? Power resources are increasingly constrained, and the cost of energy is spiraling out of control. You need to know how much power you are using, how much is available, and where you can improve efficiency. Having a tool to help answer these questions and keep your power usage in control is critical to optimizing your data center power management.



Complete Data Center Power Monitoring

Power IQ functionality scales to meet enterprise needs, allowing you to securely monitor the power equipment in your data center:

- Rack and Floor PDUs
- Meters
- Busways
- UPSs
- Branch Circuits
- RPPs



Rapidly Deploy and Manage PDUs

- Autodiscover PDUs simply by scanning IP addresses to find and add your PDUs to the system
- Quickly and easily update firmware, passwords, and other PDU information in bulk via the GUI
- Select multiple PDUs and place them in decommission, recommission, or maintenance mode to accurately track which equipment is in service
- Add, edit, and delete PDU data in bulk via CSV import/export

With Sunbird's Power Management Features:

- Accelerate PDU deployments with autodiscovery and bulk management activities
- Plan power capacity more effectively and reduce downtime with more accurate forecasting and data center health reporting
- Drive productivity with automated power control actions



Prevent Downtime with Data Center Health Status and Reports

Avoid unplanned downtime that can cost hundreds of thousands of dollars per outage and the health of your overall data center.



- · Rack failover reports identify available capacity to ensure coverage in case of failure
- Color-coded health map provides an at-a-glance view of rack load levels, line currents, and other information
- Automated notifications enable quick identification of threshold violations and potential trouble areas

Make Informed Power Capacity and Planning Decisions

- · Easily identify cabinets with the most or least available power capacity
- Automatically create and email reports that provide cabinet power capacity and utilization
- Forecast days-of-supply capacity at the rack, row, room, lab, or data center level
- See actual data, forecast trends, and capacity limits on a line chart
- · Monitor UPS capacity and battery information to prevent potential over-capacity situations



Improve Productivity with Automated Power Control

Let Sunbird DCIM do the hard work of mapping servers to individual power supplies to outlets in rack PDUs so you can visually see relationships without being on site. Easily increase productivity by controlling the powering on/off of outlets, IT devices, and groups of IT devices with power sources spanning multiple rack PDUs, without the need to log into your rack PDUs individually. Patented agentless graceful operating system shutdown reduces energy costs under normal operations and extends battery life during power failure and disaster recovery.





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"The largest improvement that I see is being able to monitor power usage in our lab and making sure that our PDUs don't get overloaded. We've gone through a few retirement phases and we can track that with the graphs in PIQ — we see the power usage going down. Being able to see the temperature throughout our lab is also pivotal."

Kiel Anderson, Senior Lab Network Engineer





3D Data Center Visualizations: Better Than Being There.

Do you think of 3D as a sales gimmick that is all style and no substance? You're not alone. The fact is, most data center management software incorporates 3D in flashy but ultimately unhelpful ways. As a result, most data center managers don't realize the full value of their 3D data center floor map visualizations as tools to help them remotely manage their facilities.



Google Earth Meets Your Data Center

Explore anywhere in your data center—from an aerial perspective of your floor map to the depths of your cabinets—without leaving your desk.

- Navigate the rows and racks of your data center with just your internet browser, no additional software required
- Get a bird's-eye view of the entire data center floor or take a closer look at the contents of specific aisles and cabinets
- Rotate, pan, and zoom the entire floor or isolate rows and containment areas



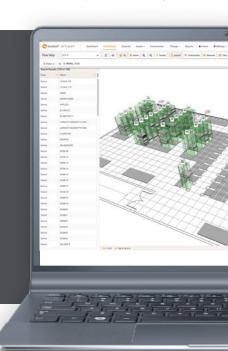
Be the Superman of Your Data Center

Both your team and your management will see you as a hero with these data center "superpowers":

- "X-ray" views enable you to see inside your cabinets
- Easily visualize the impossible: side views of all your racks without the side panels
- Flip from the front to the back of your row with superhuman speed
- Enhance your vision with detailed model, depth, alignment, and mounting information as well as sensor data for your devices
- 3D rendered at the speed of your browser ensures high performance for faster analysis, without lag

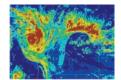
With Sunbird's Visualization Features:

- View cabinet elevations and see where and how devices are placed and connected
- Analyze power, temperature, and humidity sensor readings alongside other information you can't easily get when physically inside your data center
- Display your visualizations in slideshow mode to create a shared understanding across organizational silos





Weather Radar for Your Data Center: Thermal and Pressure Maps with Time-Lapse Video



- Forecast and address changes in your data center environment with speed and accuracy
- Spot temperature and humidity trends over time across your entire data center floor map
- Identify and predict hotspot formation—from start to end points
- Works with environmental sensors already deployed in your data center for easy data collection and high-quality data

Real-Time Mutli-Site Health Status and Events

- Easily see the health of all your sites in one view with simple red-yellow-green color coding
- Quickly drill down to understand the events that trigger threshold alerts
- · Achieve optimal data center health with multi-site monitoring across all your locations
- · Customize views with drag-and-drop ease and resize tiles to fit all your data centers on one screen
- · Take the stress out of tracking changes in your data centers with user-configurable notifications
- Rapidly sort, filter, and clear all of your events in a single view



3D Visualizations Enhance Remote Management Capabilities

- Use floor map visualizations to direct technicians to the correct aisle and row
- Pinpoint the best areas to place equipment based on available capacity within a cabinet, without being physically on site
- See which devices are installed or planned for installation
- Help technicians view exactly where the device ports are located to ensure that connections are made correctly





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"The many visualizations such as device, cabinet and floor plan (including 3D) are quite valuable to me. With the cabinet views, I can "see" the best areas to place equipment within a cabinet without the need to be physically on site. Device views allow me to "show" installers where exactly the various device ports are located so they connect data cables correctly. The floor plan allows me to estimate distances so I can order cables of proper length. All of these views are invaluable to me since I support remote data centers."

Dave DeFrancisco, Deployment Engineer





Safeguard Your Data Center Against Threats and Intrusions.

Modern data center professionals are facing a wide range of security management issues. Their data centers are continuously exposed to physical and informational security threats from both external and internal sources. They need to comply with increasingly stringent company requirements and industry regulations. Basic, low-level safeguards are no longer adequate for today's data centers, especially remote and colocated facilities.



Let Authorized Users in and Keep Intruders Out

- Leverage a single, centralized system for transparent, high-visibility data center access management
- Remotely lock and unlock doors to restrict physical access to individual cabinets and containment areas in your data center
- Control access and limit who has permissions to configure and manage access within the software
- Stay informed and protected with trap notifications and alarms
- Ensure no door is left unlocked with a user-configurable, global auto-relock timer

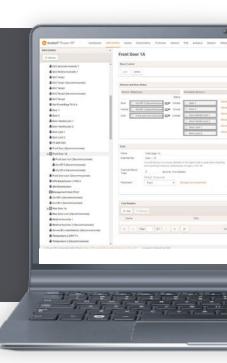


Keep an Eye on Your Data Center-Even When You're Not on Site

- · Track who goes in and out of your data center with smart card and RFID authorization support
- · Easily create, assign, deactivate, and track smart cards within the software
- Restrict access down to the card level
- View and protect your data centers anytime, anywhere with real-time surveillance feeds using IP or USB plug-and-play cameras
- Create a security dashboard with feeds and events for multiple sites

With Sunbird's Security Features:

- Manage access to different areas of your data center and keep track of who goes in and out with real-time reporting and surveillance feeds
- Restrict access to company data and assets with role-based granular permissions
- Mitigate common security threats, reduce the risk of human error, and eliminate the hassle of manually tracking access requests





Protect Against the Biggest Enterprise Security Threat of All: Your Employees

Seemingly innocuous employee behaviors can have unintended consequences that compromise the security of your data center.

- Assign and maintain user permissions with granular role-based access control
- Integrate with your existing LDAP systems and Active Directory for an additional level of authentication
- Prevent unauthorized access and changes to data
- Enforce company policies and procedures

Peace of Mind for Both You and Your Tenants

Physical and informational security is a top-of-mind risk for colocation data centers. Ensure that access to company data and customer assets stays in the right hands.



- Support multi-tenancy with granular access control to physical areas in your facility
- Comply with SSAE-16, HIPAA, and other industry standard regulations
- · Keep your tenants' security paramount



Real-time Visibility of Audit Logs and Security Reports for Forensic Analysis

Mitigate risks and improve disaster recovery efforts with audit logs and reports. View date-and time-stamped audit logs of successful user logins, failed logins, remote storage actions, RFID card authorization attempts, and card activations, deactivations, assignments, and updates. Get an at-a-glance view of the status of all doors, locks, and handles in your data center with door security reports. Analyze access request data over a historical period of time so you can understand who accessed what and when. Export reports to PDF or CSV or schedule email delivery to share the data with your team.





Compatible with Your Third-Party Hardware

Designed to support any locks connected to a Raritan®, CPI®, or Panduit® iPDU, Sunbird's DCIM software also can be leveraged in any cabinet, such as those manufactured by Legrand, Ortronics, CPI, Panduit, Minkels, and Afco.



No Data Science Degree? No Problem.

In today's ever-changing data center environment, insights from data provide a critical competitive advantage. But with the massive volume and variety of data generated by your data center devices, who has the time or training to collect that data, analyze it, gain insights from it, and ultimately derive value from it?

It's simply not possible with traditional data analysis or old-school tools like basic floor map diagrams and spreadsheets. However, data center professionals need to figure out how to harness the power of their data, or risk being left behind.



Your Ultimate Data Center Dashboard Has Arrived

- Over 75 preconfigured widgets across twelve dashboard categories cover a wide range of data center metrics
- Works out of the box-no user configuration required
- · Change the size and location of your chart widgets with intuitive, drag-and-drop simplicity
- Pull in third-party data from around the web with HTML widgets
- Gain full access to your data and generate self-service reports with SQL widgets
- Quickly filter, select, or deselect chart data points to refine your analysis

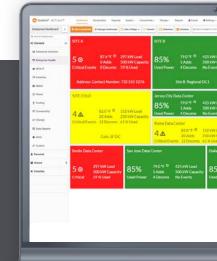


Visual Data Center Analysis: Slice and Dice Your Data Any Way You Want It.

- Get full access to the raw data behind the dashboard
- View summary panels for an overview of your data
- Expand or contract the timeframe to get just the dataset you want
- Display or hide data points with one click to more easily spot trends or focus your analysis on just the data that interests you
- Filter, sort, print, and export tabular reports to CSV or PDF to share with your team or management

With Sunbird's data center Business Intelligence and Analytics:

- Make smarter, more informed data center management decisions based on accurate, high-quality data
- Leverage out-of-the-box reports for faster analysis or display just the info you want with customizable reports
- Share your insights with your team and management to create a common view of your data center



Add an Additional Layer of Insight with Floor Map Overlay Reports

Floor map reports overlay on your data center visualizations for enhanced data analysis.

- Used RUs Per Cabinet
- Available RUs Per Cabinet
- Percent Full Per Cabinet
- Weight Per Cabinet
- Weight Capacity Per Cabinet
- Static Load Per Cabinet
- Max Temp Per Cabinet Fronts
- Max Temp Per Cabinet Rears
- Measured Amps Per Cabinet
- Budgeted Power Per Cabinet
- Health Map
- Thermal/Pressure Map



Out-of-the-Box and Custom Reports for Every Data Center Scenario

Sunbird provides a wide range of reporting options to address your most common data center challenges:



- Find stranded power capacity
- Forecast and trend power and space capacity
- · Billback energy costs based on usage
- Simulate power failure
- Prevent costly, unplanned downtime
- Tailor reports to your organization's Key Performance Indicators (KPIs)
- · Rapidly sort, filter, and clear all of your events in a single view

Plan for Today and in the Future

With Sunbird's data center business intelligence and analytics, ease one of the biggest headaches facing data center managers today: capacity planning.







· Make your CFO happy with just-in-time spending versus overspending and overprovisioning





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"The new interactive dashboards provide data center business intelligence that drives deeper insights, more 'what-if scenarios' and more informed decision making to better manage our facilities."

Joseph Keena, Manager, Data Center Operations



Say Goodbye to Cable Spaghetti and Spider Webs.

How can you quickly identify circuits in your data center? How do you know which customers and applications are relying on those circuits? Knowing how devices are connected to each other is critical to effectively managing your data center. Without this information, you can't plan capacity, perform failover analysis, manage virtual as well as physical connections, and quickly respond to outages in your data center.



Power and Network: We've Got Both Covered

- · Select any cable connection and get a complete view of the circuit from origin to termination
- Easily budget power at every connection point in the power chain from the UPS to the device power supply with (N) or (N+1) redundancy to reduce downtime
- · View both a tabular and a visual circuit trace so you can reduce troubleshooting time
- Get a holistic view of circuit connections, with hyperlinks to verify and update the device/connection attributes



Complete Power and Network Distribution Visualization

Visualize, monitor, and budget power usage and capacity for each point in the power chain, from servers to rack PDUs, breakers, panels, and UPSs. At each hop, see Item Class, Make, Model, Location, Cabinet, U-Position, RU Height, Connector, Color, Phase, Volts, Max Amps, and Rated Amps to simplify validation, troubleshooting, and maintenance.

With Sunbird's Connectivity Management Features:

- Visualize circuits between any combination of devices, network equipment, and patch panels - all at the click of a mouse
- Trace power and network paths, for faster and more efficient troubleshooting
- Bulk manage structured cabling to rapidly build out and maintain infrastructure





Make Power and Data Port Connections in Seconds





- Connects to items and ports within the same cabinet or identify the far-end item you want to connect to
- Results are more heavily weighted to items that have similar attributes, such as location, media color, phase, volts, VLAN/subnet, protocol, and data rate
- Only displays compatible ports and connections based on connector and media type

Structured Cabling Data Highways Managed with Ease

In your data center, your structured cables are your highways, and your connections are on/off ramps. Make sure you can go from Point A to Point B with ease.



- Add, edit, and delete structured cabling connections in bulk to easily and accurately document your infrastructure
- Capture structured cabling attributes, including cable media, length, color, and group
- Decrease the risk of downtime and unexpected issues when you perform maintenance or updates
- Determine if your structured cabling can adequately support your network

Visualize 3D Cable Connectivity and Cord Length Across Your **Entire Data Center**

Whether you're interested in full circuits complete with patch cords or just the structured and power distribution cabling between end points, see exactly how items are connected with 3D visualization of all the cabinet hops on your data center floor. No more walking the data center floor with a tape measure in one hand and a pencil in the other.





Measure distances between items so you'll always have just the right length of cabling. See cable tray layers for fiber, copper, and other cable

types for a full picture of your data center cable management.

"Pricing was clear cut and scaled easily with license packs as needed. The tools are very intuitive and user friendly. We were up and running, tracking power in a few days."

Tony Ferello, Data Center Manager



A Single DCIM System for Your Multi-Vendor Environment

Vendor-Agnostic DCIM So You're Never Locked In

Sunbird's Data Center Infrastructure Management (DCIM) solution supports over 50 vendors natively and/or via plugin so you're free to choose the devices that work in your environment and manage them all in a single system.

Native support helps you get up and running faster. Out-of-the-box support for these vendors and their devices comes standard in Power IQ®—no additional user installation or configuration required. Native support is production-hardened by our lab engineers and field-tested by hundreds of users.

Plugin support enables you to manage a wider range of vendors and devices in your data centers. Plugins are developed by and distributed through our plugin community free of charge. Get access now to our free library of over 100 plugins that can be

IT Service Management











Metering Infrastructure



























































DCIM Integration

Flow-Through Operations for Improved Efficiency

To improve data center operations management, organizations today need to leverage data from a wide range of heterogeneous data sources. The various components of your data center management infrastructure can fit together and applications can seamlessly talk to each other, with nothing lost in the shuffle.

Sunbird's DCIM solution for data center operations, comes with open APIs to enable flow through operations that improve efficiency, accuracy and uptime. With open APIs you can use the tools you are most familiar with to integrate and meet the technical, business, and user needs of your organization. As a result, you can complete your application integration in less time and realize greater value from the systems you've already invested in, ultimately meeting your data center optimization project needs.





Developer Tools

- Open database connectivity capabilities let you use your existing data warehouse and reporting system to generate custom reports
- APIs enable asset create, read, update and delete to/from configuration management databases (CMDB) for seamless information exchange
- APIs enable seamless integration with change ticketing systems, reducing time and improving the accuracy of creating requests and work orders in the DCIM system



Download the full Sunbird® Ssrvices Brochure sunbirddcim.com/services

DCIM Startup, as Easy as 1, 2, 3

We Make It Easy to Get Data In

With Sunbird's flexible discovery and import capability, you can get your existing data into our system in a snap. With our built in smart models library and support for existing Visio and AutoCAD floor maps, getting data in becomes a chore of the past.



1. Import



2. Configure



3. Train





Quick Start

If you have a smaller site or want to tackle a larger one on your own, we offer a four day Quick Start service to get you going. Turnkey implementation is also available so you can focus more on your day job.



Get Value Day 1

To ensure you get the most out of your investment, training is provided by our implementation experts. Before we hand over the keys, we want to ensure you extract maximum value from your investment.



Turnkey Services

Sunbird's Data Center Services quickly put our customers on the path to easily managing their data center infrastructure with their new DCIM software. Our experts in installation, setup, database population and training are at your service—and they take pride in your DCIM success.

A Professional Service Engineer (PSE) will serve as a single point of contact, working with you each step of the way to define what a successful implementation looks like, build a project plan to support those goals, and ensure that there are no surprises. Ultimately getting you from where you are today to where you want to be tomorrow, quickly and efficiently.

Combining standard project management processes with standard service offerings and DCIM best practices, customers will be provided with deliverables along each step of the way including detailed project plans, database population, post-implementation verification and training programs that enable administrators and end-users to efficiently manage their data centers.

With 100% supported solutions from Sunbird, your data center infrastructure management transition will be fast and easy.



Technical Support

We're Here to Help



Access Our Large Library of Support Resources via the Sunbird Online Support Portal



Manage Tickets

Open tickets via the web and see the status and history of all your tickets



Training Videos

Watch "how to" videos and become an expert DCIM user



Online Help

Access user guides and searchable online documentation



Chat

Get your questions quickly answered in real time by our online support agents



Community Forums

Access forums, see announcements and share tips and tricks with other customers



Tools and Templates

Download templates and application tools to streamline configuration



Knowledge Base

Search for help and answers to your questions



New Feature Request

Submit new features to our product and development team



Models Library

Download the latest model versions, updated monthly



If you need to speak to a Sunbird Technical Support Representative, please call 732-993-4476.

Do you have a problem that you just can't solve? Are you interested in learning more about Sunbird DCIM? Do you just want to have a friendly conversation?

Don't hesitate to contact us today.



Headquarters

200 Cottontail Lane, Suite B106E