NLYTE®
ENERGY OPTIMIZER

**COMPREHENSIVE DATA CENTER
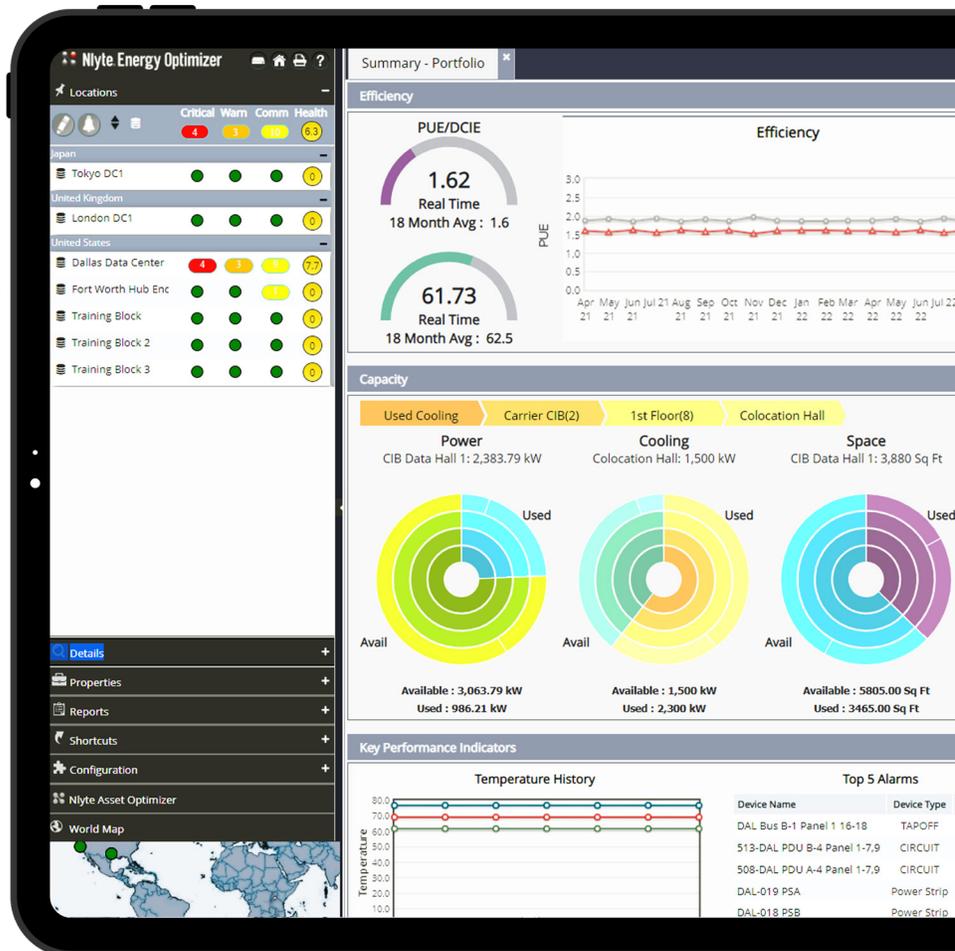ENERGY MANAGEMENT SOLUTION**

Nlyte Software

SOLUTION BRIEF

As businesses increasingly rely on data centers to meet their IT infrastructure needs, managing energy consumption and reducing operational costs are becoming critical priorities. Nlyte Energy Optimizer (NEO) is an advanced software solution designed to address these challenges by providing comprehensive energy management and optimization for data centers. By integrating real-time monitoring, predictive analytics, and advanced reporting, NEO empowers organizations to maximize energy efficiency, reduce operational costs, and achieve sustainability goals.
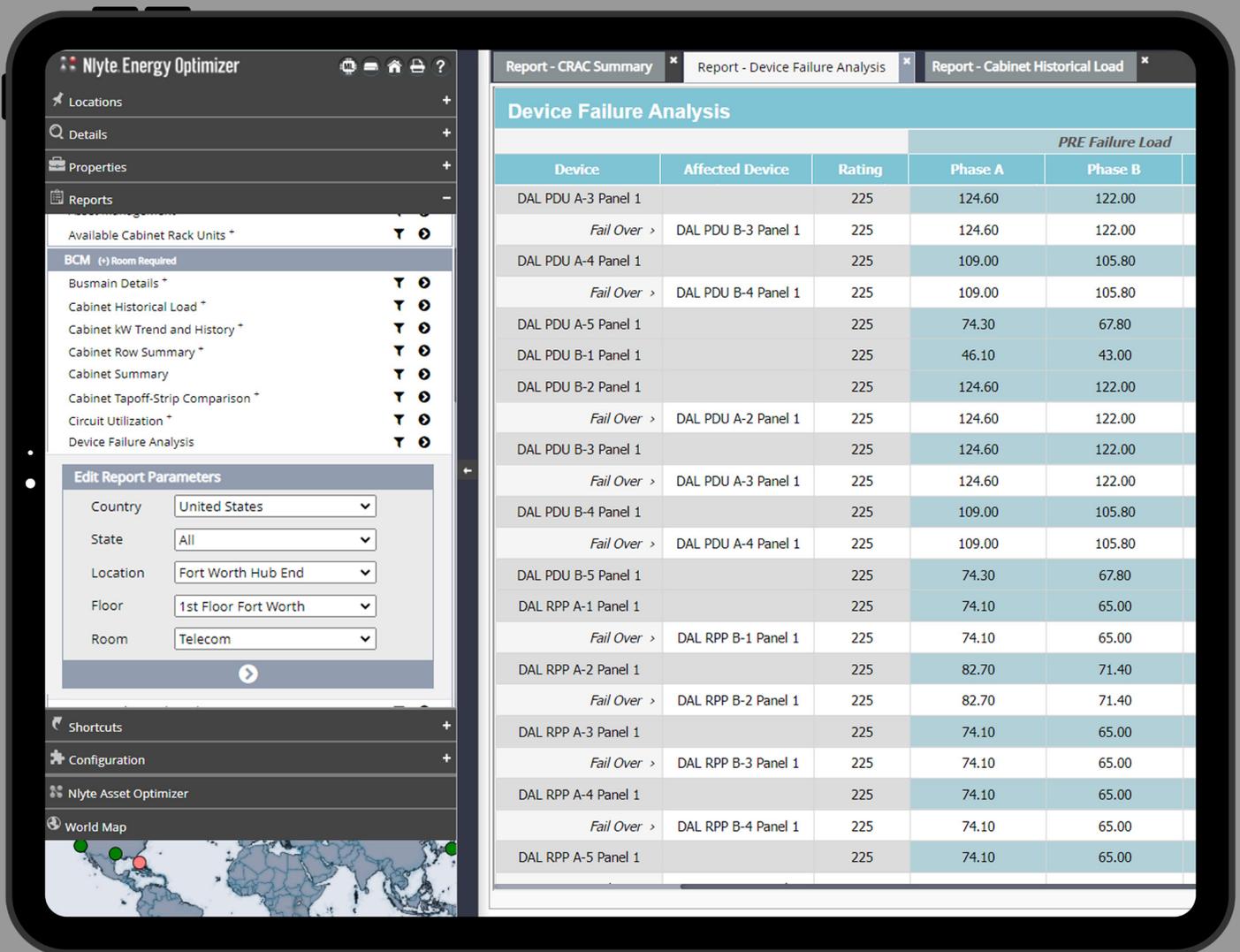
THE NLYTE ADVANTAGE

- **Real-time monitoring:** NEO's real-time monitoring capabilities provide detailed insights into energy consumption, power usage, and thermal conditions across data center facilities. This granular visibility enables organizations to identify inefficiencies and take corrective actions promptly.

- **Predictive analytics:** Leveraging machine learning algorithms, NEO's predictive analytics module forecasts energy consumption trends, potential equipment failures, and other key performance indicators (KPIs) to help organizations proactively manage energy usage and avoid downtime.

- **Advanced reporting:** NEO's customizable reporting features facilitate the analysis of energy consumption patterns, cost savings, and carbon footprint reductions. This comprehensive reporting allows organizations to track progress against their energy efficiency and sustainability objectives, ensuring continuous improvement.

- **Capacity planning:** By simulating different scenarios, NEO's capacity planning tools help organizations optimize resource allocation and plan for future growth, while minimizing energy consumption and costs.

- **Integration capabilities:** NEO seamlessly integrates with existing data center infrastructure management (DCIM) systems, building management systems (BMS), and IT service management (ITSM) tools, providing a unified view of energy management across the organization.

The Nlyte Energy Optimizer Global Dashboard: A comprehensive, real-time overview of your data center's energy consumption, efficiency metrics, and key performance indicators, empowering informed decision-making and optimized energy management.

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KEY BENEFITS

- **Energy cost savings:** By identifying inefficiencies and optimizing energy usage, NEO can significantly reduce data center energy costs.

- **Enhanced sustainability:** With its focus on energy efficiency, NEO helps organizations reduce their carbon footprint and achieve their sustainability goals.

- **Improved uptime:** By predicting potential equipment failures and providing real-time monitoring, NEO reduces the risk of downtime and ensures high availability of critical IT systems.

- **Informed decision-making:** NEO's advanced reporting capabilities enable organizations to make data-driven decisions regarding energy management and capacity planning.

- **Scalability:** Designed to support data centers of all sizes, NEO's flexible and scalable architecture ensures that it can adapt to the evolving needs of growing organizations.
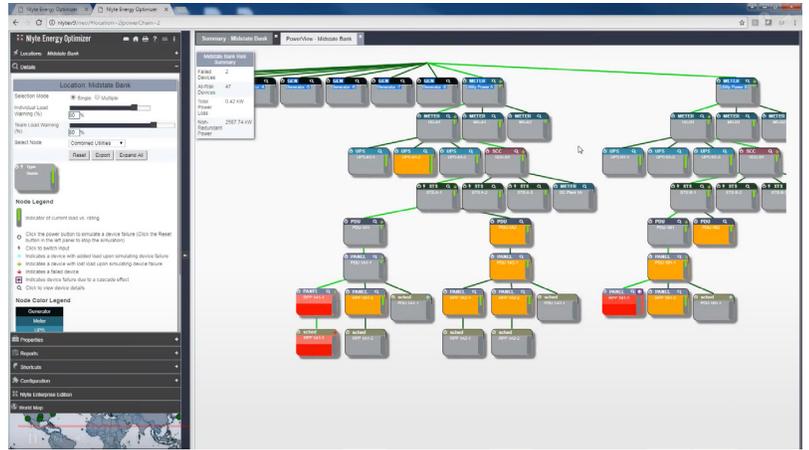

The Nlyte Device Failure Analysis report in the Nlyte Energy Optimizer (NEO) solution focuses on predicting and preventing potential equipment failures in data centers. The report utilizes advanced algorithms and historical data to analyze the performance and health of devices within the data center, identifying trends and patterns that may indicate a higher likelihood of failure.
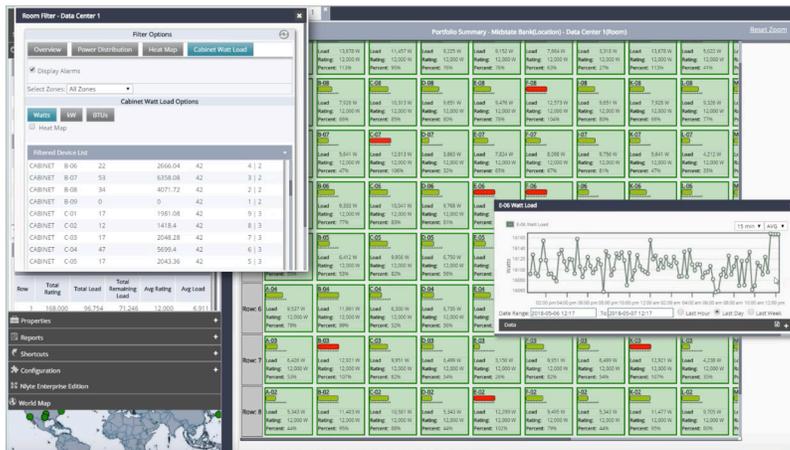
By generating this report, organizations can proactively address potential issues, schedule maintenance activities, and take necessary measures to avoid downtime and ensure the reliability of critical IT systems. The Nlyte Device Failure Analysis report not only enhances the overall operational efficiency of the data center but also helps in reducing associated costs and risks related to unplanned outages.

POWER FAILURE SIMULATION AND PREVENTION

Nlyte Energy Optimizer includes an advanced power management solution designed to enhance data center energy efficiency and reduce operational costs. The platform focuses on optimizing energy consumption by providing real-time monitoring and control of data center power infrastructure, including power distribution, cooling systems, and environmental conditions. Nlyte Energy Optimizer enables informed decision-making for efficient power management and capacity planning, ensuring optimal utilization of energy resources. By integrating with virtualization and ITSM systems, the solution offers improved planning, issue prevention, and system forensics. With its comprehensive approach to power management, Nlyte Energy Optimizer promotes collaboration among teams, streamlines compliance and audit processes, and ultimately leads to a more energy-efficient and cost-effective data center environment.
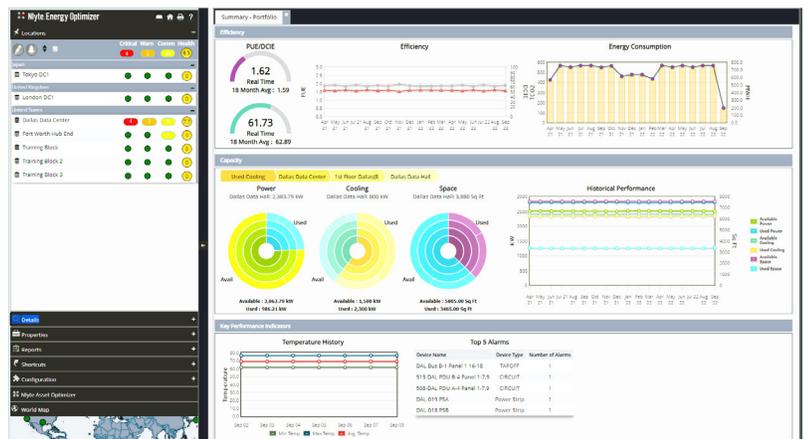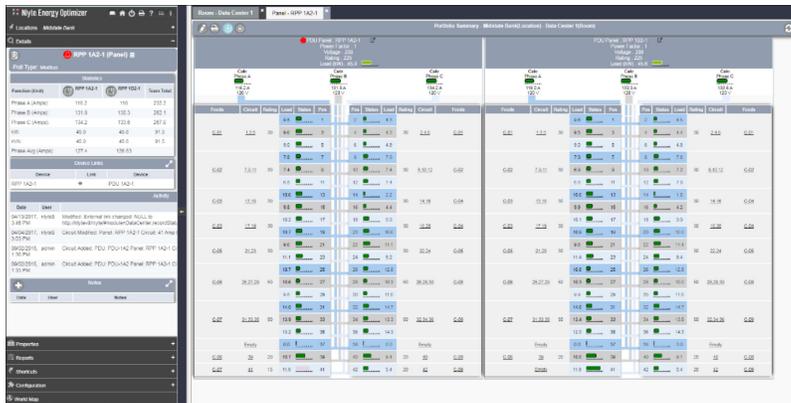
ENERGY CAPACITY PLANNING

Nlyte Energy Capacity Planner is a state-of-the-art solution aimed at improving data center performance by providing comprehensive energy capacity planning and resource optimization capabilities. The platform emphasizes maximizing data center energy efficiency by delivering in-depth insights into power distribution, cooling systems, and environmental conditions. Nlyte Energy Capacity Planner enables organizations to make informed decisions regarding energy management, capacity allocation, and future expansion, ensuring optimal utilization of energy resources and avoiding expensive overprovisioning. Seamlessly integrated with virtualization and ITSM systems, the solution offers enhanced planning, problem prevention, and system forensics. By streamlining energy capacity planning, Nlyte Energy Optimizer Capacity Planner promotes collaboration among teams, accelerates compliance and audit processes, and leads to a more energy-efficient and cost-effective data center environment.

ENERGY OPTIMIAZATION AND COST REDUCTION

The Energy Optimization Dashboard is an intuitive and comprehensive solution designed to enhance data center performance by providing real-time insights and control over energy consumption, capacity planning, and resource management. The platform offers a user-friendly interface that displays critical information on power distribution, cooling systems, and environmental conditions in an easily digestible format. The Energy Optimization Dashboard allows organizations to make informed decisions regarding energy management, capacity allocation, and future expansion, ensuring optimal utilization of resources and cost-effective operations. Integrated with virtualization and ITSM systems, the solution supports improved planning, problem prevention, and system forensics. By offering a centralized and accessible view of data center performance, the Energy Optimization Dashboard promotes collaboration among teams, streamlines compliance and audit processes, and leads to a more energy-efficient and cost-effective data center environment.
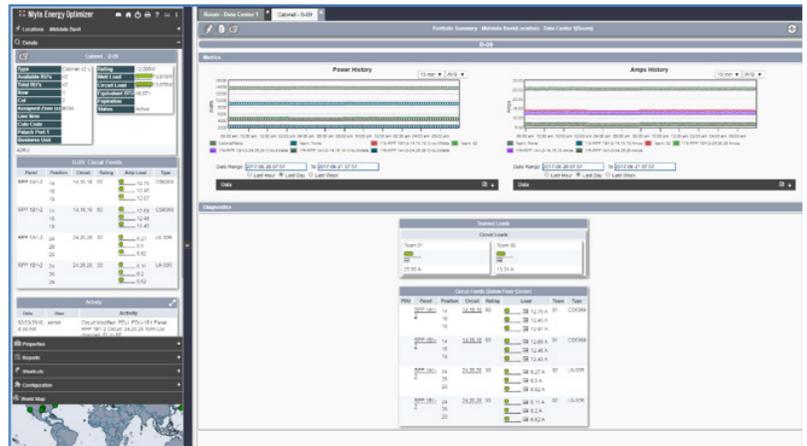
BRANCH CIRCUIT MONITORING

Circuit Monitoring is a highly effective solution designed to enhance data center performance by providing real-time monitoring and management of power distribution circuits. The platform focuses on ensuring the reliability and efficiency of data center power infrastructure by delivering comprehensive insights into circuit loads, capacities, and potential risks. Nlyte Circuit Monitoring enables organizations to make informed decisions regarding power management, capacity allocation, and proactive maintenance, ensuring optimal utilization of electrical resources and preventing costly downtime due to circuit failures. Integrated with virtualization and ITSM systems, the solution offers improved planning, problem prevention, and system forensics. By providing continuous monitoring and control over data center circuits, Nlyte Circuit Monitoring promotes collaboration among teams, expedites compliance and audit processes, and contributes to a more reliable and cost-effective data center environment.

LABOR EXPENSE MANAGEMENT

Labor Expense Management is a compelling solution designed to optimize data center operations by providing effective management of personnel resources and labor costs. The platform focuses on maximizing efficiency by offering insights into staff allocation, workload distribution, and associated expenses, enabling organizations to make informed decisions regarding personnel management and cost control. Nlyte Labor Expense Management helps to ensure the optimal utilization of human resources, reducing the time spent on routine tasks and streamlining the allocation of skilled labor for critical projects. Integrated with virtualization and ITSM systems, the solution supports improved planning, problem prevention, and system

forensics. By providing a centralized view of labor expenses and resource allocation, Nlyte Labor Expense Management fosters collaboration among teams, accelerates compliance and audit processes, and contributes to a more cost-effective and efficient data center environment.

STANDARD REPORTS

Alarm Reports
Alarm Enrollments
Alarm History

Colocation Reports
Customer Billing Amps (Circuit)
Customer Billing Amps Sum Row (Circuit)
Customer Billing kWH (Circuit)
Customer Billing Amps
Customer Billing Amps Summary Row
Customer Billing kWH
Customer Circuit Utilization
Zone IO Points
Zone kWH
Zone Summary

Asset Reports
Asset Management
Available Cabinet Rack Units +
Busmain Details +
Cabinet Historical Load +
Cabinet kW Trend and History +
Cabinet Row Summary +
Cabinet Summary
Cabinet Tapoff-Strip Comparison +
Circuit Utilization +
Device Failure Analysis
Device Failure Risk Analysis
Panel Detail
Panel Schedule
PDU Redundancy +
Power Consumption +
Team Circuit Overage

Infrastructure Reports
CDP Summary
CRAC Summary
Device Links
Gen Summary
Generic Devices
PDU Summary
UPS Summary
Device Utilization

Insight Reports
Device Anomaly
Device Forecast
Zone Anomaly
Zone Forecast
Metric Trend

Audit and Other Reports
Activity Log
Asset Sync Exceptions
Connection Information
Design Load Overview
Groups Summary
Points Summary
Room Notes
User Summary
DC Efficiency

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ACHIEVE ENERGY EFFICIENCY AND REDUCE COSTS WITH NLYTE ENERGY OPIMIZER

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Nlyte Energy Optimizer stands as a robust and powerful solution for organizations aiming to enhance their data center energy management and realize considerable cost savings. By offering a comprehensive suite of features, including real-time monitoring, predictive analytics, and advanced reporting, NEO empowers businesses to make well-informed decisions that help reduce energy consumption and minimize their environmental impact.

NEO's seamless integration capabilities and scalable architecture make it a crucial tool for contemporary data center management. As organizations continue to expand and evolve, NEO's adaptability ensures that it remains a valuable asset in effectively managing energy usage, optimizing infrastructure, and achieving sustainability goals across all sizes and types of data centers.

POPULAR NLYTE CONNECTORS

Nlyte for Virtualization – Connect the virtual to the physical. Automatically discover and monitor each hypervisor's virtual machines, with a single view across all physical and virtual devices. Application relationship changes are automatically updated for each hypervisor.

Nlyte Receiving – Works seamlessly with Nlyte Energy Optimizer. Simply scan and verify an asset right at goods receiving, initiating the next workflow step for accurate, well-controlled, asset lifecycle management. Get your assets added, running, and making money for you as fast as possible.

Nlyte for RFCode – RF Code Asset Manager, an RFID solution, notifies Nlyte Energy Optimizer of any device movements to keep your DCIM asset inventory up-to-date. In turn, Nlyte Energy Optimizer gives RF Code Asset Manager asset location and cabinet definitions, and other details. Your data is synchronized between the two systems.

Nlyte Software helps teams manage their hybrid infrastructure throughout their entire organization– from desktops, networks, servers, to IoT devices – across facilities, data centers, colocation, edge, and the cloud. Using Nlyte's monitoring, management, inventory, workflow, and analytics capabilities, organizations can automate how they manage their hybrid infrastructure to reduce costs, improve uptime, and ensure compliance with organizational policies.

Nlyte Software is a part of Carrier Global Corporation, the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions. For more information, visit Nlyte.com or follow Nlyte on LinkedIn.

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