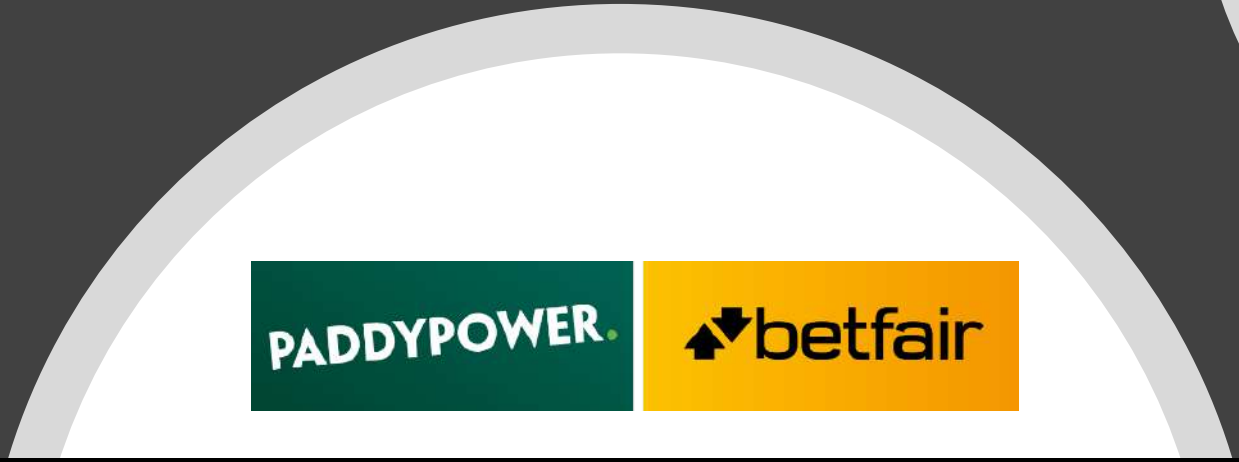


# Using DCIM software, with ITSM Automation, to meet the challenges of Hybrid Enterprise data centres

Presented By: Richard May, Country Manager UKI & Nordics  
Datacenter Forum 2023

# Customers' Discussed In Today's Presentation

*Very different organisations, with very similar DC Ops and DC Management challenges & requirements.....*



# Who are Sunbird?

- Leader in 2nd Generation DCIM Software, 19 years est.
- Leader in white space monitoring and using data to create actionable intelligence.
- Vendor agnostic - Broad compatibility with 3rd party meters, sensors, & software
- Technology partnerships with ServiceNow, VMware, BMC, Cherwell, nVent, Legrand, Raritan, ServerTech, Chatsworth, Starline & more.....
- 100% Insourced Development & Support
- Large installed base of satisfied customers
- Extreme customer focus



# Automation – CMDB & Ticketing





# 1st Principles – What is an ITSM CMDB?



CMDB & Ticketing

**servicenow**

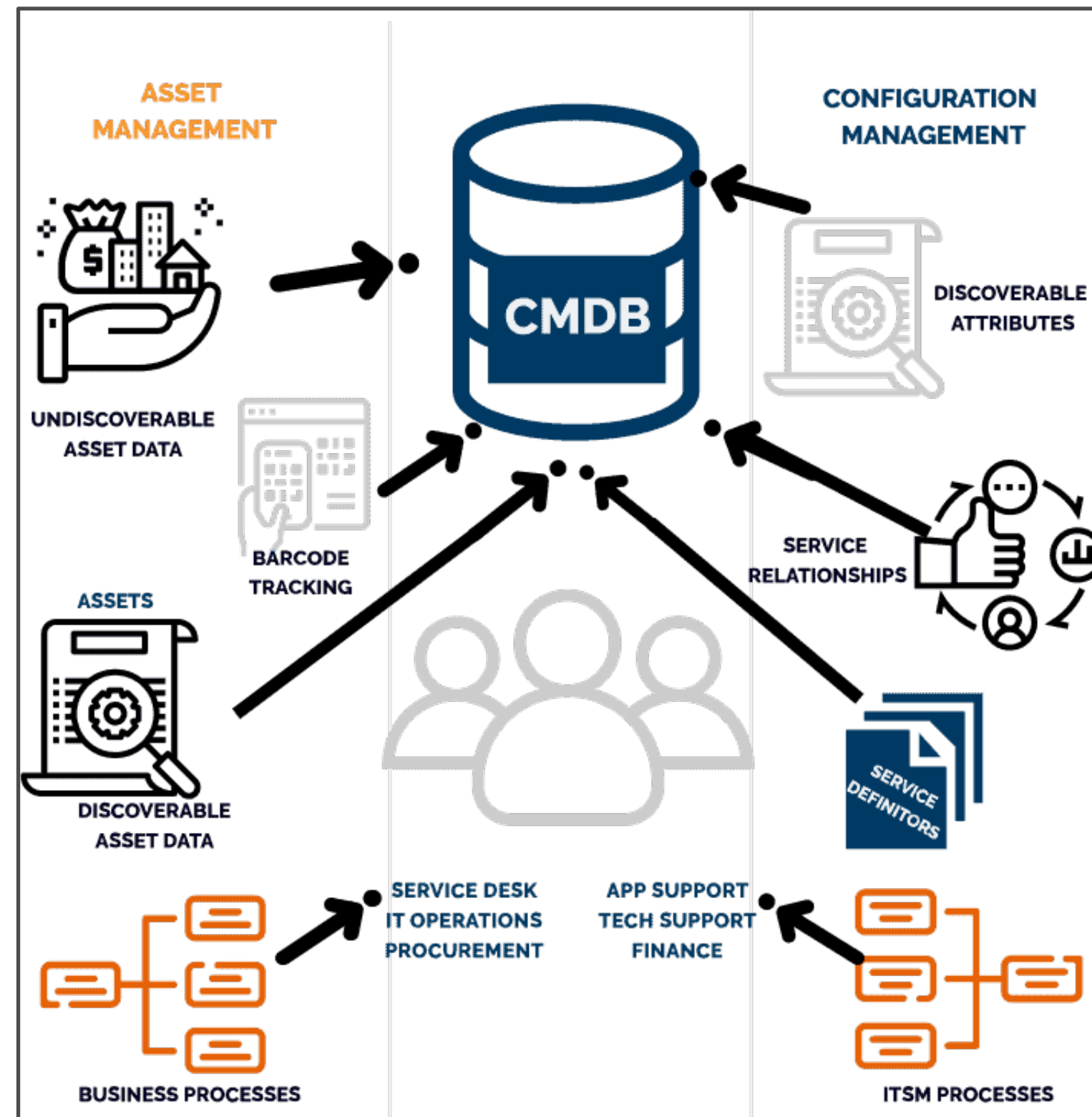
**bmc Atrium**

**bmc REMEDY**

Ticketing

**cherwell**  
Acquired by Ivanti

**Jira Software**



← Back to Search Results



# Sunbird dcTrack DCIM Connector

DCIM that's fast, easy, and complete

Sunbird Software, Inc.

Compatibility: Tokyo, San Diego, Rome | [Other App Versions](#)

Pricing

**Free**



☆☆☆☆☆ No Reviews

Share With  

☰ **Product Details**

☆ Ratings and Reviews

## Summary

The Sunbird dcTrack DCIM Connector enables bi-directional updates of asset and ticket information. This connector greatly reduces manual double entry of information and enhances the value of the information in your ServiceNow system.

The connector is customer-configurable to match your desired operations. For example, you can decide what types of assets and which fields are synchronized and which are not. You can decide which system has write privileges for certain fields and which is read-only. You can even decide which system the asset is initially created in.





**Make** HP

**Model** Proliant DL380 Gen10 v3

**Class/Subclass** Device / Standard kg 27

**Mounting** Rackable / Fixed RUs 2

**H x W x D (mm)** 89 x 445 x 711

---

**Serial Number** 78452067

**Asset Tag**

**eAsset Tag**

**Name** DB SERVER01

**Alias**

**Type** ▼

**Function** ▼

**Customer** Human Resources ▼

---

**Status** ⓘ Installed ▼

**Location** SITE A

**Cabinet** ↗ 2F

**Rails Used**  Both  Front  Back

**U Position** 30 ▼

**Orientation** Item Front Faces Cabinet Front ▼

---

**Location Reference**

**Front View**

Custom Fields   Asset and Maintenance   Configuration   Relationships   Data Ports (5)   **Power Supply Ports (2)**   Audit Trail   Parts   Tracking   Virtual Machine Details   Break/Fix

Trace   Connect   In Use   Not In Use   Port Inspector   Get Readings

**Port Name Prefix** PS   **Effective Power (W)** 0   **Original Power** 480

**Quantity** 2 ▼   **Potential Power (W)** 480   **Auto Power Budget**

**\* Redundancy** N+1 ▼   **Next Auto Adjust in** 5 days   **Budget Status** Default Budget (60%)

Port Name *	Index * ..▼	Connected Item	Circuit Status	Power Supply Part	Color Code	Connector *	Phase Type *	Volts * ..▼	Power Factor * ..▼
PS1	1	<input type="checkbox"/> Available ⚡				IEC-320-C14	Single Phase (3-Wire)	120	1
PS2	2	<input type="checkbox"/> Available ⚡				IEC-320-C14	Single Phase (3-Wire)	120	1



**servicenow**

System of Record



# ServiceNow Customer Workshop - Scope Of Operations



- Locations
- Cabinets
- Smart Rack PDUs
- Devices

28	431
415	3,172
800	1,300
6,600	19,952

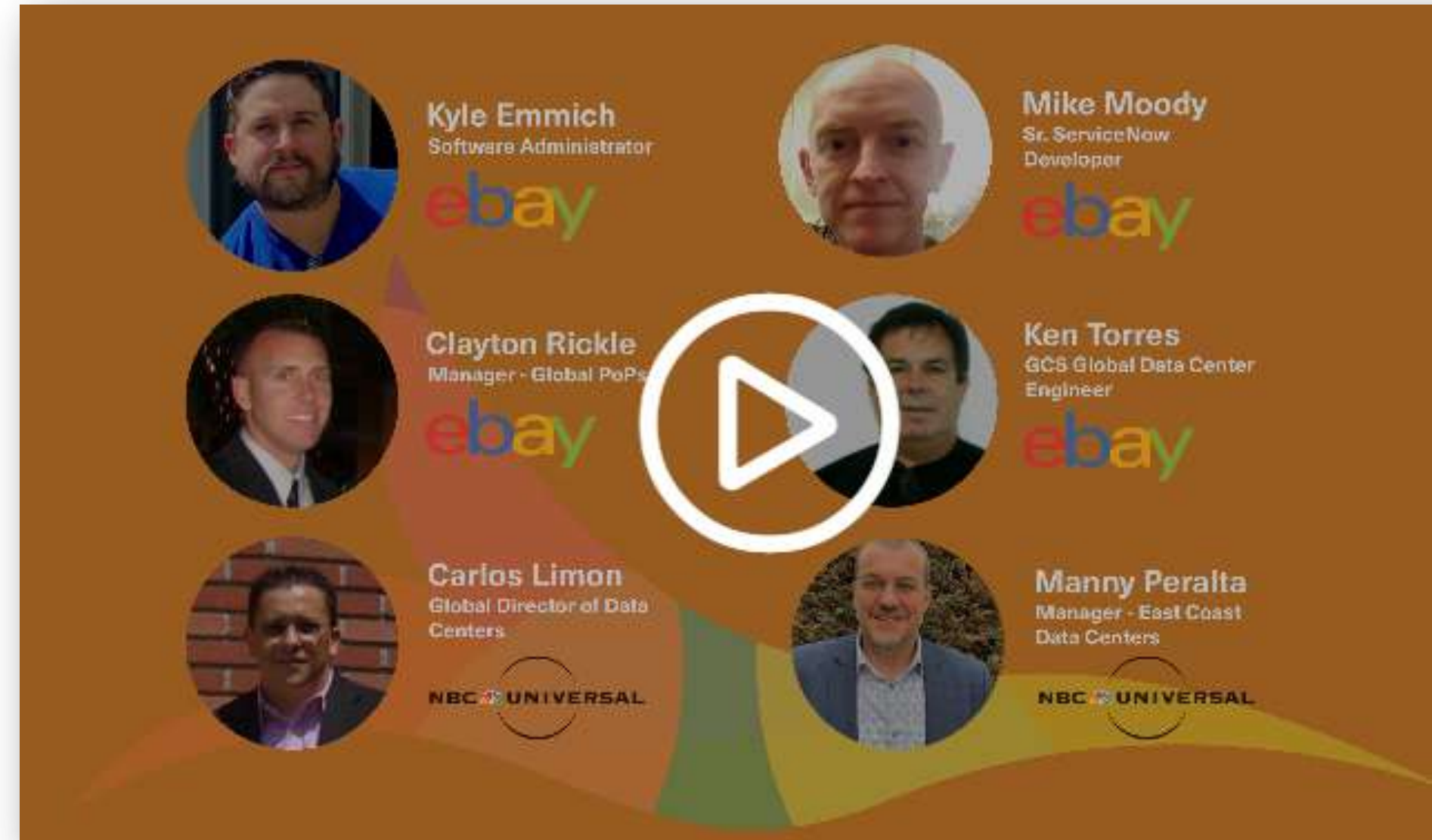




# ServiceNow Workshop

- **Customer quotes:**

- eBay - “ServiceNow is the source of truth and that’s where our asset lifecycle management team does all their work. As **they’re installing, adding, removing, and decommissioning equipment**, they do all of their transactions and updates in ServiceNow and we needed this to be able to update dcTrack so we **don’t have to do it twice**. That’s the real value here. There’s as many as **600 transactions in any given 24 hours**. That’s just way too much to keep track of and having to manage two databases separately.”
- NBCUniversal – “One of the things we’re trying to accomplish is we’re trying to connect the **CMDB in ServiceNow with the CMDB in dcTrack**. We’re also trying to leverage the usage of the **ticketing system** within dcTrack by connecting that to the ticketing system of ServiceNow for all the requests that come to our group for **installs, removals, cabling**, and so on of all the work that we’re doing within the data centers. Another thing we’re trying to accomplish is connecting Power IQ alerting to ServiceNow so that we automatically create ServiceNow tickets to our technicians so they can **troubleshoot any alerts** that we get from Power IQ.”



# Automation – Provisioning & Orchestration



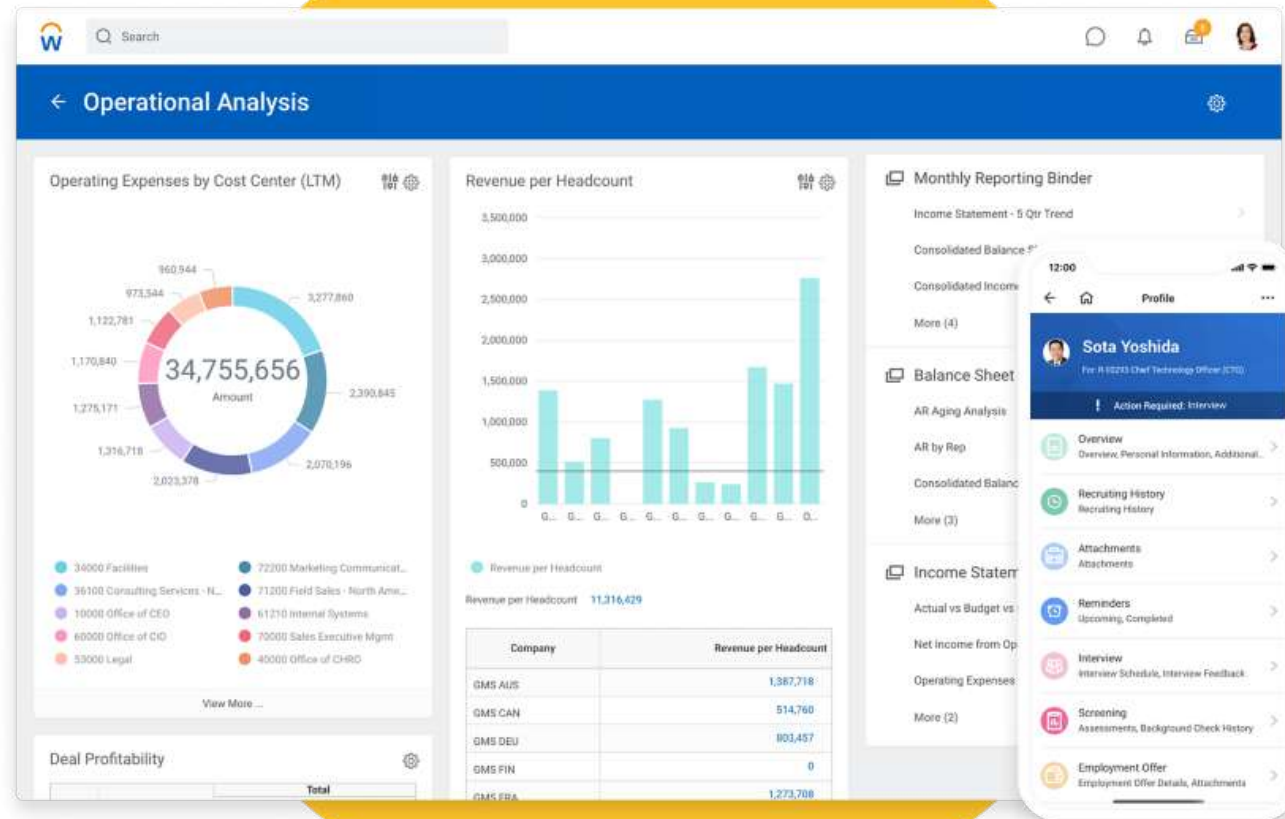
Sunbird Software, Inc.  
Proprietary and Confidential Information



Saturday, January 1, 2022 - 16:29

"One pane of glass for ALL datacenter assets and information."

COLM R. - DATACENTER OPERATIONS



**COMPANY:** Workday  
**COMPANY TYPE:** Computer Hardware  
**# OF EMPLOYEES:** 10,001+ employees  
**SOFTWARE USAGE:** 2+ years

**OVERALL QUALITY:** ★★★★★ **LIKELIHOOD TO RECOMMEND:** 8/10

**COMMENTS:** Overall, pleasant communications and openness to discuss moving the product forward

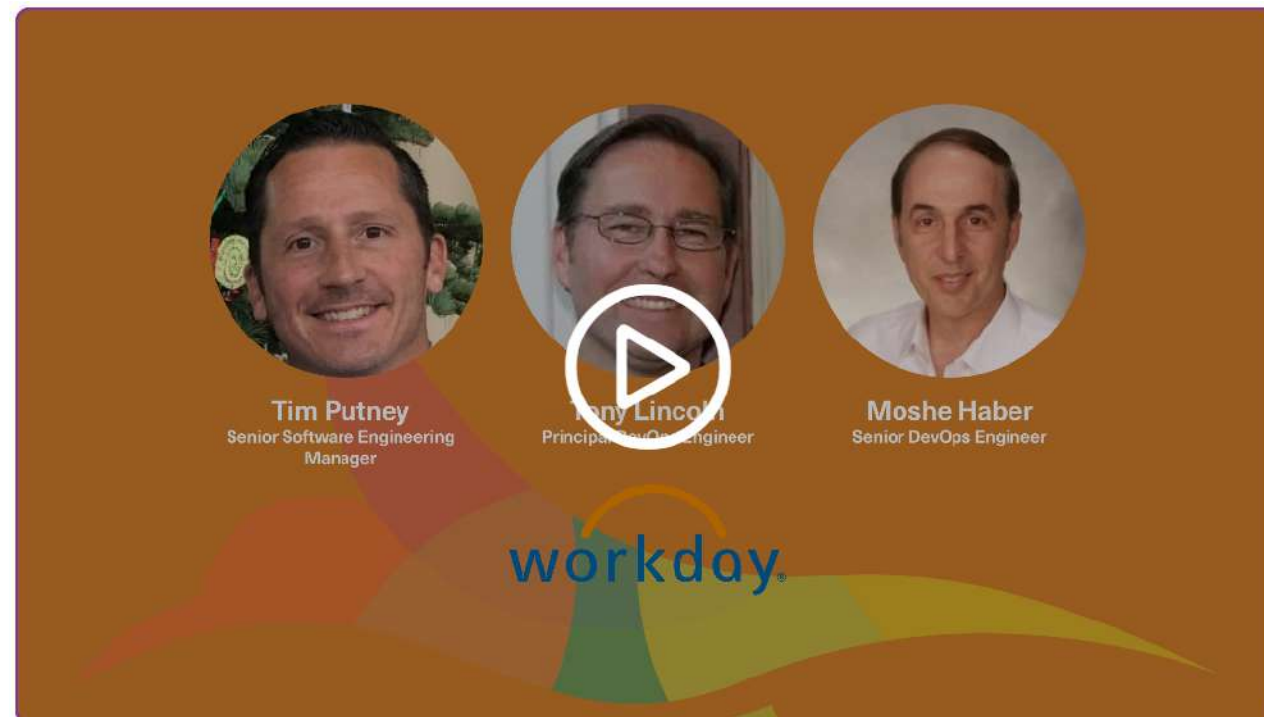
**PROS:** One pane of glass for ALL datacenter assets and information.

**CONS:** Disconnect between new Parts Tracker feature and main Assets feature



# Workday DevOps - Automation

- They use the bidirectional RESTful web service API of their DCIM tool to automate just about everything in their data center operations. Its heavily used for automated provisioning and orchestration.
- Previous homegrown tool had data integrity issues where their asset tool could report values that weren't accurate until a machine configuration was complete.
- Near real time API integration with 500K – 1M API calls per day.



## Workday's Automation Use Cases

See how Workday automates device provisioning and orchestration, device lifecycle state management, parts management, and more.





# Automation – Back Office Processing



# Automated Back Office Processing



*“Now that we can see our floorspace in 3D, we can easily maximize that space. Our old system didn’t keep track of all the network devices, switches, firewalls, cable managers, and things like that. With Sunbird, we see it all.”*

Robert Perkins | Manager of Networks  
and Infrastructure Engineering  
**MacStadium**

## Customer

MacStadium is an IaaS company that is trusted by Apple and iOS developers, mobile testing teams, and DevOps engineers at thousands of companies around the world.

## Situation

The rapid expansion of MacStadium’s international operations drove the need for a robust DCIM software that would allow the company to remotely monitor all of the physical assets and floor and rack space in its data centers.

## Solution

Sunbird’s well-rounded and easy-to-use DCIM software provides MacStadium with end-to-end visibility and insight into all of its data centers’ physical layout, equipment, and performance in real-time.

# MacStadium automated back-office processing

- They deployed our **DCIM software** and **integrated** with their **billing platform**, **customer portal**, **administration system**, and **accounting systems** to **automate back-office processing**. This has reduced manual data entry and the possibility of human error
- They automatically assigns slots and compute devices to be ready on-demand for customers placing an order on their website. Their automation moves devices from a pre-staged account directly to their customers' accounts and updates all their internal systems to reflect the change.



"We save a lot of time because we don't have to bring together people in different time zones for off-hour meetings to make a decision," said Perkins. "If we want to figure out where to build our next set of racks or our next cold aisle, we can just look at the floor space right in dcTrack and make a decision at a higher level. Sunbird has definitely sped up the decision-making process."



# Automation – Reporting & KPIs





Addons

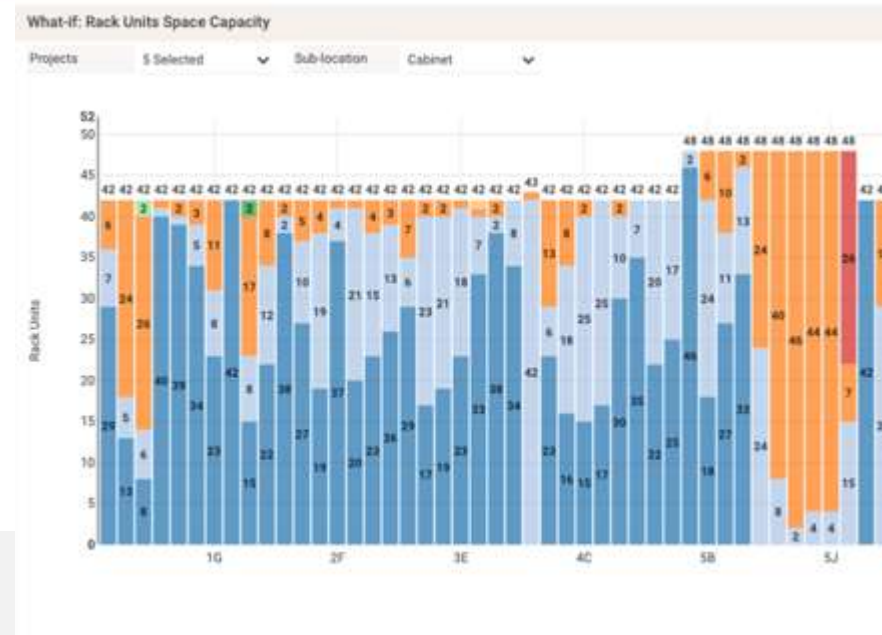
Sunbird



dcTrack Dashboard Widgets (167)

- PDU Redundancy
- Percent Cabinet Space Remaining Gauge
- Permissions by Role
- Potential and Effective Power vs Capacity per Cabinet
- Potential Power vs Location Capacity by Country
- Power Chain Breakers Utilization With Actual Values
- Power Port Usage by Cabinet
- Power Port Usage by Cabinet Group and Custom Field
- Power Supply Reading Variance (8.1.0)
- Power Supply Reading Variance (pre 8.1.0)
- Power Supply Variance (8.2)
- Power Trend Chart
- Rack PDU Model Search
- Rack Power Monitoring Status
- Rack Temperature Monitoring Status
- Rack Units per Type and Power /wo Archived Status
- Sensor Trend Chart
- Storage Inventory by Model (8.1.0 or later)
- Storage Inventory by Model (pre 8.1.0)
- Stranded Power by Cabinet
- Ticket Status Transition Metrics
- Tickets by Status and Purpose
- Tickets by Status and Purpose Trend Chart

- Budget Power Capacity (Per Location Capacity Attribute)
- Budget Power Capacity by Country (8.1)
- Budget Power Capacity by Country (8.2)
- Budget Power Capacity by Country (pre 8.1)
- Budget Power Capacity vs Location Capacity Gauge
- Cabinet Content Weight vs Cabinet Capacity
- Cabinet Contents Audit Report
- Cabinet Count by Cabinet Group and Custom Field
- Cabinet Count by Customer
- Cabinet Space By Cabinet Group per Cabinet
- Cabinet Space By Location and Cabinet Group
- Cabinet Space Capacity by Country
- Cabinet Space Capacity in Percent
- Cabinet Space Remaining WO Blanking Plates Gauge
- Cabinet Space Remaining by Cabinet Group and Custom Fields
- Cabinet Space Remaining Gauge By Custom Field
- Cabinet Space Used by Cabinet Group
- Cabinet Usage by Location and Cabinet Group
- Capacity vs Remaining Power by Sublocation
- Contract Ending Dates Pie
- Contract Expiration by Make and Model
- Count of Devices, Network, Rooms and Floors by Data Center
- Count of Items with Tickets (8.2)
- Count of Planned Cabinets by Location



- Item Count By Model and Location
- Item Count By Owner
- Item Counts by Building
- Item Counts by Country
- Item Creation Count by Date
- Item Percentage by Row (8.1.0 or later)
- Item Percentage by Row (pre 8.1.0)
- Item Permissions Granted By Class (8.1.0 or later)
- Item Permissions Granted By Class (pre 8.1.0)
- Items by Function or Type Pie
- Items by Type and Data Center
- Latest Temperature Per Rack By Cabinet Group
- Local Permissions by Role
- Location Drawing File Status
- Months to Contract Expiration By Class
- Part Actions
- Part Stock Levels with Threshold
- Part Transactions Over Time by Part Model
- PDU Redundancy
- Percent Cabinet Space Remaining Gauge
- Permissions by Role
- Potential and Effective Power vs Capacity per Cabinet
- Potential Power vs Location Capacity by Country
- Power Chain Breakers Utilization With Actual Values
- Power Port Usage by Cabinet



- Custom Range Cabinet Space Capacity
- Data Port Usage By Cabinet (8.0 or later)
- Data Port Usage By Cabinet (pre 8.0)
- Data Port Usage by Row and Cabinet per Property (
- Data Port Usage by Row and Cabinet per Property (
- Data Ports Usage Per Port Properties and Cabinet
- Energy Trend Chart
- Fixed Energy Per Rack
- Free Contiguous RUs by Cabinet Group
- Free Rack Unit Trend by Cabinet Group
- Free RU Trend in Percent
- Historical Item Count by Status
- Historical Item Count by Subclass
- Historical Parts Count
- Host and VM Count by VM Manager
- Hosts Per OS By Item Type
- Inlet Utilization
- Item Age in Months by Class/Subclass
- Item Age in Months-Custom
- Item Age in Years
- Item Age in Years by Customer
- Item Age in Years by Item
- Item Count By Custom Device Status/Sub-Status
- Item Count By Customer and Type
- Item Count by Function and Class

- Rack Units per Type and Power /wo Archived Status
- Sensor Trend Chart
- Storage Inventory by Model (8.1.0 or later)
- Storage Inventory by Model (pre 8.1.0)
- Stranded Power by Cabinet
- Ticket Status Transition Metrics
- Tickets by Status and Purpose
- Tickets by Status and Purpose Trend Chart
- Time from Planned to Last Install
- Top Make by Data Center
- Types of Completed Requests by Location Over Time (8.1 or Later)
- Types of Completed Requests Over Time (Pre 8.1)
- Under Utilized Assets (Zombie Servers)
- Used RU Forecast
- User Permissions by Role
- What If Power by Customer
- What If RU Space by Cabinet Customer
- What If: RU and Power by Project (8.1.0 or later)
- What If: RU and Power by Project (pre 8.1.0)



# Better Reporting & Shared Data Usage



*“From the very first conversation, Sunbird bought into Paddy Power Betfair, and we saw that they weren’t just pitching a sale here—they actually had a product that was fit for purpose.”*

Peter Giles | Senior Data Center Manager  
**Paddy Power Betfair**

## Customer

Paddy Power Betfair is a subsidiary of Flutter Entertainment. One of the world’s largest sports betting companies, Flutter now facilitates online and retail betting through brands such as FanDuel, PokerStars, Full Tilt Poker, FOX Bet, and Sportsbet after merging with the Stars Group in 2020.

## Situation

PPB wanted to better understand their existing capacity levels, trends, and future needs, in order to optimize and plan for use of data center resources.

## Solution

PPB engaged in a proof-of-concept arrangement with Sunbird and provided a highly detailed scope of work that described all the features and reporting capabilities they needed.



Sunbird® dcTrack® Dashboard Visualization Capacity Assets Connectivity Change Reports Events Settings

Quick Search Import Help jamesc Production

Floor Map SITE A

Views STATUS: installed Isolate Results

The image shows a 3D perspective view of a server room floor plan. The racks are arranged in a grid and are color-coded. Each rack has a label with a alphanumeric code and a numerical value. The labels include: 1A-1H (6.0), 2A-2H (6.0), 3A-3H (6.0), 4A-4H (6.0), 5A-5M (10.0), 6A-6L (10.0), 7A-7K (10.0), 8K (10.0). The floor is a light gray grid. There are two large gray mats on the floor. The interface includes a top navigation bar with various menu items and a toolbar with icons for search, connectivity, measure, tiles, reports, thermal maps, layers, color, and sync. The bottom status bar shows 'Location: SITE A', 'Cabinet: BI', and 'Drawing north:'. On the left side, there is a 'Color Code List' and on the right side, a 'Cabinet Elevation'.

Color Code List Cabinet Elevation

Tile: 0-17 X: 32.6, 12.6 ft Location: SITE A Cabinet: BI Drawing north:





Floor Map SITE A

3D Home Isolate Search Connectivity Measure Tiles 3 Reports Thermal Maps Layers Settings Sync

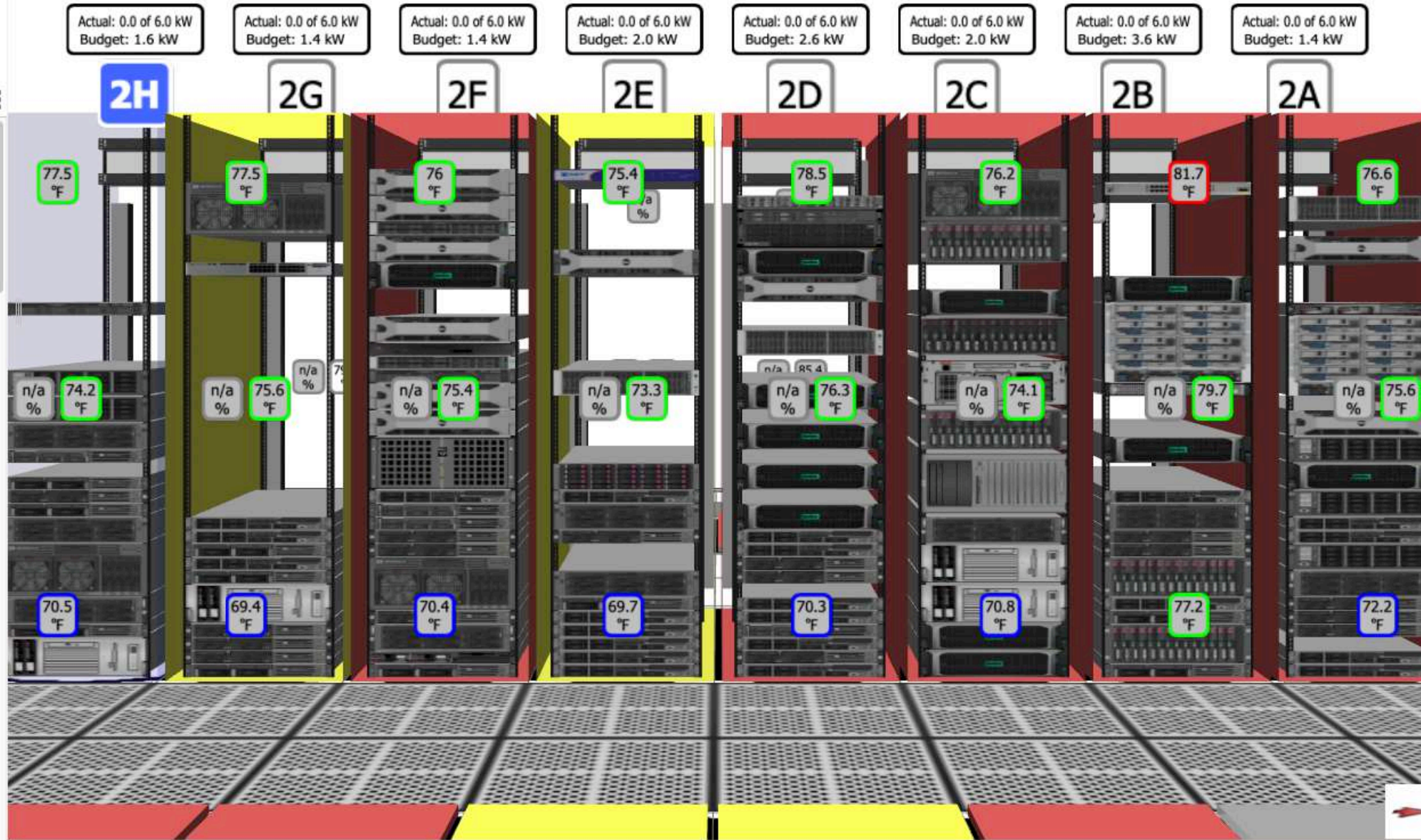
Current View: All Items

Reports Legend and Data



Edit Threshold  
Get Reading Updated: 08/29/2019 at 01:51:48 PM

Cabinet	Used RUs	Budgeted kW	Front (°F)
LARRY	5	0	N/A
1A	35	1.7	77.7
1B	41	1.9	80.7
1C	38	1.3	72.2
1D	41	0.4	70.8
1E	41	0.7	80.9
1F	41	0.2	70.9
1G	34	1.5	70.4
1H	40	0.2	71
2A	34	1.4	72.2
2B	30	3.6	81.7
2C	40	2	70.8
2D	32	2.6	70.3
2E	23	2	69.7
2F	40	1.4	70.4
2G	21	1.4	69.4
2H	27	1.6	70.5
3A	29	1.2	70.2
5M-TEST	13	0	N/A
3B	36	1.1	83.1
3C	19	2	82.5
3D	21	1.2	71.6



Tile: S-7 X,Y: 13.2, 36.1 ft

Drawing north:

Cabinet Elevation

2H

Back View

WIRE MANAGER 1U	42
2H1	41
WIRE MANAGER 1U	39
	38
	37
	36
	35
	34
	33
	32
	31
	30
	29
HP SERVER DL360 U28	28
	27
	26
	25
	24
JAMES10	23
JAMES9	21
	20
MPTXL01	19
FMSPACE	18
	17
	16
KMIIS2	15
PORTAL-WAS02	14
PORTAL-WAS01	13
PORTAL-DOM01	12
	11
	10
PORTAL-DB201	9
	8
	7
	6
NJLNX08	5
KMIIS1	4
	3
WPS-NY01	2
	1





Enterprise Dashboard



Manage Dashboards

Add a Widget

Goto Widget

Favorite

SITE A



Schedule



Search Dashboards...

Standard

Enterprise Overview

Enterprise Health

What-if

Items Inventory

Parts Inventory

Space

Power

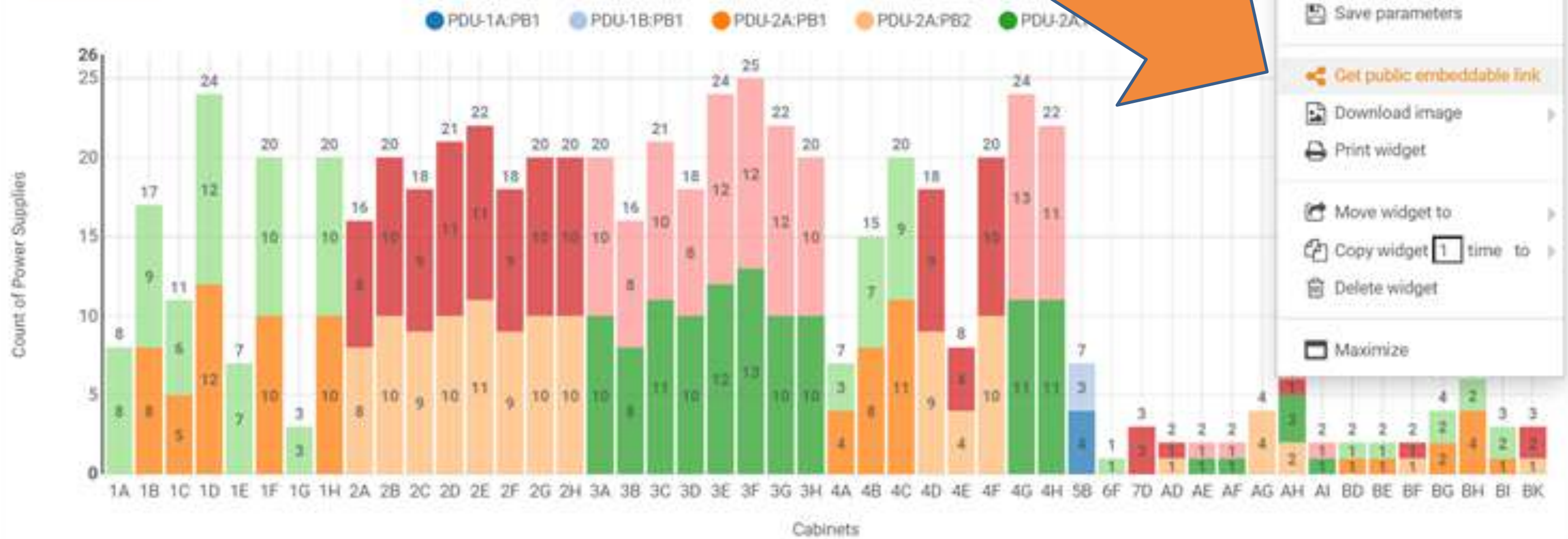
Cooling

Connectivity

Change

### Power Distribution and Redundancy

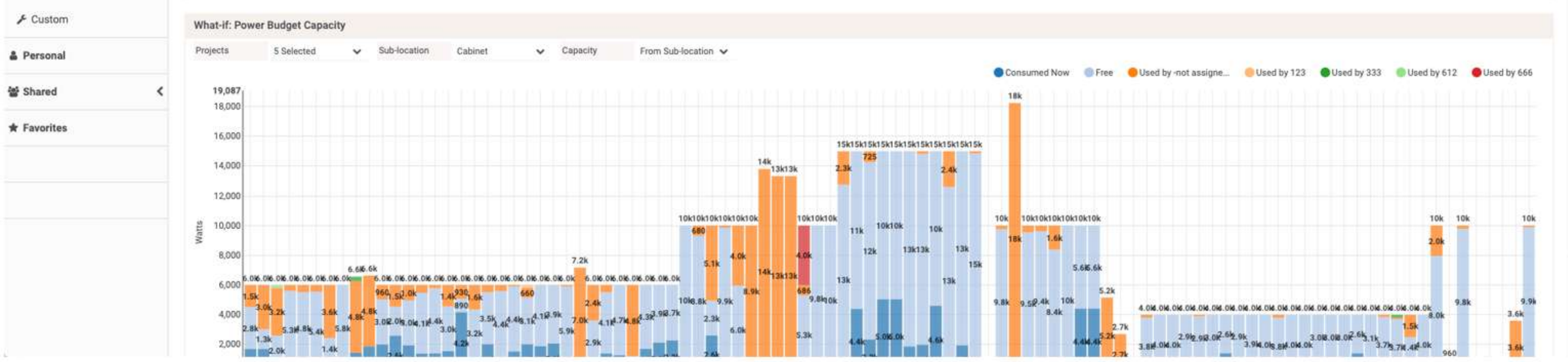
Power Panel 15 Selected



- Widget settings
- Save parameters
- Get public embeddable link
- Download image
- Print widget
- Move widget to
- Copy widget 1 time to
- Delete widget
- Maximize

Stranded Power per Sub-location







Sunbird® dcTrack® Dashboard Visualization Capacity Assets Connectivity Change Reports Events Settings

Quick Search... Help hchan

Floor Map SITE A 3D Home Isolate Search Connectivity Measure Tiles Reports Thermal Maps Layers Settings Sync

Views MODEL: d1380 Isolate Results

Search Results (130 of 130)

Class	Name
Device	10.34.0.101
Device	10.34.0.115
Device	ABCD
Device	ABCDK KAAH
Device	APPLED1
Device	BJ-SRV-01
Device	BLADETEST T
Device	CAPACITY-SEARCH**21405
Device	CAPACITY-SEARCH**21405
Device	CLARITY04
Device	DB-NY03
Device	DB-SERVER01
Device	DCIM-09
Device	DCIM-10
Device	DCIM-13
Device	DCIM-14
Device	DCIM-15
Device	DCIM-16
Device	DCIM-17
Device	DCIM-18
Device	DCIM-19
Device	DCIM-20
Device	DCIM-21
Device	DCIM-23
Device	DCIM-24
Device	DCIM-25
Device	DCIM-26
Device	EH-GEN-0

File: Y-44 X: 86.3, 88.5 ft Drawing north



# Automation – Capacity Planning





# Stranded Power Capacity Management



*“From an ROI perspective, it’s massive for us. We’re getting 40% more usage out of our facilities and power sources.”*

Michael Piers | Senior Manager DCIM/Tools  
**Comcast**

## Customer

Comcast creates incredible technology and entertainment that connects millions of people to the moments and experiences that matter most. Comcast brands include Xfinity, NBCUniversal, Sky, Comcast Business, and more.

## Situation

Comcast wanted to identify space and power resources that were not being leveraged to their full potential.

## Solution

Sunbird’s comprehensive, easy-to-use DCIM software gives Comcast complete visibility into their data centers.

# Auto Power Budget

- Patent Pending
- Collect and Store Massive Amount of iPDU Outlet Data
- Models Library Correlates Compute Devices to Outlet Data
- Provides Highly Accurate Power Budgets for Each Compute Device rather than using % of Nameplate Power

*“From an ROI perspective, it’s massive for us. We’re getting 40% more usage out of our facilities and power sources.”*

Michael Piers | Senior Manager DCIM/Tools  
**Comcast**





Thank You!