Improving data centre operational efficiency using DCIM, illustrated using customer reviews and case studies

Presented By: Richard May, Country Manager UKI & Nordics

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Customers' Discussed In Todays Presentation

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

Who are Sunbird?

- Leader in 2nd Generation DCIM Software
- Large installed base of satisfied customers
- Vendor agnostic - Broad compatibility with 3rd party meters, sensors, & software
- Technology partnerships with ServiceNow, VMware, BMC, Cherwell, Legrand, Raritan, ServerTech, Chatsworth and Starline.
- 100% Insourced Development & Support
- Extreme customer focus

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Saturday, January 1, 2022 - 16:29

"Sunbird - The best feature-rich DCIM product in the marketplace."

ANDREW M. - SENIOR INFRASTRUCTURE & DATA CENTER MANAGER

vodafone

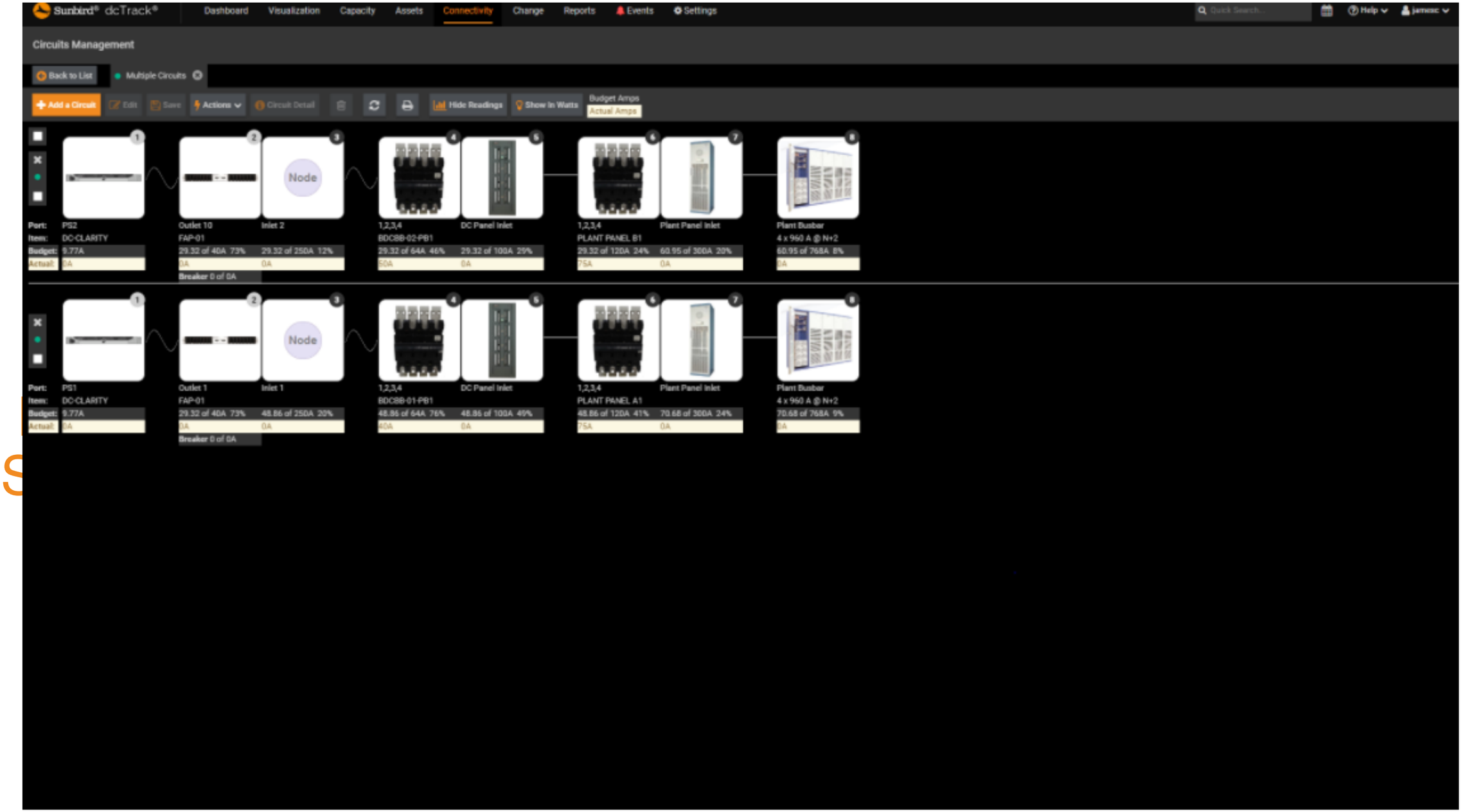
COMPANY:	Vodafone
COMPANY TYPE:	Telecommunications
# OF EMPLOYEES:	10,001+ employees
SOFTWARE USAGE:	Less than 6 months

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

PROS: The software provides a rich end to end functional journey of creating a DC room, adding the power train, then the racks and finally the devices into those racks. In the process of doing this you get a visualization view and an asset list plus how it all logically & physically connects together. Plus great out of the box dashboards.

CONS: None from a product perspective, but it does require you to understand all the layers within your data centre and the equipment makes and models plus specifications.

Sunbird® dcTrack®
Dashboard
Visualization
Capacity
Assets
Connectivity
Change
Reports
Events
Settings
Import
Help
jamesc
Production
Floor Map
SITE B
Current View: All Items
Item List (1402 items)
Class
Name
Device 10.2.32.4
Rack PDU A1-RDPU-L
Rack PDU A1-RDPU-R
Device ADOBE ACROBAT
Device AGER
Device AMSTAD_T3
Network ASR01
UPS A-UPS-1
UPS A-UPS-2
UPS A-UPS-3
Device BARBARA_S1
Device BETASOFT_L25_1
Device BLADECENTER PDU
Floor PDU BUS01A
Floor PDU BUS02A
Floor PDU BUS03A
Floor PDU BUS04A
Floor PDU BUS05A
Floor PDU BUS07A
Floor PDU BUS07B
Floor PDU BUS08B
Floor PDU BUS09B
Floor PDU BUS10B
Floor PDU BUS11B
Floor PDU BUS12.1B
BUS20
BUS13A
S10
S11
S12
S13
S14
S15
S16
S17
Row D
Tile: M-38
X,Y: 74.9, 24.6 ft
Location: SITE B
Drawing north:
Cabinet Elevation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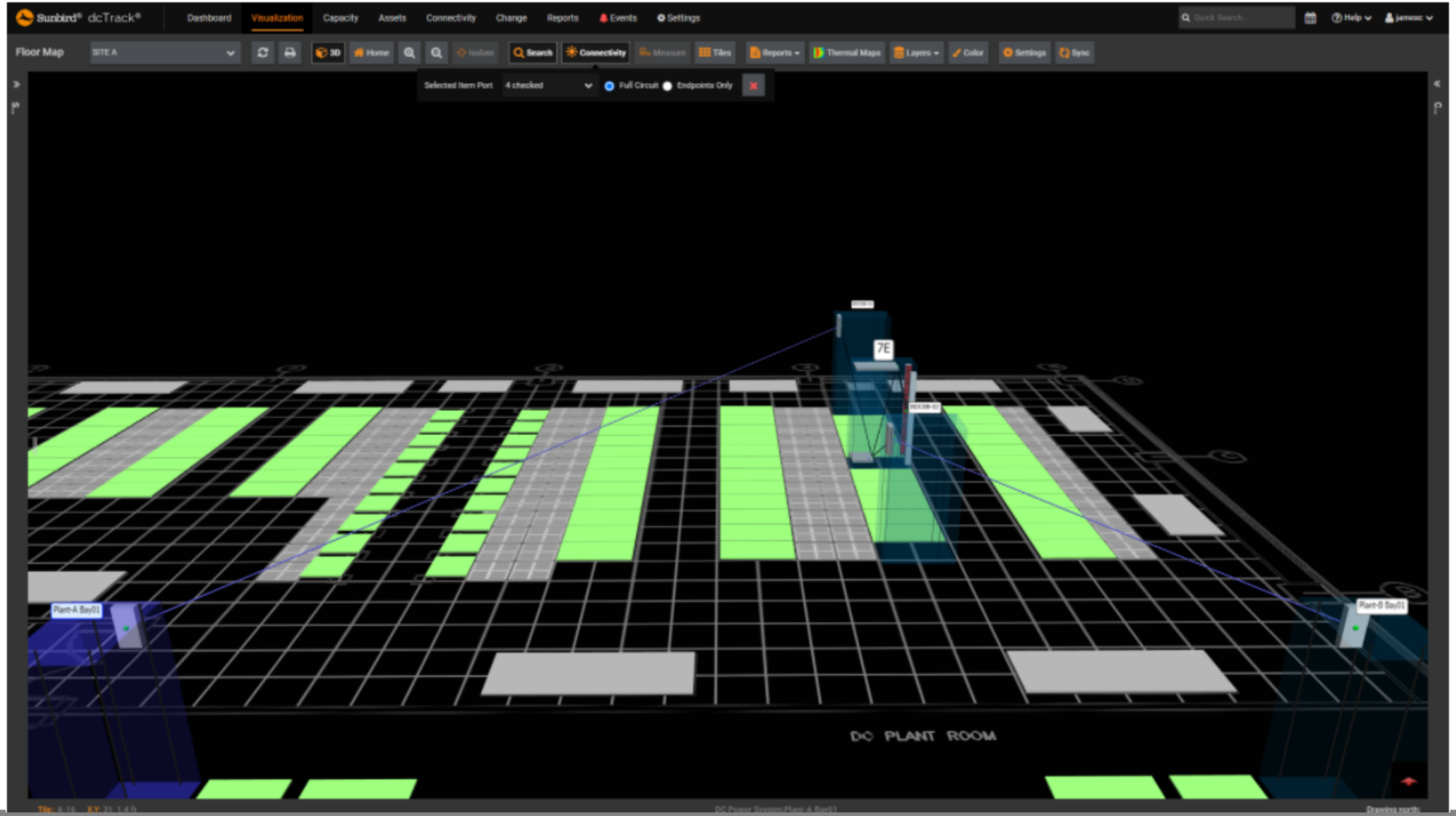
Reports
Events
Settings
Help
Circuits Management
Back to List
Multiple Circuits
Add a Circuit
Edit
Save
Actions
Circuit Detail
Hide Readings
Show in Watts
Budget Amps
Actual Amps
Node
Port: PS2
Item: DC-CLARITY
Budget: 9.77A
Actual: 0A
Outlet 10
FAP-01
29.32 of 40A 73%
0A
Breaker 0 of 0A
Inlet 2
29.32 of 250A 12%
0A
1,2,3,4
BDC8B-02-PB1
29.32 of 64A 46%
50A
DC Panel Inlet
29.32 of 100A 29%
0A
1,2,3,4
PLANT PANEL B1
29.32 of 120A 24%
75A
Plant Panel Inlet
60.95 of 300A 20%
0A
Plant Busbar
4 x 960 A @ N+2
60.95 of 768A 8%
0A
Port: PS1
Item: DC-CLARITY
Budget: 9.77A
Actual: 0A
Outlet 1
FAP-01
29.32 of 40A 73%
0A
Breaker 0 of 0A
Inlet 1
48.86 of 250A 20%
0A
1,2,3,4
BDC8B-01-PB1
48.86 of 64A 76%
40A
DC Panel Inlet
48.86 of 100A 49%
0A
1,2,3,4
PLANT PANEL A1
48.86 of 120A 41%
75A
Plant Panel Inlet
70.68 of 300A 24%
0A
Plant Busbar
4 x 960 A @ N+2
70.68 of 768A 9%
0A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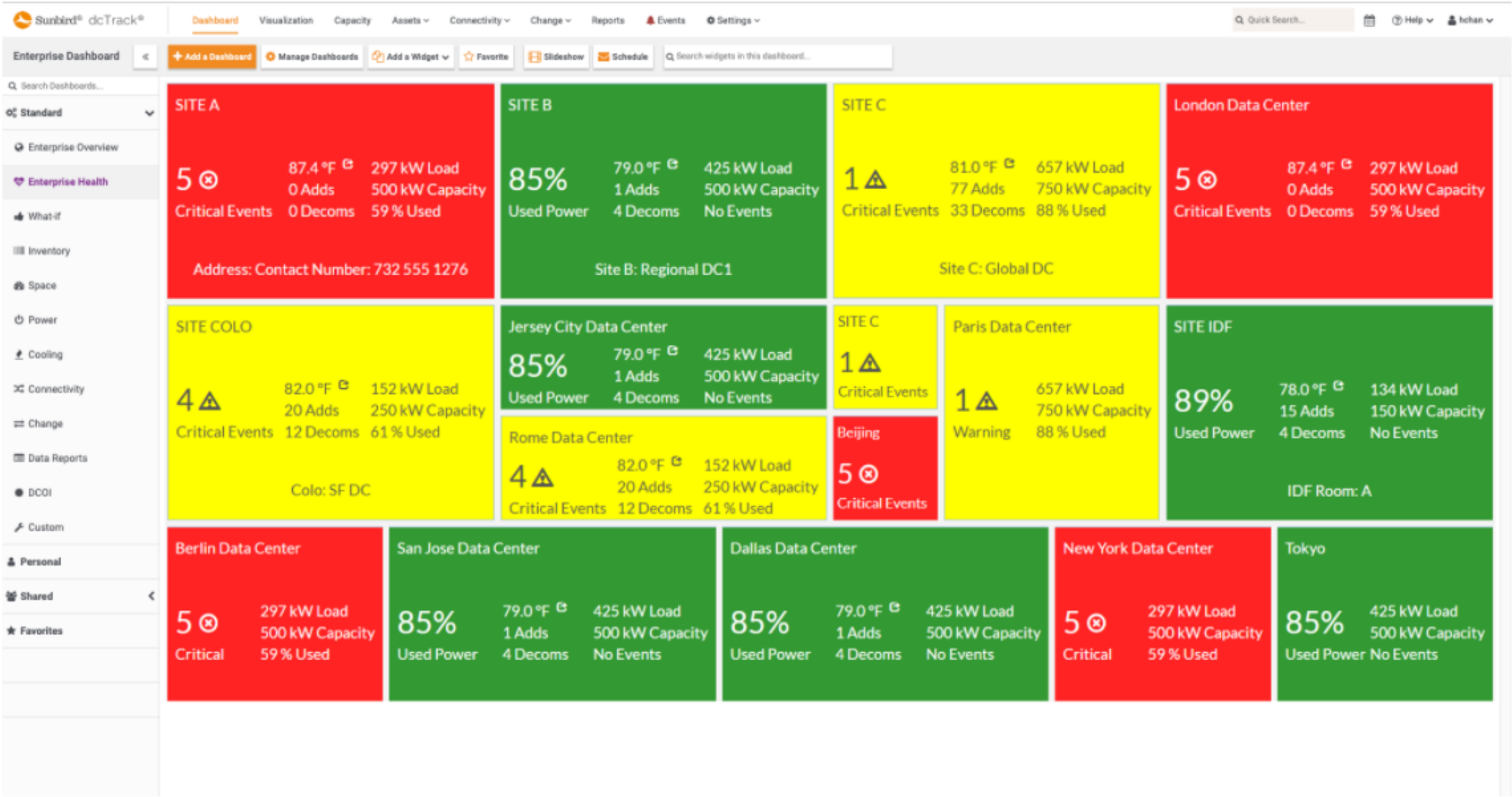
Events
Settings
Floor Map
SITE A
3D
Home
Isolate
Search
Connectivity
Measure
Tiles
Reports
Thermal Maps
Layers
Color
Settings
Sync
Selected Item Port
4 checked
Full Circuit
Endpoints Only
7E
Plant-A Bay01
Plant-B Bay01
DC PLANT ROOM

Dashboards & Reports

"Sunbird simplifies and manages where everything is located and how it connects with the data center environment across the enterprise. It gives you a very good overview of everything going on within your data center in one single application."

Kyle Kohne | Data Center Technician
& DCIM Application Technical Services Manager
Emerson

Customer	Emerson is a global manufacturer of automation solutions, and commercial and residential solutions. They pride themselves on tackling the most complex challenges faced by the industrial, commercial, and residential markets.
Situation	Emerson wanted to optimize performance with a solution that provided better reporting on their existing data center assets.
Solution	Sunbird's technology provides Emerson with an easy-to-use DCIM software, giving them complete visibility, monitoring, business intelligence, and analytics on their power and data management.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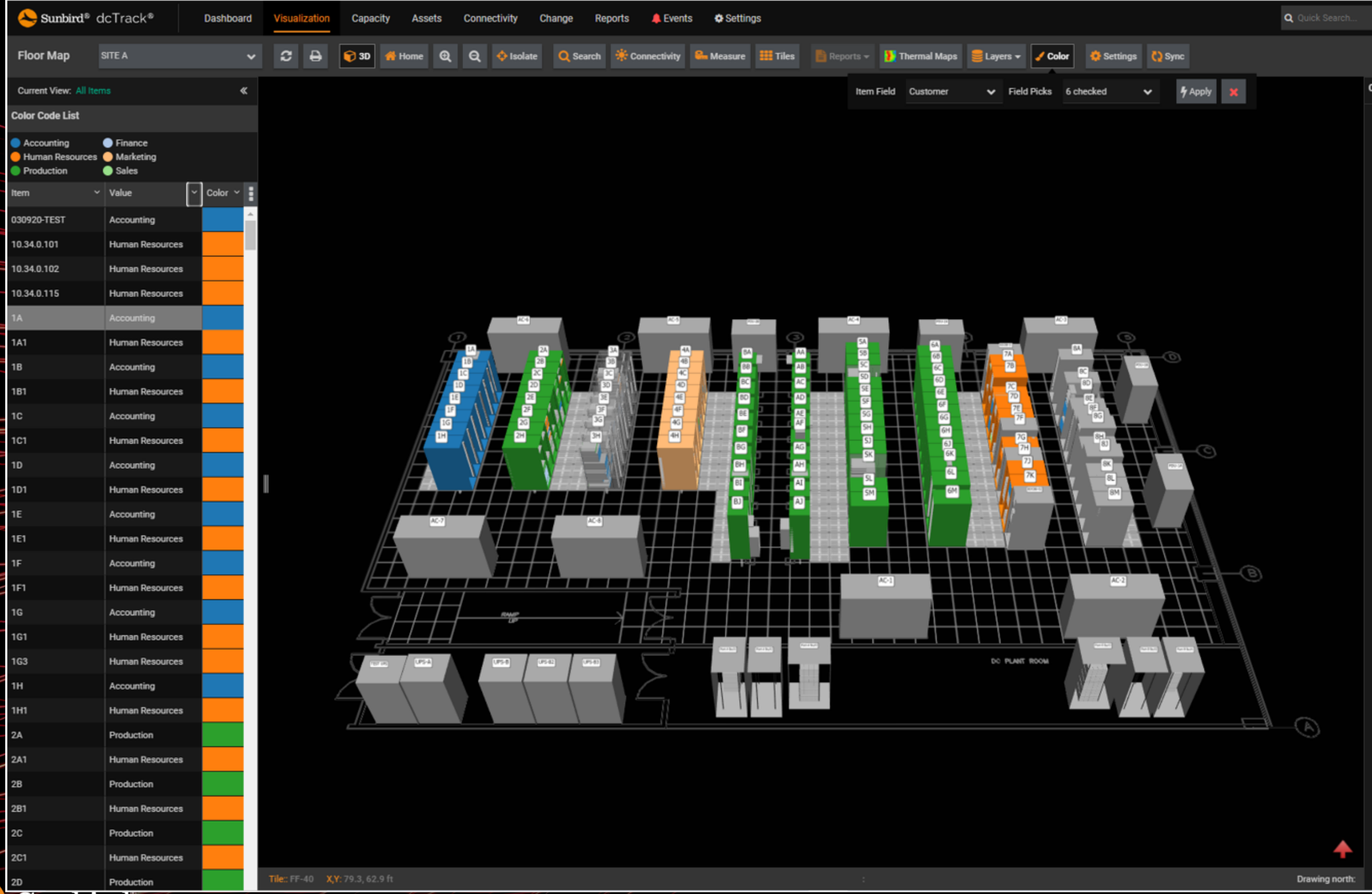
Events
Settings
Quick Search...
Help
hchan
Enterprise Dashboard
Add a Dashboard
Manage Dashboards
Add a Widget
Favorite
Slideshow
Schedule
Search widgets in this dashboard...
Search Dashboards...
Standard
Enterprise Overview
Enterprise Health
What-if
Inventory
Space
Power
Cooling
Connectivity
Change
Data Reports
DCOI
Custom
Personal
Shared
Favorites
SITE A
5 Critical Events
87.4 °F
0 Adds
0 Decoms
297 kW Load
500 kW Capacity
59 % Used
Address: Contact Number: 732 555 1276
SITE B
85% Used Power
79.0 °F
1 Adds
4 Decoms
425 kW Load
500 kW Capacity
No Events
Site B: Regional DC1
SITE C
1 Critical Events
81.0 °F
77 Adds
33 Decoms
657 kW Load
750 kW Capacity
88 % Used
Site C: Global DC
London Data Center
5 Critical Events
87.4 °F
0 Adds
0 Decoms
297 kW Load
500 kW Capacity
59 % Used
SITE COLO
4 Critical Events
82.0 °F
20 Adds
12 Decoms
152 kW Load
250 kW Capacity
61 % Used
Colo: SF DC
Jersey City Data Center
85% Used Power
79.0 °F
1 Adds
4 Decoms
425 kW Load
500 kW Capacity
No Events
Rome Data Center
4 Critical Events
82.0 °F
20 Adds
12 Decoms
152 kW Load
250 kW Capacity
61 % Used
SITE C
1 Critical Events
Beijing
5 Critical Events
Paris Data Center
1 Warning
657 kW Load
750 kW Capacity
88 % Used
SITE IDF
89% Used Power
78.0 °F
15 Adds
4 Decoms
134 kW Load
150 kW Capacity
No Events
IDF Room: A
Berlin Data Center
5 Critical
297 kW Load
500 kW Capacity
59 % Used
San Jose Data Center
85% Used Power
79.0 °F
1 Adds
4 Decoms
425 kW Load
500 kW Capacity
No Events
Dallas Data Center
85% Used Power
79.0 °F
1 Adds
4 Decoms
425 kW Load
500 kW Capacity
No Events
New York Data Center
5 Critical
297 kW Load
500 kW Capacity
59 % Used
Tokyo
85% Used Power
425 kW Load
500 kW Capacity
No Events



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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.

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Dashboard | Visualization | Capacity | Assets | Connectivity | Change | Reports | Events | Settings

Quick Search... | Help | hchan

Asset Management

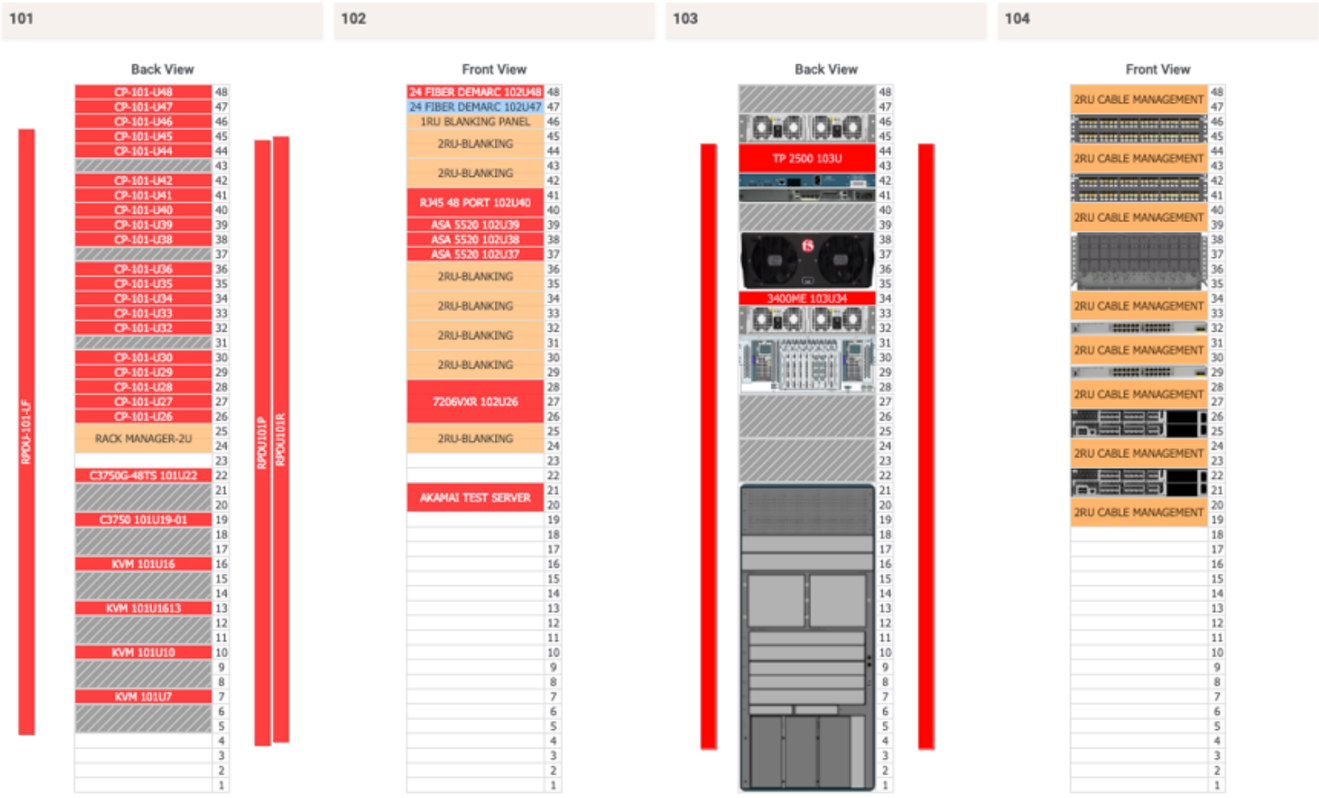
Add an Item | View | Edit | Clone | Actions | Reports | Export | Floor Maps | Port Inspector | Permissions | Elevation

Views

Current View: My View Rows: 1 - 100 of 352 Columns: 27 Filters: Class: Cabinet

Clear | How to Search

Location	Class	Subclass	Status	Name	Make	Mo
Select...	1 checked	Select...	Select...	abc OR xyz*...	abc OR xyz*...	abc O
SITE COLO	**Cabinet**		**Installed**	**101**	**CPI**	**48R**
SITE COLO	**Cabinet**		**Installed**	**102**	**CPI**	**48R**
SITE COLO	**Cabinet**		**Installed**	**103**	**CPI**	**48R**
SITE COLO	**Cabinet**		**Installed**	**104**	**CPI**	**48R**
SITE COLO	Cabinet		Installed	105	CPI	48R
SITE COLO	Cabinet		Installed	106	CPI	48R
SITE COLO	Cabinet		Archived	107	CPI	48R
SITE COLO	Cabinet		Installed	108	CPI	48R
SITE COLO	Cabinet		Installed	109	CPI	48R
SITE COLO	Cabinet		Installed	110	CPI	48R
SITE COLO	Cabinet		Planned	11-12	CPI	45R
SITE A	Cabinet		Installed	1A	CPI	42R
SITE A	Cabinet		Installed	1B	CPI	42R
SITE A	Cabinet		Installed	1C	CPI	42R
SITE A	Cabinet		Installed	1D	CPI	42R
SITE A	Cabinet		Installed	1E	CPI	42R
SITE A	Cabinet		Installed	1F	CPI	42R
SITE A	Cabinet		Installed	1G	CPI	42R
SITE A	Cabinet		Installed	1H	CPI	42R
SITE COLO	Cabinet		Installed	201	CPI	48R
SITE COLO	Cabinet		Installed	202	CPI	48R
SITE COLO	Cabinet		Installed	203	CPI	48R
SITE COLO	Cabinet		Installed	204	CPI	48R
SITE COLO	Cabinet		Installed	205	CPI	48R
SITE COLO	Cabinet		Installed	206	CPI	48R
SITE COLO	Cabinet		Installed	207	CPI	48R
SITE COLO	Cabinet		Installed	208	CPI	48R



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Dashboard | Visualization | Capacity | Assets | Connectivity | Change | Reports | Events | Settings | Quick Search

Enterprise Dashboard

Manage Dashboards | Add a Widget | Goto Widget | Favorite | SITE A | Schedule

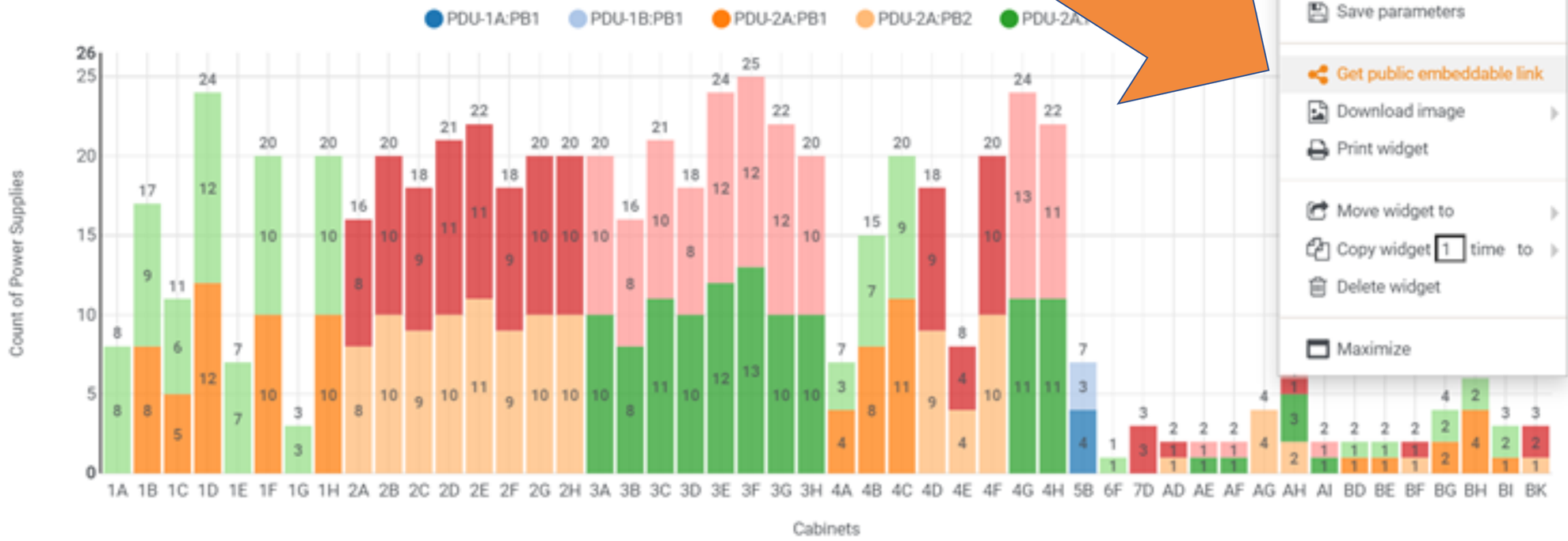
Search Dashboards...

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

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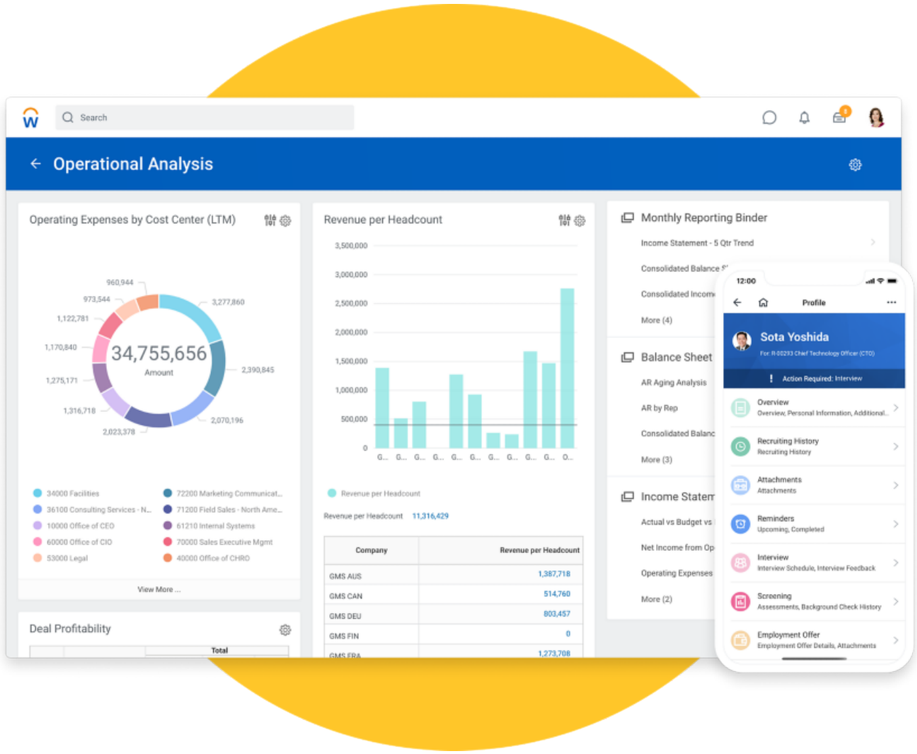


Saturday, January 1, 2022 - 16:29

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

COLM R. - DATACENTER OPERATIONS

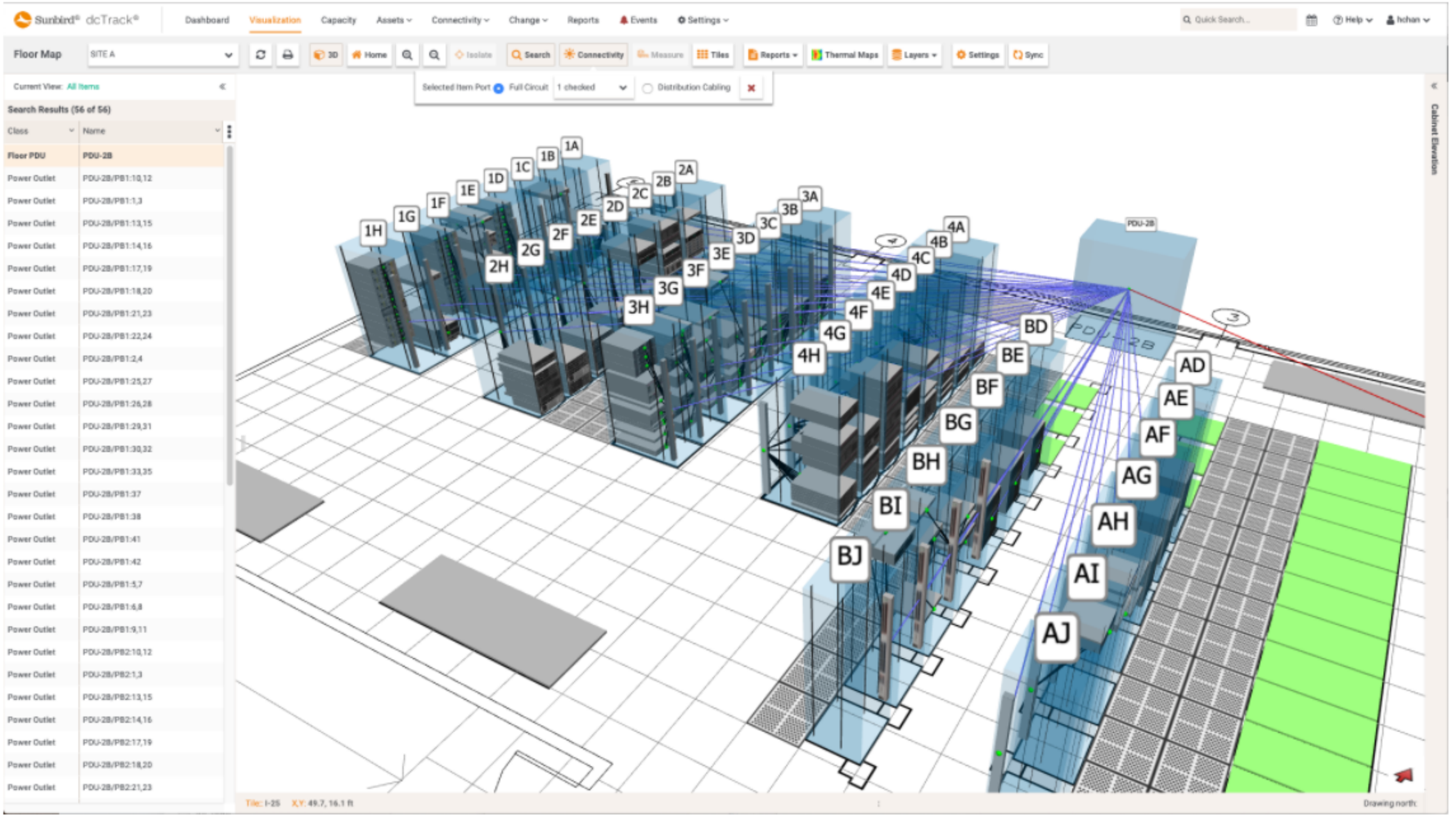
COMPANY:	Workday
COMPANY TYPE:	Computer Hardware
# OF EMPLOYEES:	10,001+ employees
SOFTWARE USAGE:	2+ years

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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Events
Settings
Floor Map
SITE A
Home
Search
Connectivity
Tiles
Reports
Thermal Maps
Layers
Settings
Sync
Current View: All Items
Search Results (56 of 56)
Class
Name
Floor PDU
PDU-2B
Power Outlet
PDU-2B/PB1:10,12
PDU-2B/PB1:1,3
PDU-2B/PB1:13,15
PDU-2B/PB1:14,16
PDU-2B/PB1:17,19
PDU-2B/PB1:18,20
PDU-2B/PB1:21,23
PDU-2B/PB1:22,24
PDU-2B/PB1:2,4
PDU-2B/PB1:25,27
PDU-2B/PB1:26,28
PDU-2B/PB1:29,31
PDU-2B/PB1:30,32
PDU-2B/PB1:33,35
PDU-2B/PB1:37
PDU-2B/PB1:38
PDU-2B/PB1:41
PDU-2B/PB1:42
PDU-2B/PB1:5,7
PDU-2B/PB1:6,8
PDU-2B/PB1:9,11
PDU-2B/PB2:10,12
PDU-2B/PB2:1,3
PDU-2B/PB2:13,15
PDU-2B/PB2:14,16
PDU-2B/PB2:17,19
PDU-2B/PB2:18,20
PDU-2B/PB2:21,23
Selected Item Port
Full Circuit
1 checked
Distribution Cabling
1A
1B
1C
1D
1E
1F
1G
1H
2A
2B
2C
2D
2E
2F
2G
2H
3A
3B
3C
3D
3E
3F
3G
3H
4A
4B
4C
4D
4E
4F
4G
4H
PDU-2B
BD
BE
BF
BG
BH
BI
BJ
AD
AE
AF
AG
AH
AI
AJ
Cabinet Elevation
Tile: I-25
X,Y: 49.7, 16.1 ft
Drawing north:

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Dashboard | Visualization | Capacity | Assets | Connectivity | Change | Reports | Events | Settings | Quick Search... | Help | hchan

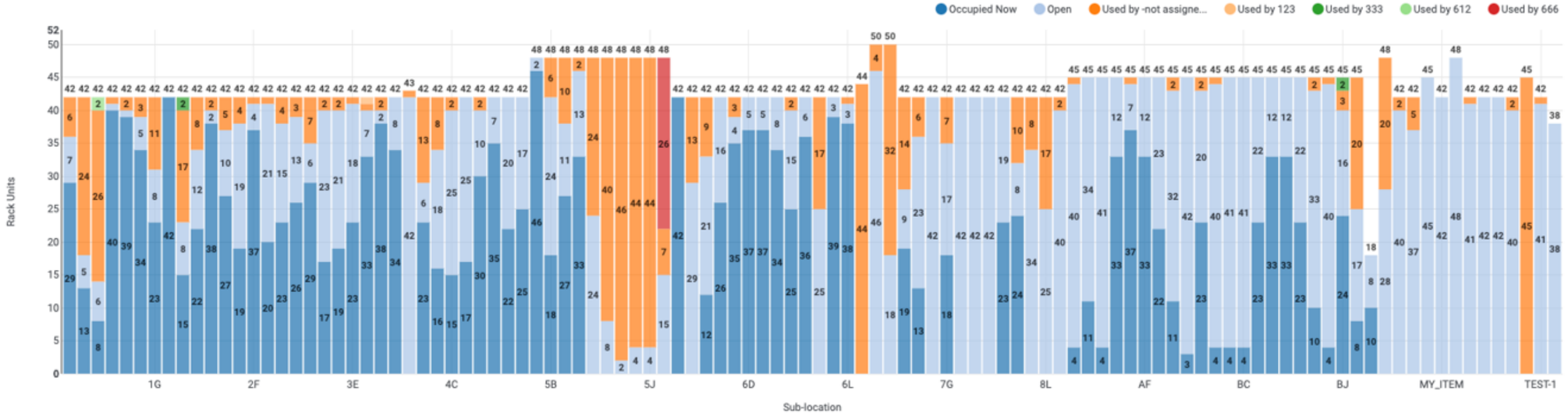
Enterprise Dashboard | Add a Dashboard | Manage Dashboards | Add a Widget | Favorite | SITE A | Refresh | Print | Slideshow | Schedule | Search widgets in this dashboard...

Search Dashboards...

- Standard
  - Enterprise Overview
  - Enterprise Health
  - What-if
  - Inventory
  - Space
  - Power
  - Cooling
  - Connectivity
  - Change
  - Data Reports
  - DCOI
  - Custom
- Personal
- Shared
- Favorites

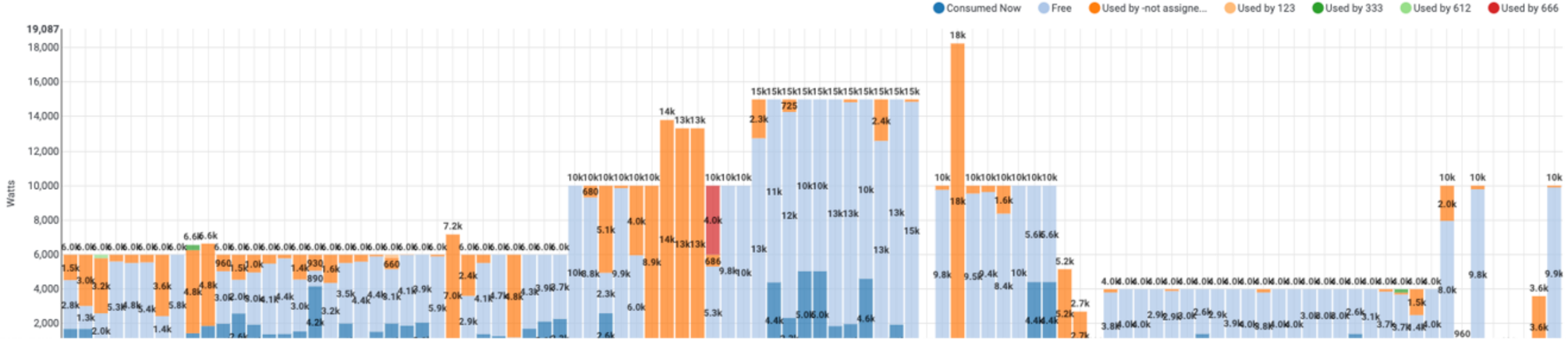
What-if: Rack Units Space Capacity

Projects: 5 Selected | Sub-location: Cabinet



What-if: Power Budget Capacity

Projects: 5 Selected | Sub-location: Cabinet | Capacity: From Sub-location



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Remote Site Management

METRO

"Now that we have been working with dcTrack, I don't know what we would do without it. It's our virtual eye on each data center."

Markus Hergesell | System Administrator
METRO AG

Customer	METRO AG is the central management holding company for METRO, a leading international specialist in food wholesale. METRO AG manages 800 racks in 600 data centers across Europe and APAC from their headquarters in Germany.
Situation	Metronom wanted easy-to-use DCIM software that would allow them to remotely monitor and manage data centers worldwide.
Solution	Sunbird's comprehensive DCIM software gives Metronom end-to-end visibility and advanced insights for all of their data centers' assets and performance.

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Quick Search... | Help | hchan

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

Current View: All Items

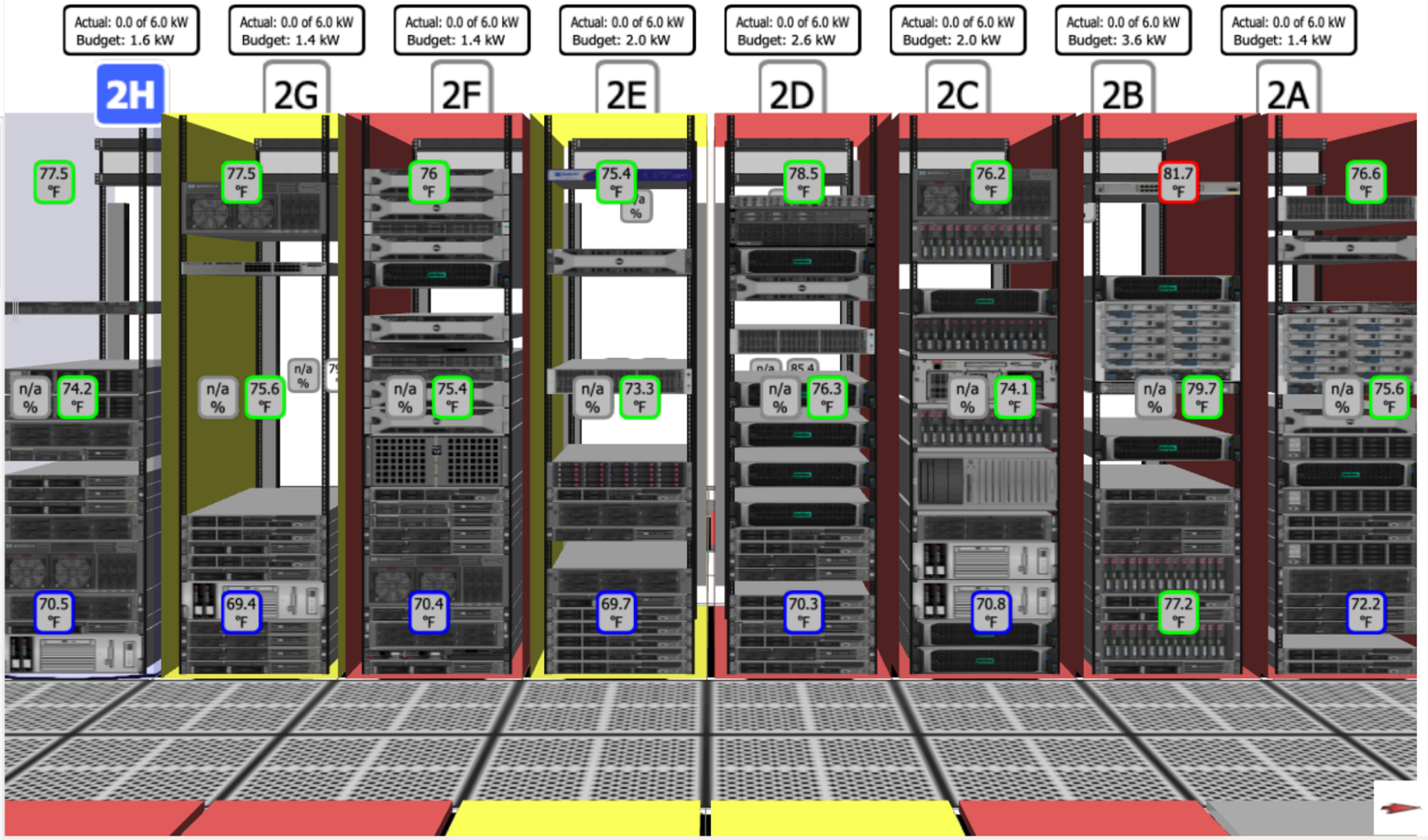
Reports Legend and Data

Used RUs	0	9	31	40
Temperature (Front)	0	72.5 - 80.5		105
Budgeted Power	0	1.7	3.4	4

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
2H1	40
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
	22
JAMES9	21
	20
MPTXL01	19
	18
FMSPACE	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

2H-RPDU-L

2H-RPDU-R

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Data Centers
Add | Remove | Refresh | Import/Export
Card Reader - 40004403
Dry Contact 1 (Decommissioned)
Dry Contact 2 (Decommissioned)
Front Door
On/Off 1
On/Off 3 (Decommissioned)
On/Off 4
On/Off 5
On/Off 6 (Decommissioned)
On/Off 7 (Decommissioned)
On/Off 8 (Decommissioned)
On/Off 9 (Decommissioned)
Powered Dry Contact 2
Rear Door
Rack A6
Rack A7
Rack A8
Servertech Room
UPS

Front Door

Actions

Door Control

Lock | Unlock

Sensors and Door Status

Sensor Mappings

		Status
Door	Door Status	Open
Handle	Handle Status	Closed
Lock	Electronic lock	Locked

Available Sensors

	PDU
On/Off 1	192.168.46.214
On/Off 4	192.168.46.214
On/Off 5	192.168.46.214
Powered Dry Contact 2	192.168.46.214

Door

Name: Front Door

External Key: Door -- 5

An external key is a unique identifier of this object that is used when importing and exporting enterprise relationships through a CSV file.

Override Relock Timer: 10 seconds. 0 is disabled.

Default: 5 seconds

Placement: Front | Manage door placements

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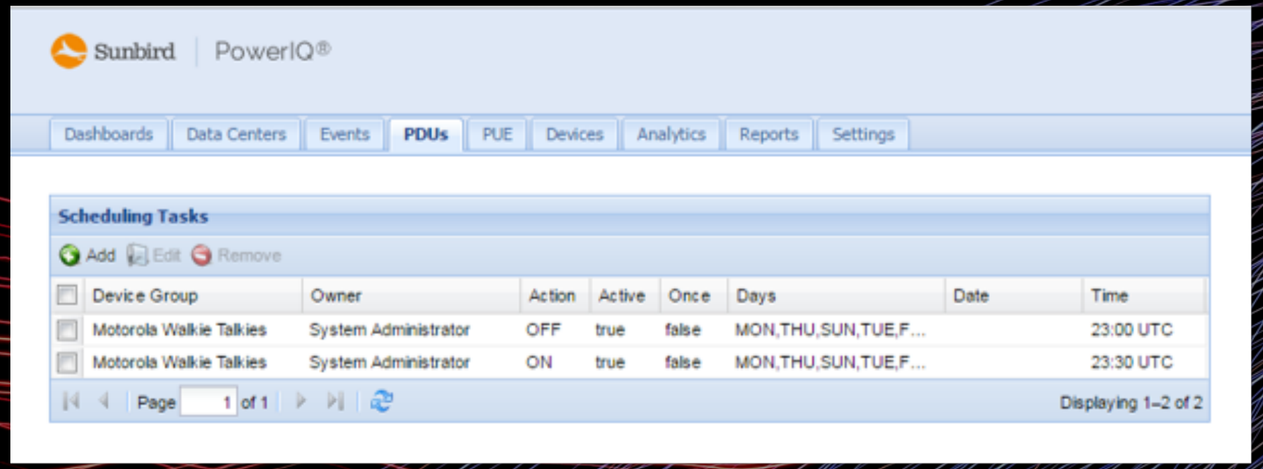

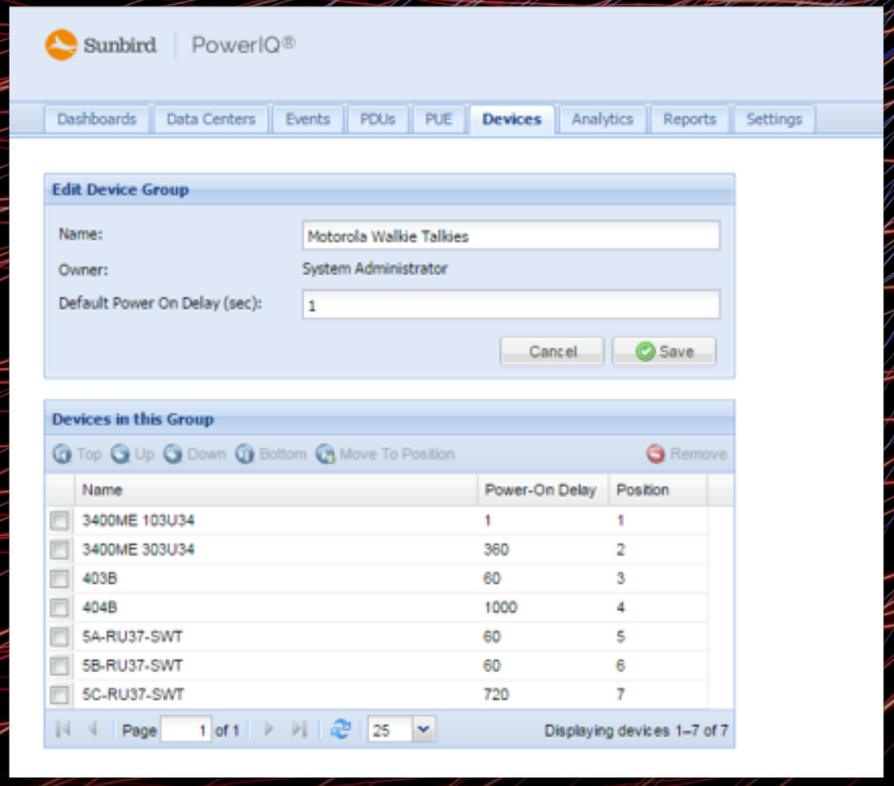

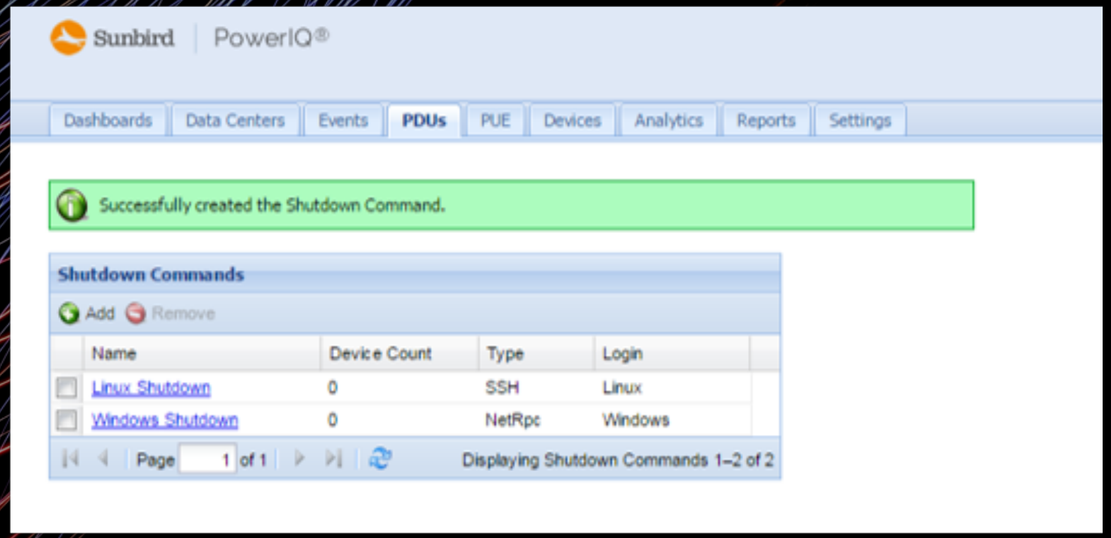

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Stranded Power Capacity Management

COMCAST

"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

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Comcast Realizes 40% Increase in Power Capacity With APB

- Blade System
- Name Plate = 1,000 Watts
- Derated at 60% = 600 Watts

- Auto Power Budget = 360 Watts

- Increased Power Capacity = 40%

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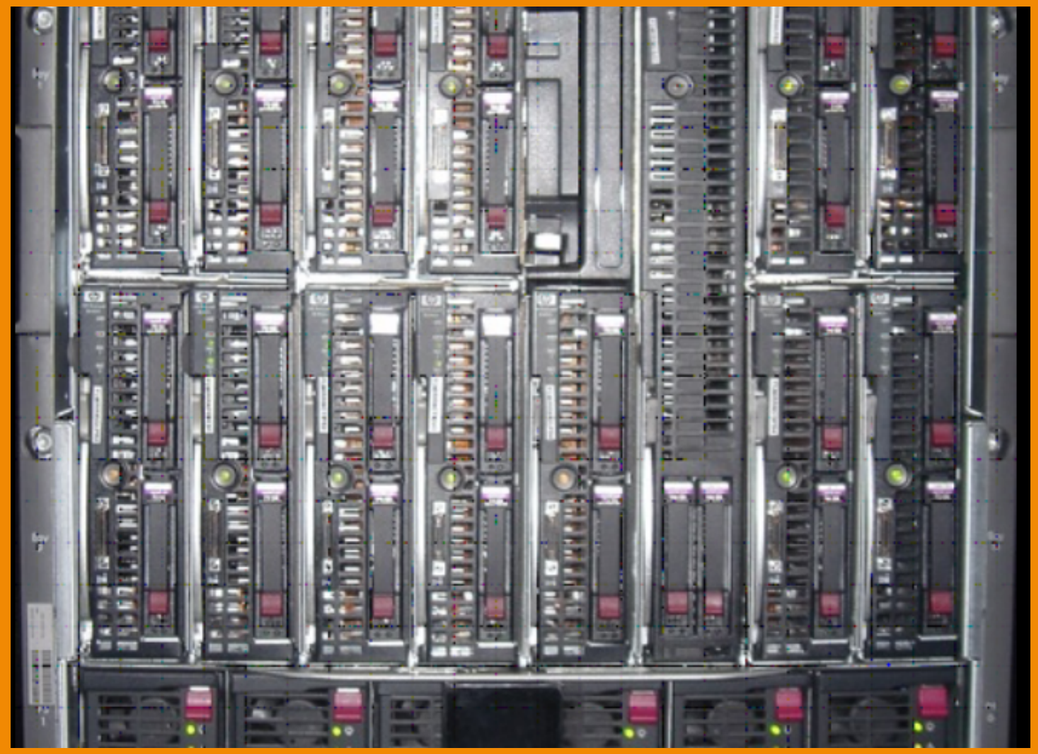
Comcast Plans to Use APB to Find & Remove Zombie Servers

- Blade System
- Name Plate = 1,000 Watts
- Derated at 60% = 600 Watts

- Auto Power Budget = 45 Watts
- Auto Power Budget – 4.5% of Name Plate
- 5% or less of Name Plate = Zombie

Zombie Servers Waste Space and Power



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New Zombie Widget – Found 100 Zombie Devices in One Room

Adjusted Budget(W)	Nameplate (W)	Utilization	Power Supplies	Effective Power	Make	Model	RU Height	Weight
> 5 AND <= 10...	> 5 AND <= 10...	> 5 AND <= 10...	abc OR abc*...	> 5 AND <= 10...	abc OI	abc OR abc*...	> 5 AND <= 1	> 5 AND
11	1200	0.92	2@N+1	11.00	HP	Proliant DL360 G7	1	40.00
0	400	0.00	2@N+1	0.00	Cisco S...	N9K-C9234BGC-X	1	17.50
10	1200	0.83	2@N+1	10.00	HP	Proliant DL360 G7	1	40.00
34	1200	2.83	2@N+1	34.00	HP	Proliant DL360 G7	1	40.00
32	1200	2.67	2@N+1	32.00	HP	Proliant DL360 G7	1	40.00
14	1200	1.17	2@N+1	14.00	HP	Proliant DL360 G7	1	40.00
0	600	0.00	2@N+1	0.00	NetApp,...	DS460C	4	247.00
0	600	0.00	2@N+1	0.00	NetApp,...	DS460C	4	247.00
15	1200	1.25	2@N+1	15.00	HP	Proliant DL360 G7	1	40.00
14	1200	1.17	2@N+1	14.00	HP	Proliant DL360 G7	1	40.00
11	1200	0.92	2@N+1	11.00	HP	Proliant DL360 G7	1	40.00

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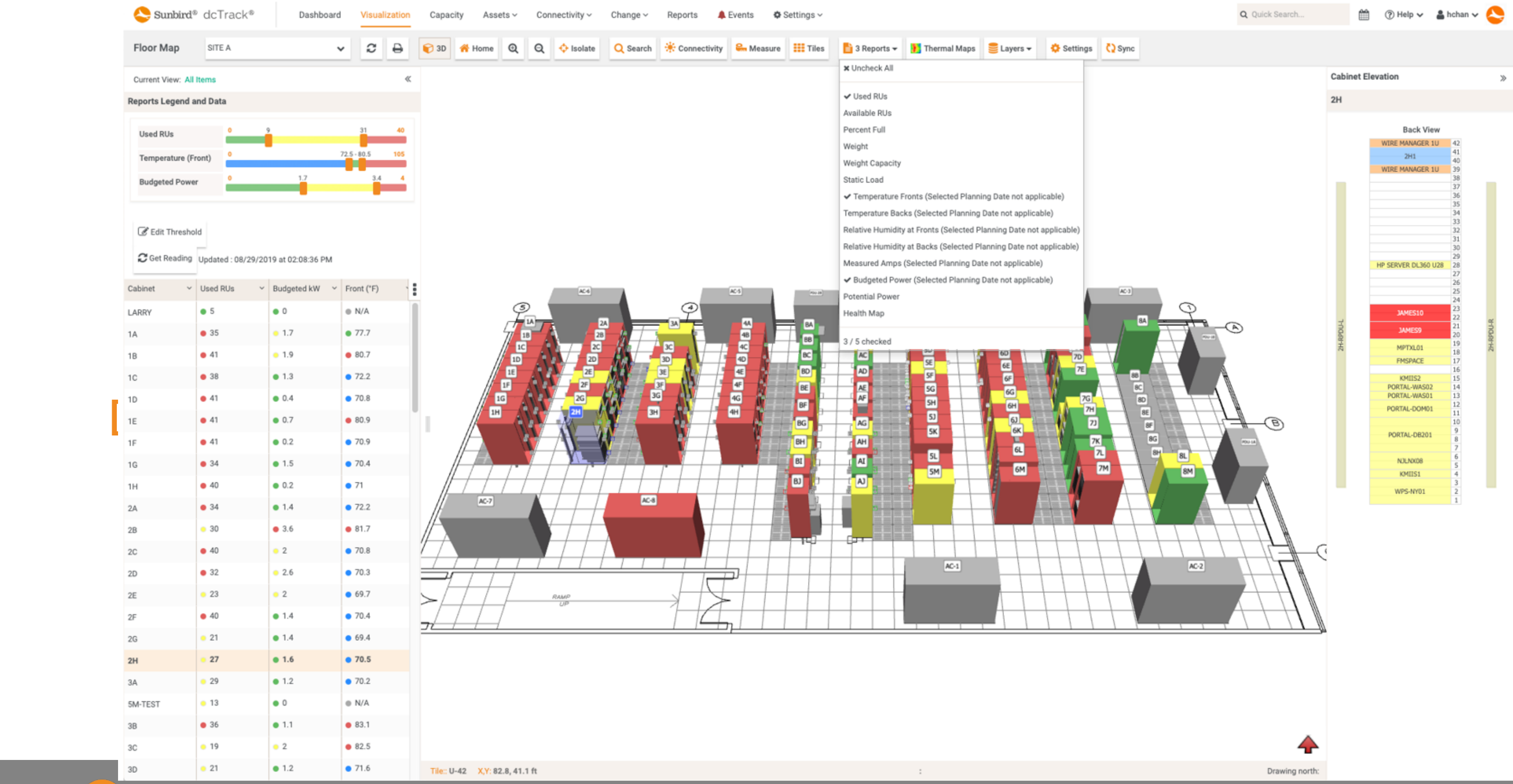
3D Visualization of Assets & Capacity

MacStadium

"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.



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MacStadium's infrastructure includes:
6ft-wide racks with 24 Mac Minis per shelf

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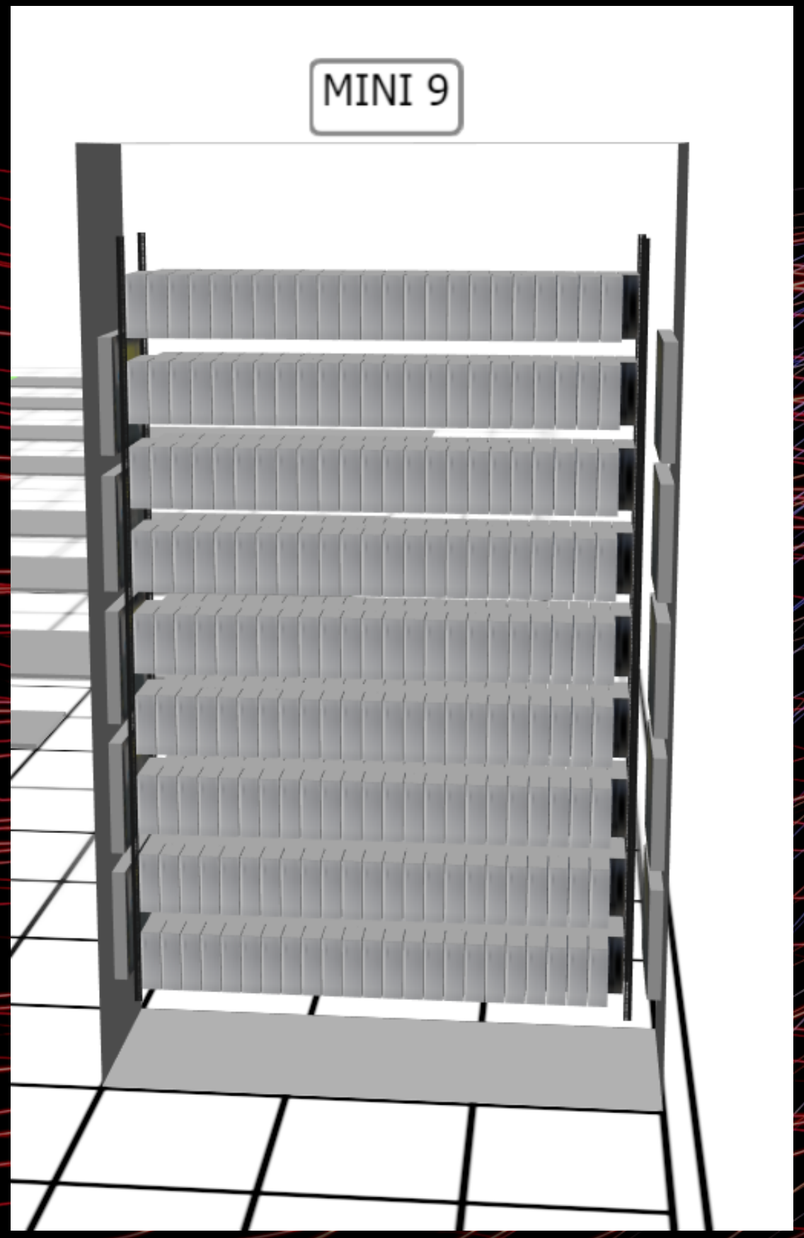

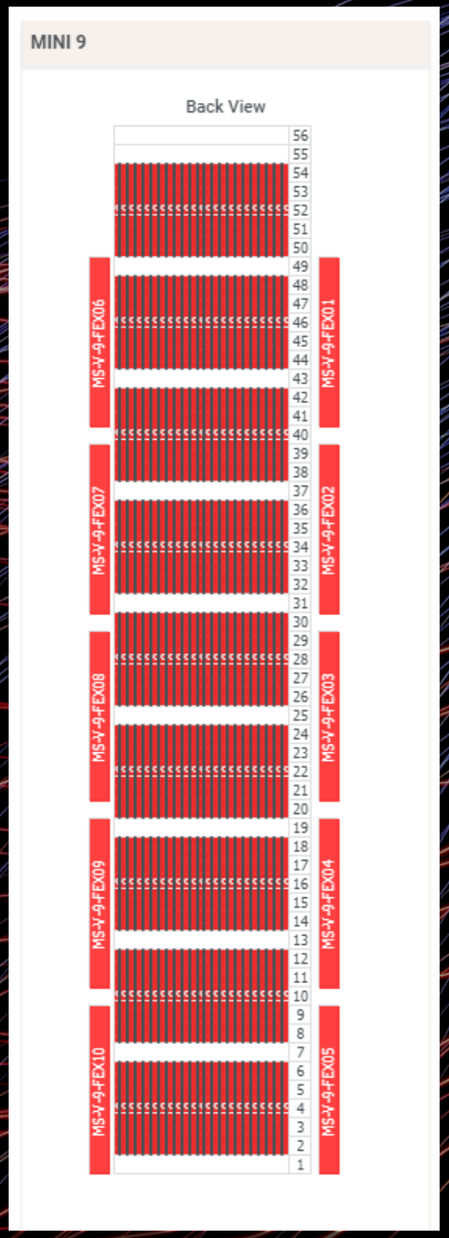

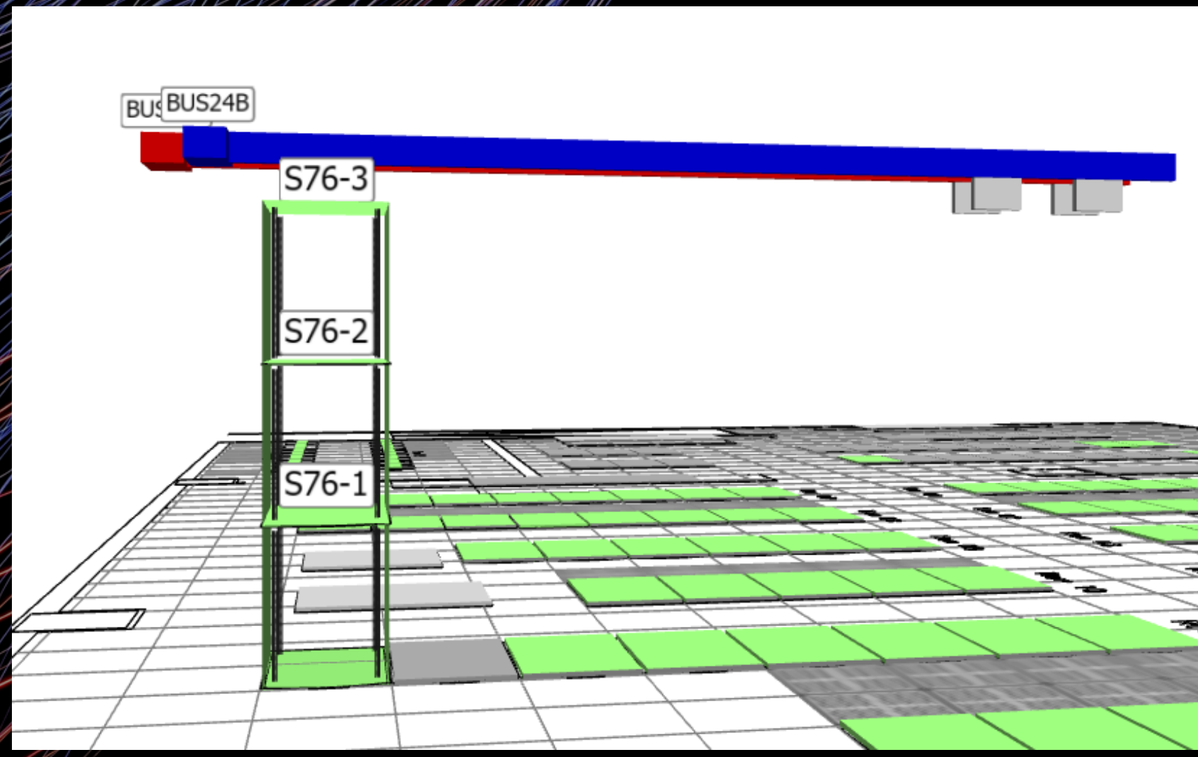

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Thank You!