PTS
DATA CENTER SOLUTIONS

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nlyte Software
ENLIGHTEN YOUR DATA CENTER

nlyte ANALYTICS

DATA SHEET

THE nlyte SOLUTION

nlyte Software is a leading provider of data center infrastructure management (DCIM) solutions. We offer the most complete, performance-based solution for DCIM, combining next generation software, proven best practices, and unsurpassed expertise in data center management. We enable intelligent capacity planning resulting in the most efficient use of power, cooling and space through the optimal placement of data center assets. The nlyte solution provides a rapid ROI by reducing data center operating expenses by up to 20% annually, reducing the time to deploy new assets by up to 50%, prolonging data center life by up to 75% and helping attain a power usage effectiveness (PUE) rating of 2.0 or less.

The nlyte suite is a cutting-edge web-based solution that provides an attractive and intuitive interface for all users. The nlyte solution has been designed to enable best practice processes. Wherever possible, steps have been automated to reduce user workload, and built-in software rules maintain data accuracy and enforce data center best practices.

The nlyte solution can automatically **Discover** IT assets, **Visualize** the physical and virtual infrastructure, **Model** the Move, Add, Change (MAC) initiatives, **Control** data center processes and personnel, **Report** on progress using integrated analytic capabilities, and **Predict** capacity resources well into the future.

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DCIM up until now has helped drive improved performance throughout the data center, and enabled the monitoring and collection of low-level data to facilitate infrastructure analysis. But leading-edge data centers have now realized that true capacity planning is not just about the placement of equipment or the management of assets, it's about understanding well in advance the cascading effects that every change will have on the environment. They also must have the insight needed to properly plan and forecast future data center capacities. This is the very essence of modern-day DCIM. As such, the next generation of DCIM solution must bring state-of-the-art analytics to the party and that is what nlyte Analytics is all about.

nlyte Analytics is a set of fully integrated business intelligence capabilities allowing data center professionals, managers and executives to quickly gain visibility into the information and key performance indicators that help optimize the critical resources of power, cooling and space leading to reduced data center operating expenses and extended data center life. Users can gain detailed visibility into the current status of the business, enabling them to track how their data center operations are performing against strategic goals and how day-to-day execution is aligned with the broader corporate strategy.

nlyte Analytics comprises of three fully integrated modules, in support of intelligent capacity planning, all based on a highly optimized business intelligence architecture utilizing best practices in data warehousing, analytics and dimensional modeling. The three modules provide business users with a variety of data visualization and manipulation options: nlyte Dashboard, nlyte Report and nlyte Predict.

nlyte Analytics Key Benefits

- Immediate availability and visibility of critical data center information
- Faster and more accurate decision making, planning and forecasting of data center capacities
- Single user-friendly view of all information sources
- Reduced time spent on reporting
- Dashboards and reports tailored to meet the needs of individual users
- Accurate measurement of data center resource usage for chargeback

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FIGURE 1. **nlyte Main Operational Dashboard**

The nlyte Main Operational Dashboard shows the asset breakdown, space utilization, power utilization, cooling utilization, network utilization, utilization to date for space, power, cooling, network connections and virtual servers, and move, add, change metrics.
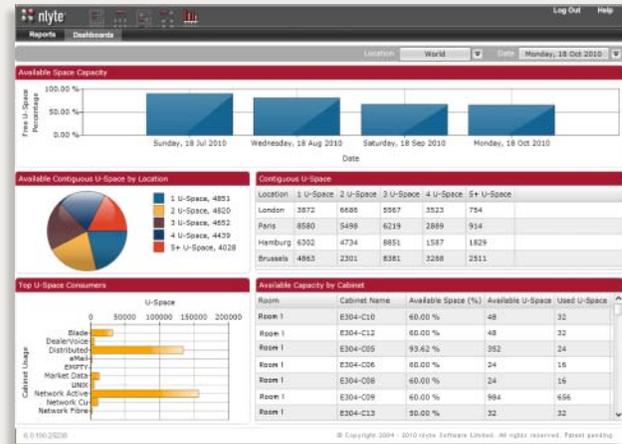

FIGURE 2. **nlyte Space Capacity Dashboard**

The nlyte Space Capacity Dashboard shows available U-space over time for the dates and location selected, average monthly decline/growth rate for the time period and contiguous U-space available.

nlyte DASHBOARD MODULE

The nlyte Dashboard makes available a number of pre-defined dashboards which, through state-of-the-art data visualization, provide senior management the critical operational metrics required to manage today's sophisticated data center facilities. Users can, for example, see a high level roll-up of capacity data for power, cooling, space and network connections across an entire data center estate, incorporating full drill-down and time-series analysis. Users also retain full flexibility to create, deploy and maintain their own dashboards using the nlyte Dashboard Manager, which provides the ability to create customized management dashboards using an easy to understand wizard-driven, drag-and-drop interface and an extensive array of data visualization components such as gauges, charts and maps.

In addition to the nlyte Main Operational Dashboard, a user can select a number of capacity dashboards, asset dashboards, and workflow dashboards.

nlyte Capacity Dashboards

• Space
• Power
• Cooling
• Network

nlyte Asset Dashboards

• Asset Inventory
• Top Power Consumers
• Asset Ownership

nlyte Workflow Dashboards

• General Workflow Operation

nlyte Dashboard Key Features

• Built-in business intelligence reporting and analytics engine
• Pre-defined and user-defined dashboards
• State-of-the-art data visualization
• High-level roll-up and full drill-down of capacity data

nlyte Dashboard Key Benefits

• Visibility into key performance indicators
• Helps optimize critical resources of power, cooling and space
• Tracks how data center operations are performing against strategic goals

FIGURE 3. Data Center Capacity Report

This report shows data center capacity including assets, heat, power, cooling, space, and network connectivity.
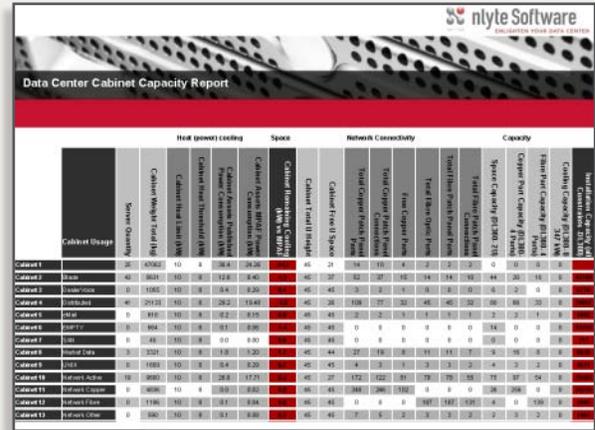

FIGURE 4. Cabinet Capacity Report

This report provides detailed information regarding cabinet weight, heat, power, cooling, space and network connectivity.

nlyte REPORT MODULE

nlyte Report provides detailed business intelligence to support daily operations, ongoing management and strategic planning. nlyte Report gathers operational data from business activities to build a growing resource of metrics. Using your preferred reporting tool, you can extract this data and present it as valuable information to help you understand and manage your data center.

nlyte Report provides a library of standard reports. These will provide you with vital support for your critical decision making:

- **Trending and forecasting reports:** nlyte Report enables you to manage assets over time; showing you how you have been using the assets in your business and predicting the effects if you continue to do so.
- **Capacity planning:** nlyte Report gives you immediate insight into the status of your resources, such as network connections, usage, cooling and space within rooms and cabinets; showing you what is in use and what is available immediately.
- **Contingency planning:** nlyte Report enables you to understand the relationships between assets and the implications of possible events; showing you dependences between devices and the knock-on-effects of device failures.

nlyte Report also provides the ability to create custom, user-defined reports

nlyte Standard Reports

- Cabinet Capacity and Utilization Reports
- Cable Reports
- Data Center Capacity and Utilization Reports
- Data Center History and Forecast Reports
- Equipment Breakdown Reports
- Inventory Reports
- Move, Add, Change Reports
- Network Usage Reports
- nlyte Quarterly Licensing Report
- PDU Reports
- Power Infrastructure Reports
- Workflow – Service Requests Reports

nlyte Report Key Features

- Built-in business intelligence reporting and analytics engine
- Pre-defined and user-defined reports
- Automatic report generation and delivery
- Real-time analytics for heat and power

nlyte Report Key Benefits

- Faster, automated report delivery
- Easy to create user-defined reports
- Quicker chargeback recovery

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FIGURE 5. nlyte Predict Analysis Screen

The nlyte Predict Module displays three bar graphs showing the starting and cumulative values for each period for area, power and cooling requirements. A line on each graph indicates the total threshold value so that you can perform capacity planning. The line graph at the bottom of the window shows the assets added or removed by cabinet usage per period. The scale on the vertical axis and the total value (displayed at the top for each period) are in terms of power, not asset instances.
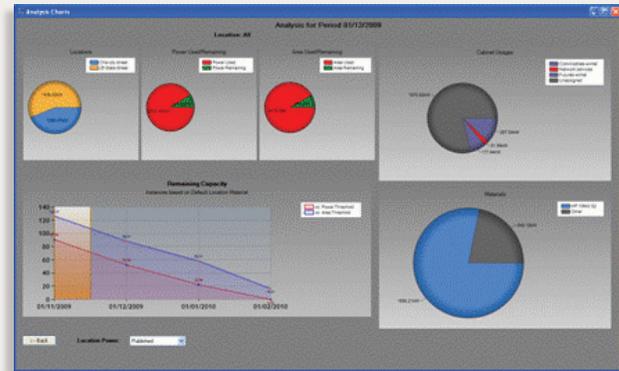

FIGURE 6. nlyte Predict Detailed Charts for a Period

The nlyte Predict Module pie charts display the following information for the period: power requirements breakdown by location, total power used/remaining, total area used/remaining, power requirements breakdown by cabinet and power requirements breakdown by material. The line graph shows the starting and cumulative requirements for assets by cabinet usage per period.

nlyte PREDICT

The nlyte Predict Module provides the ability to forecast and predict the future state of your data center's capacities based on historical data.

In a way, overspending for capacity that you don't need is worse than not having enough capacity to complete a new project. Either way, the consequences of missing the mark and not accurately projecting your data center's needs for space, cooling and power will cost you dearly. Before you start your new data center build, plan your data center migration or consolidation project, or think about swapping out old equipment for new, you need to know if your facility's capacity is up to the task. The nlyte Predict module allows you to precisely forecast your data center's capacity and analyze the impact of changes so you can plan, not react.

The nlyte Predict Module forecasts space and power based on all the free-standing and cabinet mounted assets on the data center floor and uses these assets to establish a baseline for space and power consumption. Once this baseline is established, the nlyte Predict module allows you to build forecast scenarios that predict the impact of moving equipment in and out of the data center over multiple months or years.

The nlyte Predict Module generates charts using the projected asset numbers and baseline statistics. You can view summary charts, or view charts for one cabinet usage (in all locations), one location (and all cabinet usages), or one cabinet usage in one location. The resulting charts provide a rolling forecast of data center capacity over time and can be compared to the real-time capacity reports available from the nlyte Report Module.

nlyte PREDICT KEY FEATURES

• Predicts data center capacities based on historical trends
• Analyzes the impact of future changes on data center capacity
• Graphs remaining capacity (space, power, cooling)
• Supports existing and modeled cabinet profiles

nlyte PREDICT KEY BENEFITS

• Improved capacity planning and management
• Proactive versus reactive data center management
• Accurate data center lifespan prediction