

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

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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

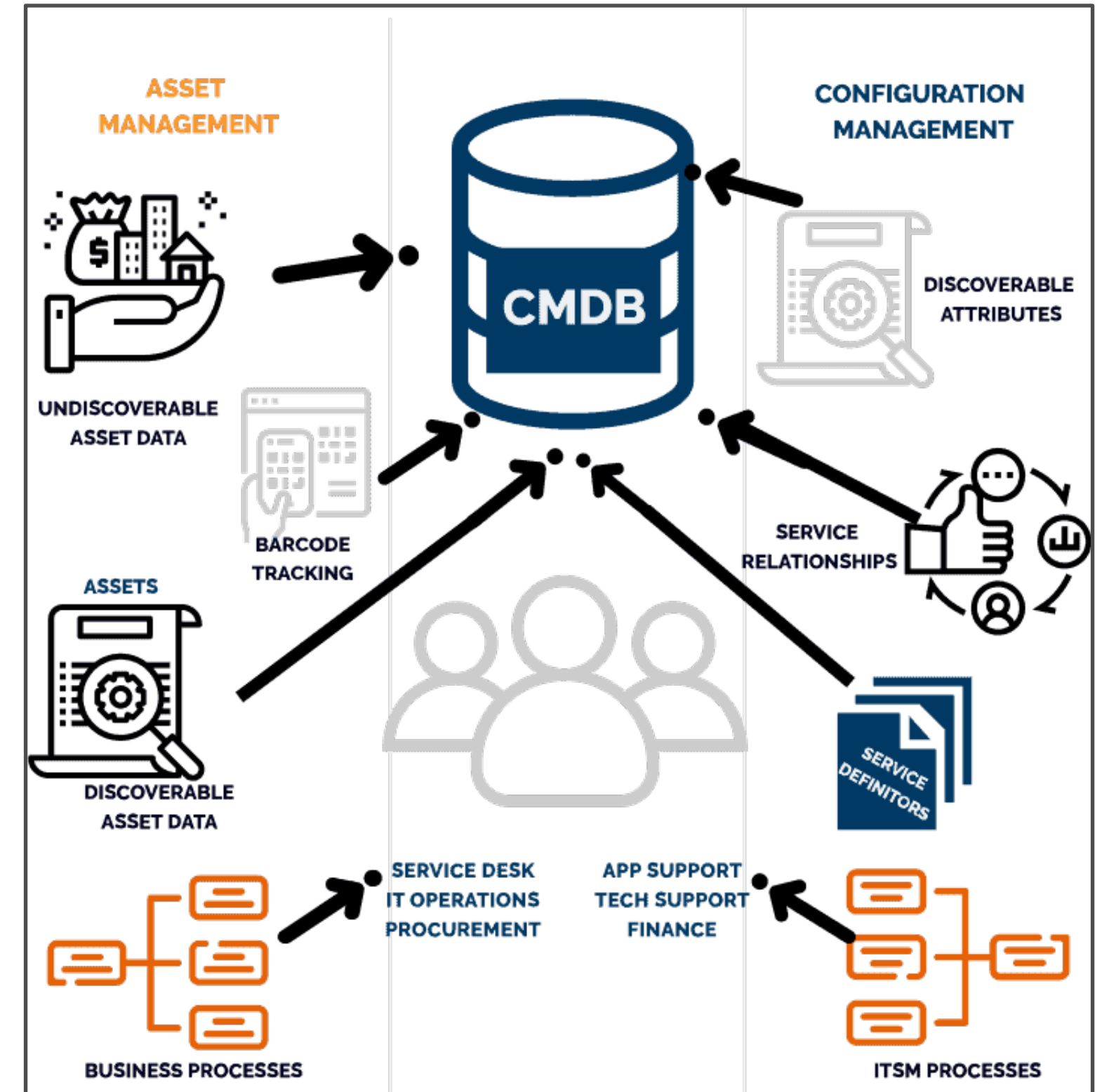
bmc Atrium

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

now

Certified App

☆☆☆☆☆ No Reviews

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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

1

42

2

41

3

40

4

39

5

38

6

37

7

36

8

35

9

34

10

33

11

32

12

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34

9

35

8

36

7

37

6

38

5

39

4

40

3

41

2

42

1

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

Quantity

2

Redundancy

N+1

Effective Power (W)

0

Potential Power (W)

480

Next Auto Adjust in

5 days

Original Power

480

Auto Power Budget

Budget Status

Default Budget (60%)



ServiceNow Customer Workshop - Scope Of Operations



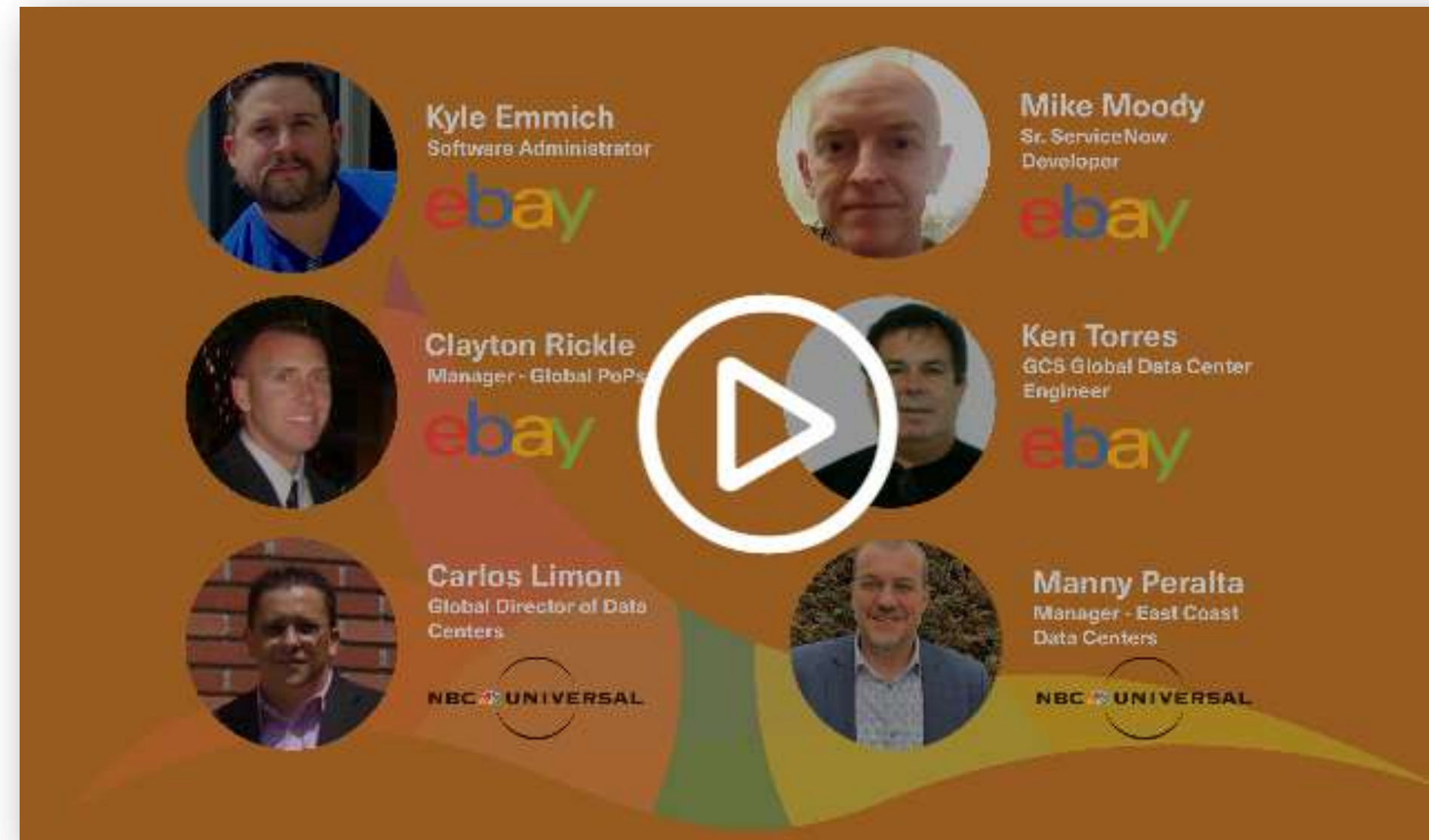
Locations	28	431
Cabinets	415	3,172
Smart Rack PDUs	800	1,300
Devices	6,600	19,952



ServiceNow Workshop

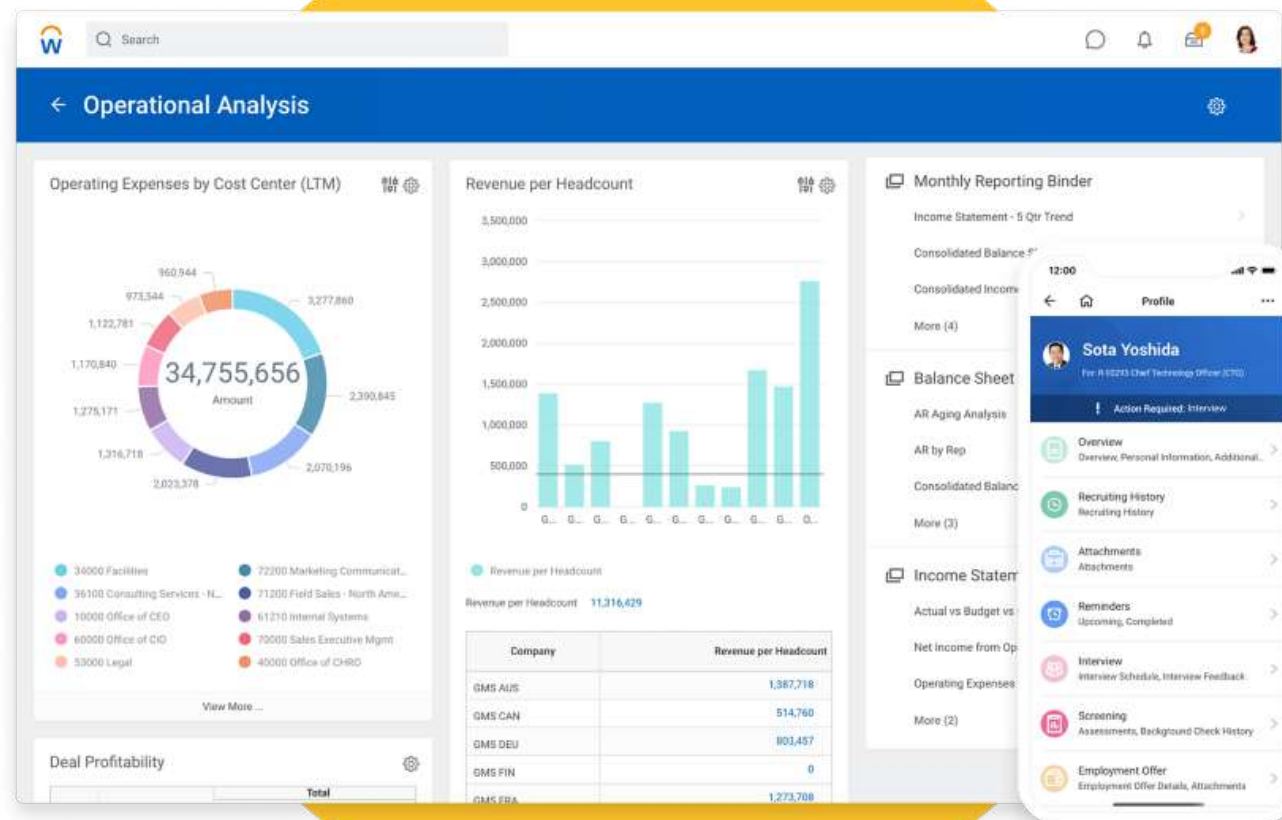
- **Customer quotes:**

- 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





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

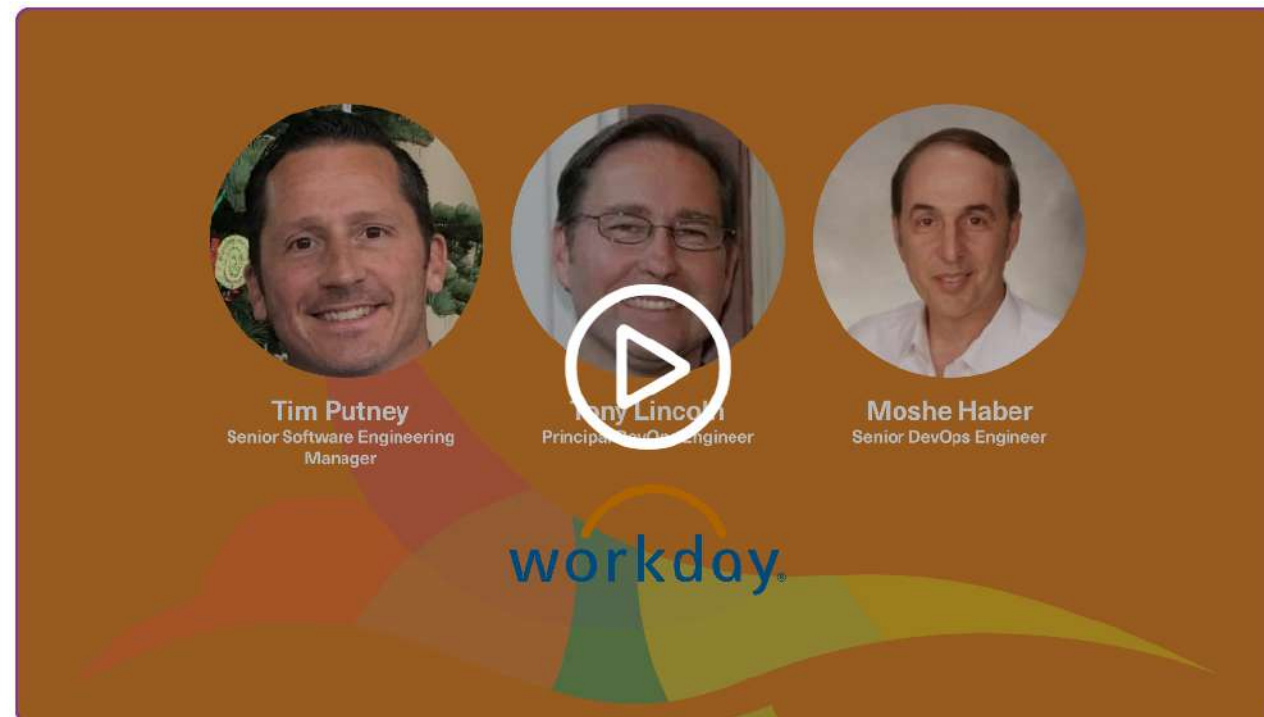
COMMENTS: Overall, pleasant communications and openness to discuss moving the product forward

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.



Automation – Reporting & KPIs



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

- 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)



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

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

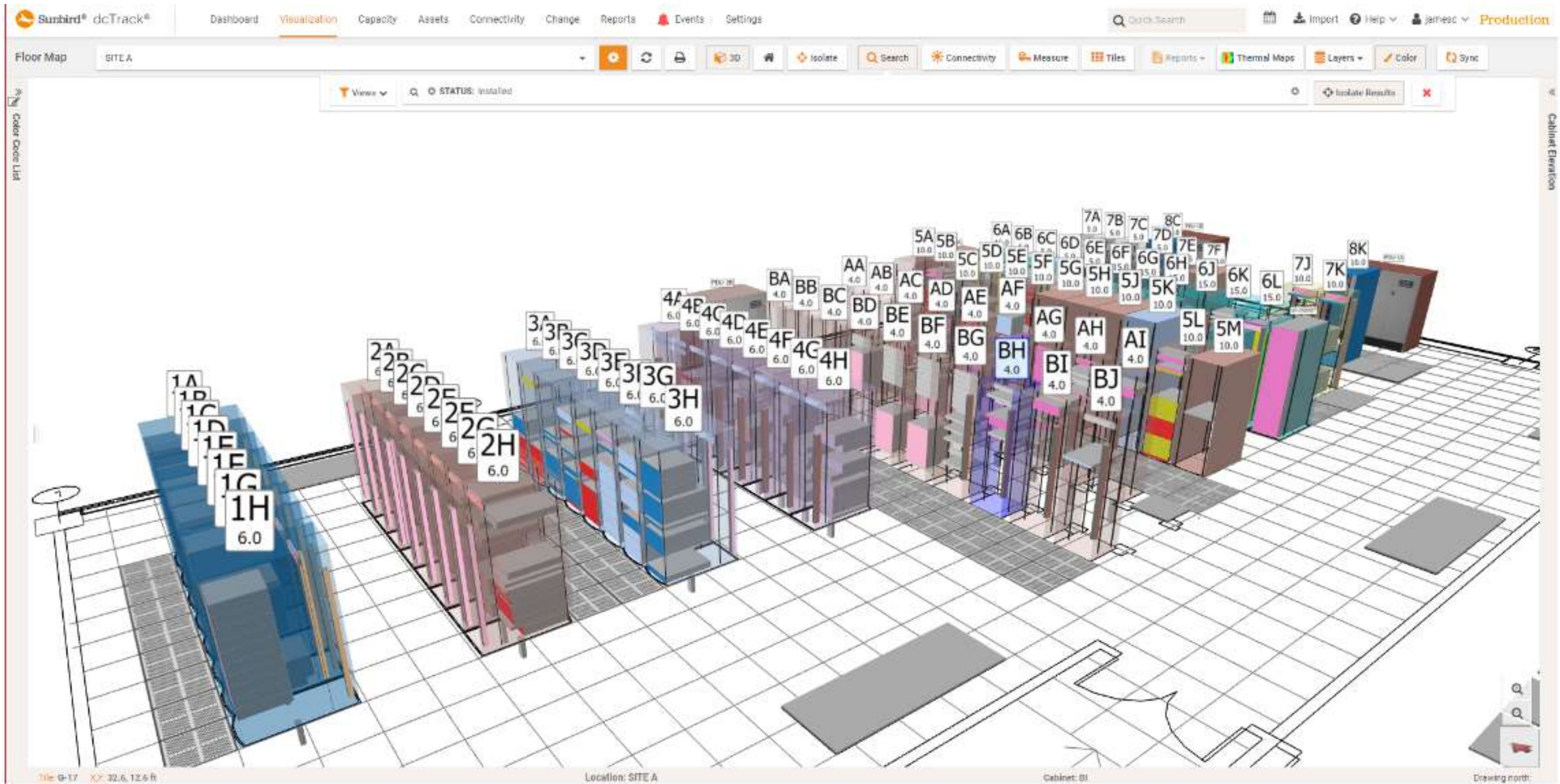
Paddy Power Betfair is a subsidiary of Flutter Entertainment. One of the world’s largest sports betting companies, Flutter now facilitates online and retail betting through brands such as FanDuel, PokerStars, Full Tilt Poker, FOX Bet, and Sportsbet after merging with the Stars Group in 2020.

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.





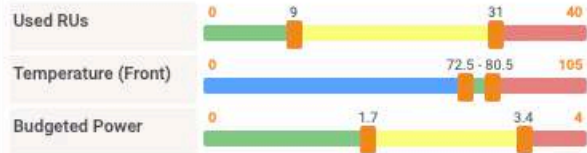
Floor Map

SITE A



Current View: All Items

Reports Legend and Data

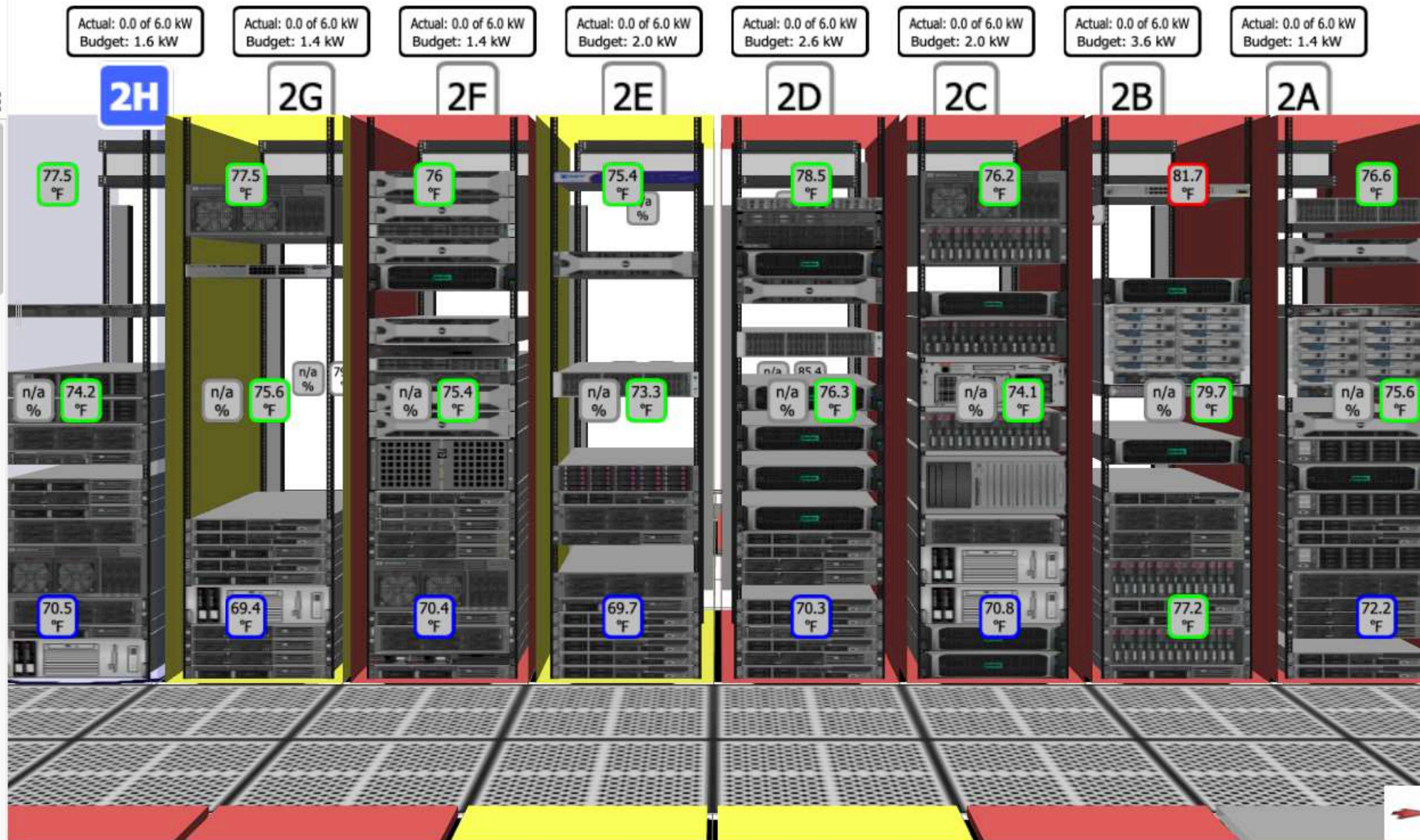


Edit Threshold

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:

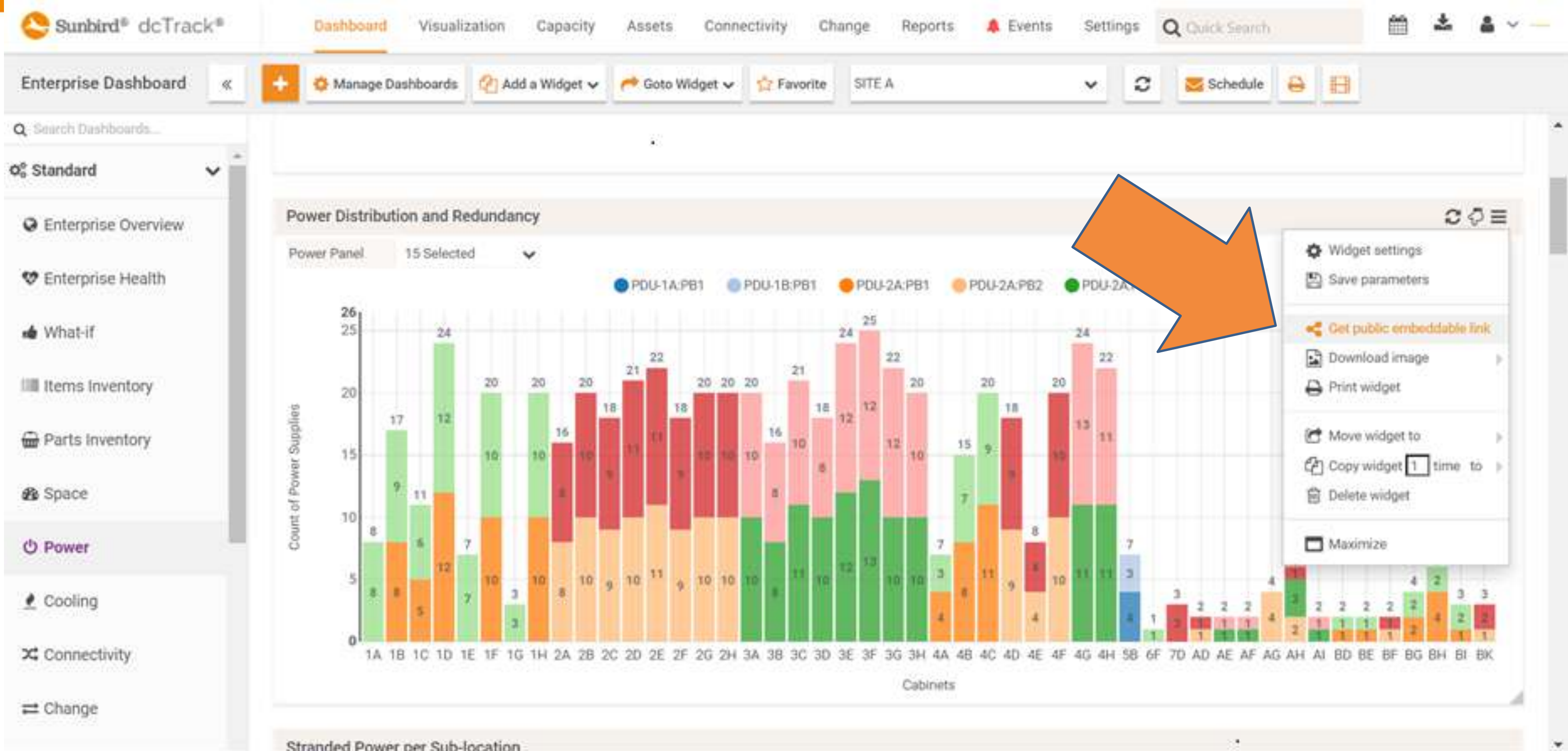
Cabinet Elevation

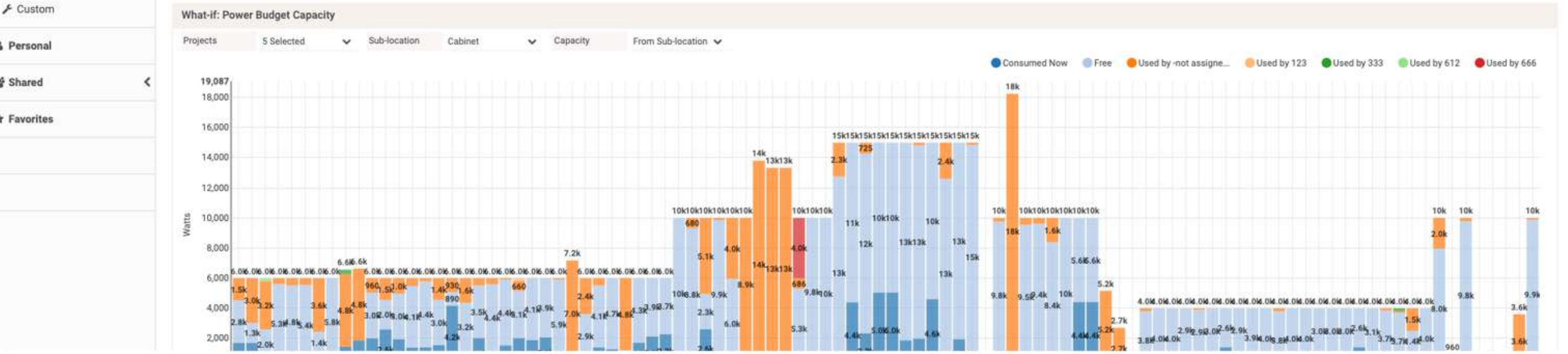
2H

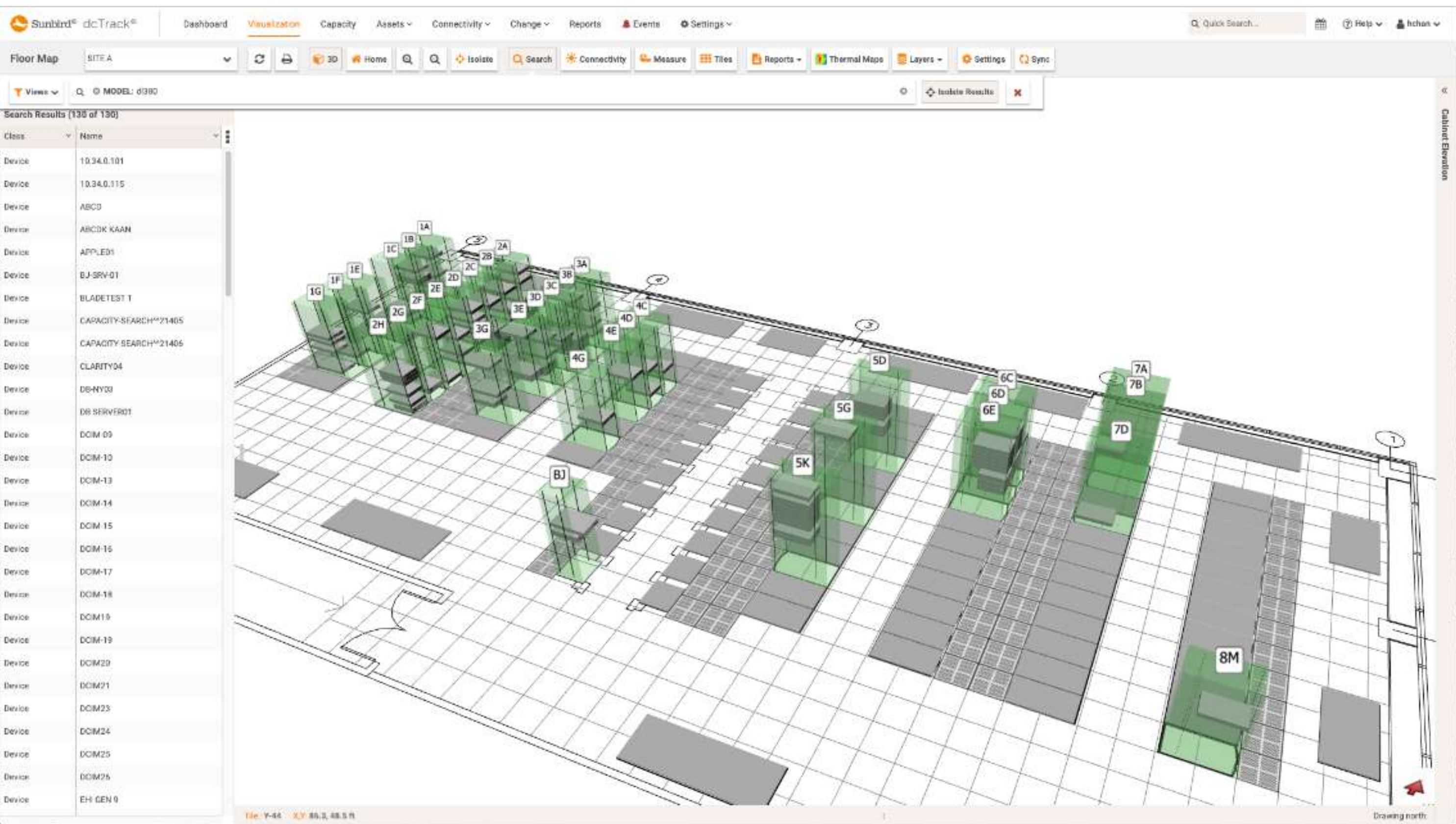
Back View

WIRE MANAGER 1U	42
2H1	41
WIRE MANAGER 1U	40
	39
	38
	37
	36
	35
	34
	33
	32
	31
	30
	29
HP SERVER DL360 U28	28
	27
	26
	25
	24
JAMES10	23
JAMES9	22
	21
MPTXL01	20
FMSPACE	19
	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









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!