1

Asset Management	Asset Tracking	Utilize standard out of the box fields or add your own custom fields to track all physical infrastruc- ture asset details and their relationships. Easily search, filter, sort, and save custom views of your filtered data sets. Quickly show or hide any data type from your views and easily share asset list or asset record views with your team members or other departments. Easily drill up or down to other infrastructure that has a relationship with an asset.	Database-driven asset tracking with Excel®-like usability provides ease of use with data accuracy.
	Custom Fields, Tabs, and Panels	Add various types of custom fields and apply them to one or more types of asset classes. Custom field types include Text, Text Area, Numeric, Date, Checkbox, Single Select List, Multi Select List, and Tags. Users can create their own tabs and design their own panels for layout of custom fields and apply those fields to different equipment types.	High customizability ensures all customers can track anything of value to their operations.
	Bulk Editing	Easily filter down or multi-select asset records and bulk edit multiple fields at once via the GUI.	Bulk actions saves time and improves productivity.
	Cloning	Allows for fast replication of multiple items, including items they contain. Items include Cabinet, Device, Network, Data Panel, UPS, Floor PDU, Power Outlet, Rack PDU, CRAC, and Probe class items.	Simplifies rollout of new business services and their associated items.
	Importing and Exporting of Data	Sunbird's DCIM solution uses multiple methods for importing existing data: 1. SNMP discovery 2. Importing floor objects from drawings 3. Bi-directional web services API 4. Import wizard using spreadsheets Locations Asset Items Data Connections Power Connections Data Ports Power Outlet Circuiting Power Supply Ports	Quick and easy way to get your system up and running. Easy to migrate from other solutions such as Excel® or other CMDB databases, and electronic connection enables data accuracy.
	Asset Search	All items maintained in Sunbird's DCIM solution are organized in one database and are easily searchable by a web browser. It provides all of the information about the asset including item type, function, administrator, and port location as well as any custom fields unique to a partic- ular device. Users can perform simple or more refined filtered searches.	Operational efficiency.



FB001 December 2022

	Virtual Servers	VM hosts are tracked as any server item with the exception that there is a "cluster" checkbox and cluster name/number field. Each VM will be created as any server and will have the VM checkbox selected and "cluster" field filled with the same cluster as its host(s). The ITEMS API can be used to automatically create, update, and delete VMs.	Adds flexibility in selecting IT item and adds efficiency.
	Blade, Line Card, and Chassis Asset Management	Support for all server and network chassis and blade/line card configurations including front and back, number of slots, servers, and network, half slot, double slot, and internal connectivity.	Easy-to-view illustrations provide a clear visual understanding of blade configurations.
	Parts & Spares Management	Centrally track the inventory and assignments of all hard drives, cards, memory modules, power supplies, patch cables, boxes of screws, SFP ports, expensive line cards, spares, and any other subcomponent. Track parts collectively or individually by serial number. Manage the inventory of parts across all your sites.	Improve uptime by ensuring availability of spare parts. Save money by ensuring defective parts are returned to the manufacturer. Streamline planning by ensuring all parts are available to roll out new equipment for new services/projects.
	"Port Ready" Models Library and "My Company Li- brary" Tool	Extensive models library includes over 40,000 data center equipment templates. The library is "Port Ready," includes equipment images, and allows the customer to display the models used in their environment for ease of use and stan- dardization. Updates are released each month. Users can add to or edit the library to match their specific environment or request updates at tech@sunbirddcim.com.	Templates with prepopulated equipment- related data adds efficiency. Routine up- dates keep models library up-to-date for new makes and models of the IT equip- ment. The pictures of actual equipment helps remote visualization with 2D and 3D rack or row elevation views.
	Asset Lifecycle Management	Support each step in an asset lifecycle including planning, purchasing, storage, staging, installing, and discarding.	Enables full audit trail tracking ensuring all steps are completed and documented.
	Bulk Actions	Issue installation, decommission, quick move, convert to VM, take out of service, and plan to decommission requests.	Perform most common tasks more efficiently.
	Share Links to Views	Easily search, filter, sort, and save custom views of your filtered data sets. Share a link with one or more users they see what you see.	Perform most common tasks more efficiently.
Capacity Management	Capacity Dashboards	Colorful gauges, graphs, usage trends, and pie charts provide real-time reporting and visualiza- tion of capacity for all infrastructure items, includ- ing power, power outlets, cooling, floor weight, cabinet space, and data ports.	Provides the ability to quickly see how much capacity is used and how much is available for better capacity planning.



FB001 December 2022

	Capacity Reports	Out of the box reports that provide detailed capacity status of all sites and infrastructure equipment, including cabinet RU space, cabinet power capacity, floor space capacity, data port usage and capacity, cooling capacity, data port usage and capacity, power port usage and capacity, cabinets with most free data and power ports.	Zero configuration reports at your fingertips save time and improve decision making for rolling out new equipment and services.
	3D Capacity Visualization of Floor/Room	Overlay multiple color-coded reports on a 3D floor map to visualize capacity of cabinet RU space, weight, and power.	Quickly see which cabinets have capacity to provision new equipment.
	Intelligent Capacity Search, Place and Reserve	Provides the ability to locate the cabinets in the data center that are the best fit for a group of items that should be added. Allows for search by make and model or any other particular search criteria like U height, cabinet group, cabinet type, cabinet function, cabinet customer, data connec- tivity and power connectivity requirements. Once space is detected, reservations can be made.	Allows for quick identification of available space, power, and network connectivity, which simplifies change management. Provides the ability to plan for future provisioning of IT equipment.
	Standard Power Budgeting	Equipment models and templates database pro- vides nameplate power specifications and user- definable default % budgets.	Streamlines deployment of consistent makes/models of equipment.
	Auto Power Budgeting	Sunbird's dcTrack DCIM solution can collect re- al-time rack PDU outlet power readings from any SNMP-enabled intelligent rack PDU via integra- tion with Sunbird's Power IQ DCIM Monitoring software. Device equipment (e.g. server) power budgeting is automated based on equipment make, model, applications, and power utilization trends.	Rack power planning is automated with highly accurate power budget profiles calculated for each device based on how they are used in your environment which improves power capacity utilization and eliminates stranded power. Eliminate manu- al effort and risk of power capacity planning. Achieve greater utilization of existing resources to save money.
Connectivity Management	AC Power Path	Model and monitor the AC power path from the main UPS or battery strings to the device power supply and all points in between. Visualize the full power path, including images of each com- ponent and connection point as well as budget power capacity and actual utilization at each point. Support for utility feeds, generators and fuel tanks, switchgears, switchboards, transform- ers, panelboards, battery, UPS, floor PDU, RPP, busways, power outlets, rack PDUs, and end-to- end mapping of single and 3-phase circuits.	End-to-end view of available power im- proves uptime by preventing a device being added to an outlet that will exceed any breaker threshold in the chain. Allows for better visibility, more efficiency, streamlined costs, and maximized ROI.



FB001 December 2022

Model and monitor the DC power path from the main UPS or battery strings to the device power supply and all points in between. Visualize the full power path, including images of each component and connection point as well as budget power capacity and actual utilization at each point. Support for all DC equipment, including DC FAP, rack inverter, plant, plant bay, plant panel, rectifier, DC bay, and DC panel.	Flexibility to support both AC and DC power for new applications like telco, 5G, and edge sites.
Track/trace cable routes from server NIC through the structured cabling to the endpoint switch, tracking which ports of each hop is utilized.	Adds efficiency tracking relationships in physical network layer and port utilization.
Tracks the physical relationship between active and passive network devices via tracking port level data connections of NICs, copper/fiber patch panels, and network switches. Visualize the full network path, including images of each component and connection point.	Reduces the mean-time-to-repair (MTTR) by accelerating the investigation process for network failures, resulting in cost savings.
Network diagrams are automatically created and updated based on your data connections in the system. View in tiered or mesh mode and cus- tomize nodes as shapes, icons, or model images. Search, filter, and color code the entire network in one location or across locations, along with structured cabling and other information in a single pane of glass.	Reduces time spent troubleshooting and performing impact analysis.
Automatic diagrams that track the electrical characteristics and interconnections of all the facility items in your AC or DC power chain including utility feeds, generators and fuel tanks, switchgears, switchboards, transformers, panel- boards, DC power plants, and DC bays.	A single pane of glass to see how every- thing is connected which allows for easier capacity and redundancy management.
Provides the ability to create, approve, route,	Allows for better control over work-order

boa Change Work Order and Provide Workflow Management audit, verify, and track the status and SLAs of process. Prevents unauthorized changes requests and work orders to ensure work is done from being made and keeps data center up Management accurately and on time. to date. Web Service API Enables the electronic transmission of Allows for easy integration with your existing management systems, such as ticket systems, information, eliminating manual entry and increasing data entry efficiency and CMDB, or asset systems. Enables the ability to create and update asset and ticket information. accuracy. Fully integrated solution to manage infrastruc-Infrastructure Consolidates tools and workflows. Increases ture deployment projects at every step in the Project efficiency and productivity with streamlined project lifecycle from conception to archive. processes and improved collaboration via a Management single pane into all aspects of any project.





DC Power Path

Data Circuit

Data Ports

Network

Diagram

Visualization

Single-Line Diagram

Visualization

Management

Management

☆

Dashboards and Reports	100+ Out of the Box Charts and Reports for Data Center Business Intelligence	Sunbird's DCIM solution has a full offering of over 100 user-configurable dashboard graphical reports including trend charts, bar charts, pie charts, and gauges that are viewable and export- able via the web browser. Both standard reports and customer report capabilities are available for executive management, data center managers, and field personnel. Reports include statistics for forecasting and trending, e.g. power capacity forecast, capacity gauge, cooling utilization, PUE trend chart, rack energy, and environmental trends.	Management reports made easy. Improve uptime with our power supply redundancy report. Inform contacts when you plan to put a PDU in maintenance mode with our connected to report. Understand all the devices connected to an application when you are organizing an application move.
	Interactive Visual Analytics	Slice and dice data, personalize and save your chart settings, export report data, and even share charts on public SharePoint or Wiki sites with embeddable links.	Democratize data and provide transparen- cy to other team members on capacity, utilization, and KPIs for the data center to increase team collaboration and produc- tivity.
	Report Scheduling	Schedule and automatically send reports out on demand or on a schedule at specific times, days, daily, weekly, monthly, or yearly to key individuals.	Easily and automatically share data, reports, and KPIs with team members or management, saving time on report generation.
	Shareable Report Widgets	Add new reports/chart widgets as they are created and made available for all customers. New widgets are downloadable from Sunbird's Support Portal.	Leverage reports/chart widgets generated for other customers via Sunbird's Support Portal and share data center industry reporting best practices.
	Customizable Dashboard and Report Folders	Personalize reports and save into personal or shared folders to standardize a common view of all pertinent KPIs that your company or teams care about.	Improve common processes and work productivity via sharing common reports, charts, and KPIs.
	Cabinet-Level Live Power Charts	Preconfigured trending charts for each cabinet. These charts provide trending comparisons for A and B side cabinet power feeds showing cabinet max capacity, planned budget load, and actual power load	Save capital expenditures. Makes it easy to find stranded capacity to defer new cabinet build outs. Know exactly how much capaci- ty you are using and have remaining.
	Cabinet-Level Live Charts for Smart Rack PDUs	Preconfigured trending charts for each rack PDU. These charts provide trending compari- sons rack PDU inlets, breaker loads, phases, and outlets. Allows for easy understanding of redun- dancy and load balancing across inlets, phases, and power supplies.	Efficient use of power resources extends the useful life of your power chain equip- ment. Improves uptime by ensuring redun- dancy.
	Custom Reports	Custom reports can also be created with built-in SQL widget. Third party reporting tools can also leverage the ODBC or the ITEMs API for access to the dcTrack database.	Easy integration allows the user to gener- ate custom reports and analytics with hot links to items in report.

FB001 December 2022



☆

2D and 3D Visualization	3D Floor & Row Visualization	Ability to visualize floor space, front/rear rack/ row as well as the complete power and network connectivity chain. In addition, there is the ability to visualize AutoCAD® and Visio® floor plan drawings in real time. Display front and rear elevations with high fidelity images.	Clear dashboards provide a quick and easy way to determine available assets and capacity. An end-to-end view of the data center simplifies troubleshooting and assists with "what if" scenarios.
	Drawing, Creation, and Import	External drawings can be imported to dcTrack's database. Floor objects can be imported with the click of a button.	Easy import of drawings helps in timely changes to the floor.
	Cabinet Metrics and Health Details	Quickly see critical cabinet information, real-time and budgeted power, heat output, weight, items in cabinet, available/used ports, events, RU space, equipment name, and images right from the cabinet elevation page.	Provides for a fast view of capacity and cabinet information.
	2D/3D Rack Elevations	Ability to multiselect and view rack elevations or blade chassis side by side, front or back, to see utilization and capacity of cabinets.	Simplifies and improves planning for provisioning of new equipment and services.
	Busway and Tap Box Visualization	Remotely visualize busways and meter locations in 3D. Understand the make, model, status, and connections. Drilldown to understand the phase wiring and power capacity utilization.	Improves uptime and increases efficiency with power resources. Enables easy understanding of three-phase balance and remaining power capacity on the busway and the tap box provided you have the appropriate meters.
	Suspended and Compartment Cabinet Visualization	Visualize to exact scale suspended and compartment cabinets including asset management.	Provides ability to remotely plan work and manage your data center by supporting all of your cabinet configurations.
	World Map Visualization	Provides a visualization of the health of all your locations by address or GPS coordinates with a clear red/yellow/green health status for each site.	See the health and power capacity of all your sites at a glance.
Automation	CMDB Integration	Standard connectors to ServiceNow, BMC Rem- edy, and Ivanti/Cherwell to enable bi-directional exchange of information. Universal connector to integrate with most other CMDB systems with the appropriate APIs.	Reduces manual data entry and increases the accuracy of information.
	Change Ticket Connectors	Standard connectors to ServiceNow, Jira, and BMC Remedy to enable the creation and update of change ticket information. Universal connec- tor to integrate with most other ticket systems with the appropriate APIs.	Reduces manual data entry and lost emails and increases the accuracy of information.



SunbirdDCIM.com | (732) 993-4476 | 30 Knightsbridge Road, Suite 620, Piscataway, NJ 08854

FB001 December 2022

	VMWare Integration	Automatically sync VMs to physical hosts and understand relationships between VMs and physical infrastructure supporting those VMs.	Quick impact and what-if analysis of services based on physical infrastructure failures or maintenance.
	Automated Database Backup	Backups of system data, users, and configuration settings are automatically created every 24 hours.	Peace of mind that all data is safe and a restore point is available.
	Rules Engine	Automate data entry via rules based upon conditions and system parameters (e.g., if a field is updated, another field is automatically updated with specific values based on the rule).	Saves time by automating manual tasks and improves data accuracy by eliminating manual data entry.
Complete Solution	Enterprise Scalability	Proven polling architecture designed for big data. Battle-tested by customers with 300,000 racks and 1,000s of sites to collect more than 1 billion data points per day.	Sunbird can scale to meet the needs of enterprise-class customers while still providing the performance and automation they require.
	Power IQ® Integration	Seamless integration with Power IQ, Sunbird's DCIM Monitoring software. Adds, moves, or changes made using dcTrack change manage- ment asynchronously updates Power IQ informa- tion. Display collected data as measured data on the GUI and in reports.	Provides a clear picture of available power, energy, and environmental trends among all assets. Helps provide accurate information on power usage which can be used to save on energy costs and maintain compliance.
		Supports single or multiple instances of Power IQ DCIM.	Multi-Power IQ provides for consolidated tracking of assets across Power IQ systems and sites.
	High Availability	Built-in feature that enables a hot standby system that is continually replicating information in the primary system and can detect lost connectivity situations and automatically or manually switching to a secondary system to avoid loss of service.	Minimize downtime due to outages, sup- port redundancy as part of disaster recov- ery configurations, provide scalability, and eliminate single points of failure for large and geographically dispersed deployments.
	Upgrades	Simple .bin file to upgrade system for new release features, security patches, and other system updates.	No special resources, professional services, or additional costs needed to upgrade your system.
	Mobile App	Access information from anywhere with your choice of smart phone or tablet. Fully supporting Apple and Android. Enables paper-less audit. Allows you to create, read, update, and delete items via mobile device. Scan a cabinet bar code and view its full configuration. Identify missing items. Found items, who audited and time stamp of audit.	People efficiency. Anytime, anywhere access. Improves inventory management by enabling paperless audit and updates on the fly.
	SAML 2.0, LDAP, and Active Directory Support	Full authentication management. Automation of user and group synchronization.	People efficiency. Make all user adds, deletes, and password updates via LDAP and AD. No need to manually update the changes in the Sunbird DCIM.





Roles Based Access Control Users and groups are provided permissions that determine what they can see and do.

Improves information security and provides only relevant information to a user.

Call 732.993.4476 or visit SunbirdDCIM.com

Sunbird Software is changing the way data centers are being managed. 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. We strive to eliminate the complexity they 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. 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.

Based in Piscataway, NJ, Sunbird serves over 1,850 DCIM customers worldwide. For more information, please visit SunbirdDCIM.com.

© 2022 Sunbird Software. All rights reserved. dcTrack and Power IQ are registered trademarks of Sunbird Software. All other marks and names mentioned herein may be trademarks of their respective companies.

FB001 December 2022

