

The background of the entire page is a stylized, futuristic illustration of a data center. It features rows of server racks that recede into the distance, creating a sense of depth. The racks are illuminated with blue and green lights. Overlaid on this are numerous glowing yellow and white dots connected by thin, intersecting lines, representing a complex network or data flow. The overall color palette is dominated by deep blues and greens, with bright highlights from the lights and network nodes.

HOW SMART INTEGRATIONS ENHANCE DATA CENTER MANAGEMENT

TAKING DATA CENTER AUTOMATION TO NEW
LEVELS WITH A COMBINED FNT/ABB SOLUTION



IN THIS WHITE PAPER:

Managing a modern data center involves multiple tools, a combination of manual and automated processes that aren't always in sync, and data that isn't always available when needed. There is no "one size fits all" solution to manage all the different facets of a data center. Each department has different objectives and day-to-day needs. While IT teams are focused on asset management and capacity planning, facilities teams are focused on monitoring and controlling power, cooling, mechanical, electrical, and environmental infrastructure.

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Collaboration is Key: The Whole is Greater Than the Sum of its Parts

To achieve greater operational insight, optimize workflows, and improve data management, DCIM solutions must be able to collaborate and share data. Through smart integrations, one comprehensive data center management solution can be created to meet every data center need and solve challenges that traditional facilities and IT solutions cannot solve on their own.

Traditionally, dedicated software tools are only available for certain departments to access. This leads to more manual work and inefficiencies as teams must spend a great deal of time retrieving accurate data and sharing it with other departments.

When data is managed and documented in different tools, and within different formats, it is very difficult for IT and facilities teams to access, analyze, and extract. Data silos also make monthly reporting time-consuming and can lead to inaccuracies or duplicate information.

To reduce time spent on locating assets and improve data quality, systems should be integrated. This ensures that systems keep each other synchronized and configure themselves rather than force duplicate information. Therefore, data is generated from a single source of truth.

Business challenges:

- Collecting and correlating billing and departmental usage data
- Managing customer relationships
- Maintaining SLAs

Planning challenges:

- Minimizing downtime
- Maximizing capacities
- Planning for the future

Environmental challenges:

- Improving energy efficiency
- Reducing water usage
- Reducing greenhouse gases





Benefits of Integrating Operations Tools and Planning and Asset Management Systems

A more efficient way of keeping every team member informed of daily tasks and planned activities within other domains throughout the data center is to integrate the operations tool with a planning and asset management system. This integration eliminates manual work and provides immediate access to reliable, up-to-date information and planned changes. Let's take a closer look at how this works in day-to-day activities.

Equipment information such as owner, organization, users, and authorized contacts are typically documented in asset management tools. Through integration, this information can be made readily available to operations teams in their BMS consoles.

Now, when facility teams have to plan maintenance tasks such as performing an annual breaker check or upgrading a power feed to a larger capacity, this contact information can be used to quickly reach out to end users and customers who may be affected and let them know about the project beforehand.

When preparing to commission new equipment, planners typically struggle to find the best location within the data center. These decisions are usually based on lists, tables, and static values such as the nameplate capacity of devices in a typical variant. Advanced asset management is much more precise and will take the exact configuration of equipment into account as well as power usage values and data from monitoring. Having a precise, digital copy of the site in the tool will allow planners to make more informed decisions when placing or moving equipment.

System integrations enable all plans to be immediately available and visible to other planners and operations teams so there is consistent information about available capacities and power usage throughout the organization. Real-time insights into site capacities will enable teams to make realistic predictions for future growth based on actual planning data. This is significantly more reliable than simply forecasting future plans based on historical changes. After all, growth is not usually linear, but rather occurs in cycles or phases.



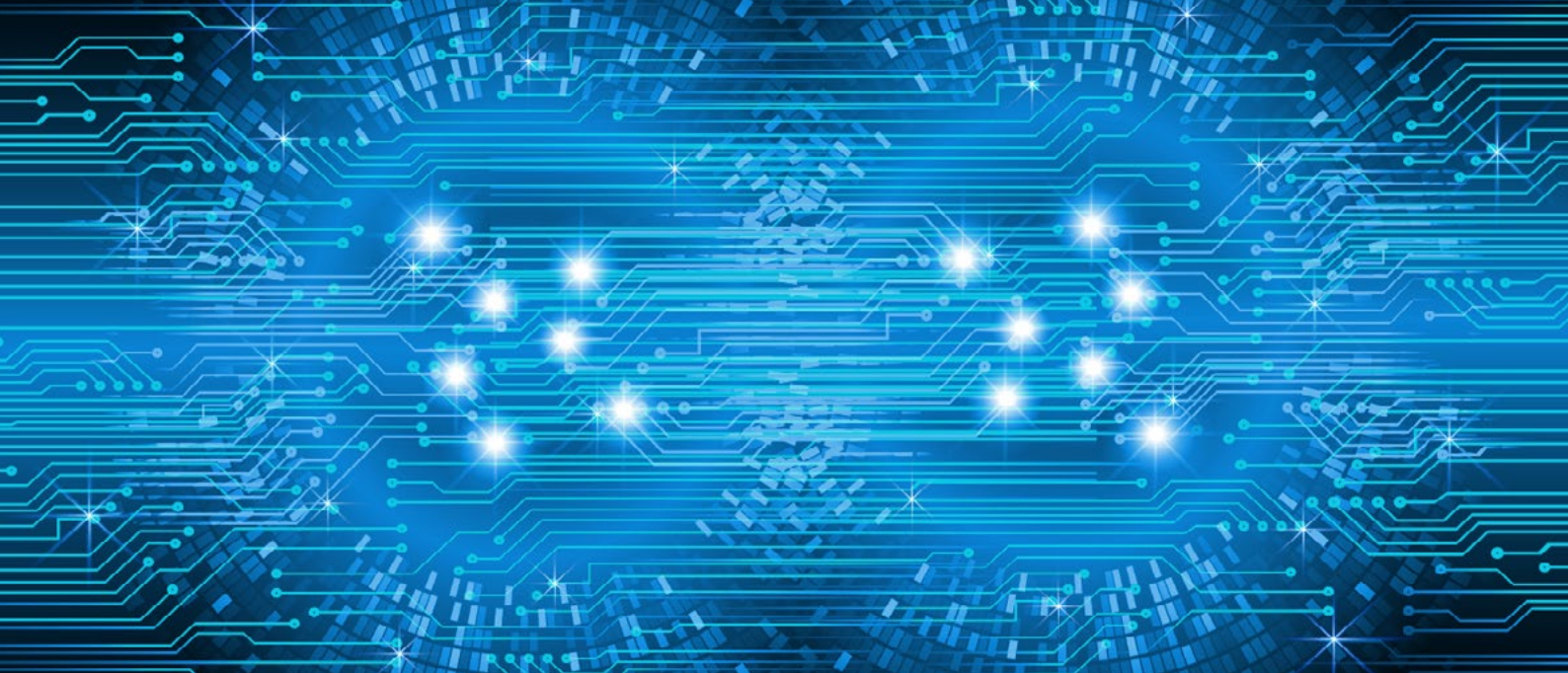
FNT Command Platform and ABB Ability™ Data Center Automation Provide an Integrated Facility and IT Operations Solution

From budget and cost pressures to capacity bottlenecks and compliance guidelines, FNT knows that data center managers face many challenges as they seek to deliver efficient and reliable IT services. As a centralized management and optimization solution, the FNT Command Platform provides greater transparency across the entire data center infrastructure – from the facility level through hardware and software to networking, power, and air conditioning. This end-to-end view enables teams to accelerate day-to-day business processes and achieve greater operational reliability.

FNT's partnership with ABB adds an additional layer of service by augmenting the FNT Command Platform documentation and planning capabilities with ABB's real-time monitoring and management of power, cooling, and other environmental factors. Data Center Automation, based on the ABB System 800xA process control platform, is ABB's industrial data center solution for monitoring, managing and controlling enterprise, co-location and cloud data centers. It collects data from IT, power, cooling and building systems, and its open environment integrates data center toolsets faster, including uploading assets into tracking tools.

ABB Ability Data Center Automation provides full visibility, decision support, and automation capabilities through an open platform supporting secure, bi-directional communications with mechanical, electrical, and IT systems. Detailed information is then integrated into the FNT Command Platform so that teams can holistically manage every aspect of the data center. Data is routed through the system in real-time to application modules that enable users to comprehensively manage and optimize the 3 Cs: cost, capacity, and control.

With FNT's 2D and 3D white space floor planning tool, inventory and operations at enterprise-, facility-, data hall-, rack-, and system-levels can be easily visualized in order to identify white space utilization (WSU) and rack space utilization (RSU) to track improvements. Through the integration, data center managers can reduce time spent locating assets and enable IT and facilities staff to collaborate to the highest degree possible. The shared data set supports capacity planning and improves space utilization to defer capital expenditures. As the systems are pre-integrated, customers can deploy the combined solution seamlessly and with minimal effort.



How the FNT and ABB Integration Adds Value

The combination of the FNT Command Platform and ABB Ability Data Center Automation provides greater insight into data center operations, enabling teams to improve their agility and productivity. Analytics make data actionable and can lead to new ways for approaching business challenges or optimizing existing processes.

For example, to make sure customers are being billed appropriately, having an accurate assessment of power consumption is necessary. A graphical representation and a tabular evaluation of individual racks in a colocation site can be compared to power data taken by ABB DCA to assess if it aligns with a tenant's contract as planned and documented in FNT Command Platform.

A similar report will work for enterprise environments if the contracted value is replaced with the planned power usage in accordance with overall capacity planning for the site, which will likely be derived from the design criteria of the data center. This will provide a clear understanding of power usage in relation to the lifecycle of the site. These values will then act as benchmarks for usage reporting and further plans.

Breaking down usage for individual racks will deliver more precise insights, particularly when this data is combined

with other evaluations. This report can also be used as the basis to optimize overall capacity usage. FNT and ABB's smart integration delivers accurate insights into the power draw of all equipment in a rack to ensure power usage is being distributed evenly and to avoid unnecessary hot spots or stranded capacities.

With granular knowledge of current power and capacity status, teams can make smarter decisions when it comes time to add new equipment such as defragmenting the environment and optimizing floor space prior to installation.

Analytics can also help data centers operate in a more environmentally conscious way. After all, being green is much more than checking power supplies and replacing old UPS systems. The right report or dashboard can help teams identify which legacy systems and servers are no longer needed and which can be replaced with more energy-efficient, modern systems.

FNT's asset management functionality feeds this insight into ABB's operations tool to make it possible for teams to evaluate efficiency by server type, age, and power usage and to determine which servers and test systems can be switched off or decommissioned.

Meeting Modern Data Center Needs

Overall, a single solution simply cannot handle the complexity of a modern data center. Integrating best-in-class tools is the key to increasing efficiency and productivity across all departments. By sharing data sets, FNT Command Platform and ABB Ability Data Center Automation

aim to reduce time spent locating assets and improve collaboration between IT and facilities staff. Together, the two DCIM systems create one comprehensive data center management solution to bridge the gap between facility operations and IT operations.



About FNT

FNT GmbH, headquartered in Ellwangen (Jagst), Germany, simplifies the management of highly complex digital infrastructures in companies and public authorities with its FNT Command Platform. With the cloud-enabled “software made in Germany”, IT, telecommunications and data center infrastructures can be efficiently recorded as digital twins and documented across all levels from buildings to digital services. The software also offers open interfaces and numerous functions for planning,

implementing and automating transformations and changes in an integrated manner. FNT’s customers include more than 500 companies and government agencies worldwide, including more than half of the DAX-40 listed corporations. FNT operates offices in several locations in Germany as well as in New York, London, Singapore and Timisoara and has an international partner system with market-leading IT service providers and system integrators.

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