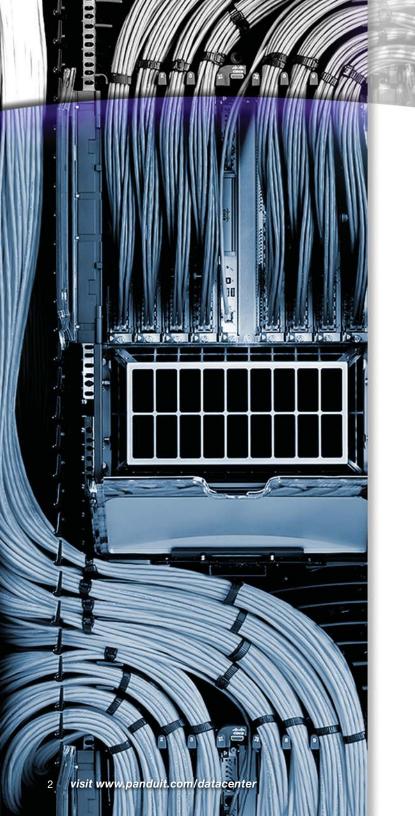


Smart Data Center Solutions

PANDUIT®

building a smarter, unified business foundation

Connect. Manage. Automate.



New Data Center Challenges Require New Solutions

Data Center Architecture. Inside and Out.

Data centers are mission-critical facilities. A silo-based approach to designing, deploying, and managing these infrastructures is becoming increasingly inadequate, as data center consolidation, virtualization technologies, and automation initiatives continue to grow more pervasive.

A unified approach to physical and logical systems architecture is imperative to pave the way for solutions that fully address the need for availability, business agility, integration and security. The introduction of progressive and innovative infrastructure solutions for data centers is necessary to enable operations flexibility, converged data applications, and greater energy and space efficiencies.

Because data centers will continue to face stringent demands, and due to the complexities of these demands on physical infrastructures, next generation architecture must address both physical and logical layers to effectively drive business advantages and overall success.

Unlock Data Center Potential

Overcome Challenges. Optimize Advantages.

Businesses depend on data and information to realize success, yet today's data centers have become far more than information processing sites. As the nerve center of successful business operations, they must evolve to accommodate a broad array of rapidly changing demands:

- Robust and diverse applications
- Multiple geographies
- Greater performance requirements
- Real-time data and services delivery
- · Rising energy costs

- Availability and flexibility
- Space limitations
- Compliance with industry standards
- Sustainability

As IT organizations embrace infrastructure consolidation and virtualization and deploy next generation architectures to improve efficiencies and systems performance, they are being confronted with significant challenges around managing power, cooling, space, speed and infrastructure performance.

To avoid these interdependent risks, a unified management system must leverage a physically mapped logical network to provide the monitoring and reporting capabilities that are crucial to efficient infrastructure diagnosis and troubleshooting. The ability to view both the physical and logical topology of an infrastructure extends real-time intelligence through both layers.

A unified approach to infrastructure architecture can also simplify asset management by enabling:

- · Managed movement of network switches, servers, applications, and resources from site to site
- Tracking of network connections, security systems, energy usage, and other important assets to identify and resolve problems before they affect general operations
- The ability to automate the collation of device, system, and administrative data across the network into a configured management database
- Real-time security integration with logical network design to speed isolation, notification, and resolution of potential security breaches





Key Benefits

- Leverage real-time information to enhance visibility, security, safety, and compliance across the enterprise
- Reduce infrastructure and systems complexities while increasing functionality and manageability of mission critical capabilities
- Achieve flexibility through deployment of a platform-agnostic, open standards-based architecture
- · Improve productivity and customer satisfaction by delivering higher levels of availability and reliability
- · Converge and optimize critical systems, leveraging and reusing existing assets/ investments for maximum ROI
- Drive tangible infrastructure efficiency and business process improvements while reducing operational costs and mitigating risk
- Create a sustainable infrastructure for securing energy efficiencies and establishing global best practices

Unified Physical Infrastructure













communication computing

control

security

Panduit's Unified Physical Infrastructure: A Guiding Vision

For a Smarter, Unified Business Foundation

The growing interdependence of systems and applications, and the increased demands that they place on physical infrastructures, requires the integration of traditionally disparate and proprietary systems. This trend is dramatically changing infrastructure design, management strategies, and effective synchronization of critical systems, opening the door for seamless convergence and interoperability of all core business systems.

Panduit provides flexible, end-to-end solutions for the physical infrastructure that drive operational efficiency and financial advantages, allowing businesses to minimize risk and heighten agility. Tailored by industry and customized by application, Panduit solutions span the core systems necessary to transform a business, from data center to facility operations, to next generation intelligent buildings.

Panduit has developed the industry's most comprehensive and holistic approach to a Unified Physical Infrastructure and can help enterprises align, converge, and optimize critical systems - communication, computing, control, power, and security - to build a smarter, unified business foundation.

This approach enables the use of an open standards-based architecture and is designed to deliver tangible infrastructure and business process improvements for increased functionality, interoperability, and manageability of mission critical operations across the enterprise.



Empowering the Data Center as a Unified Physical Infrastructure

Minimize Risk. Maximize Performance.

Panduit understands today's vital business and technology challenges and how they impact data centers. Panduit's Smart Data Center Solutions embody the next wave of systems integration and risk management by aligning and harmonizing critical systems to support the delivery of secure, energy-efficient, always-on-real-time data and services.

Driven by the industry's most comprehensive approach to physical infrastructure unification, Panduit can help manage integration of key elements with solutions that enable systems consolidation and network convergence, reducing the risks associated with availability, interoperability and security. Panduit combines best practice methodologies, physical and logical architectures, end-to-end support, and a comprehensive portfolio of solutions to deliver robust, scalable physical infrastructure that facilitates the deployment of technologies to meet current and future requirements:

- Visibility and control for managing and automating real-time data processes and documentation
- Monitoring and measurement of data center infrastructure power consumption and environmental conditions within racks and cabinets to optimize performance
- Convergence of new technologies and high speed data applications
- Enhanced reliability and security of the physical layers of the infrastructure
- Operational efficiency through process improvement and green IT initiatives (such as cooling conservation through green data cabinets)
- Identification of available space, as well as power and temperature capacity around that space, to maximize real estate utilization

Unified Physical Infrastructure







Connect. Manage. Automate.

Part of Panduit's End-To-End Smart Data Center Solutions

Based on the principles of a Unified Physical InfrastructureSM approach, Panduit is the industry's leading supplier of complete end-to-end solutions for evolving data centers.

Data Center Advisory Services – Offering expertise to provide a reliable and scalable physical infrastructure that delivers operational flexibility to reduce costs, improve scalability, and meet future requirements by laying a strong foundation for migration to next generation solutions, mitigating risks surrounding consolidation and virtualization, and achieving greater energy and real-estate efficiency.

Software and Intelligent Hardware Appliances – Complete data center infrastructure management (DCIM) through monitoring of and management of critical physical layer resources, power usage, asset tracking and utilization, available space for expansion, and connectivity monitoring.

Integrated and Energy Efficient Data Center Cabinets – Cooling conservation for greater thermal management and energy efficiency (such as green data cabinets), as well as modular designs that provide accessibility, flexibility, and effective space utilization.

High Speed Data Transport (HSDT) Copper and Fiber Cabling Systems – Offering ease of deployment and proven performance to ensure availability, reliability and scalability of mission critical systems.

Physical Infrastructure Foundation – Which includes all critical systems, such as zone cabling, routing, grounding, labeling and identification and more, that support a smart data center and ensure reliability, agility, and security to drive business advantages and overall success.



The Panduit Difference

The Knowledge and Support Behind our Smart Data Center Solutions

Panduit's Smart Data Center Solutions are designed from years of ongoing research, development, and first-hand customer problem solving. These solutions meet or surpass rigorous quality management standards to assure compliance with industry standards and requirements. More importantly, they help our customers realize advantages in business performance, continuity, and green IT initiatives.

This experience is at the heart of Panduit's Data Center Advisory Services group, who supports Smart Data Center Solutions with first-hand expertise in harnessing and optimizing the physical infrastructure. Through assessment, analysis, design, and deployment of a cost-effective physical infrastructure, Data Center Advisory Services helps enterprises to prepare for virtualization or automation initiatives, create greater sustainability and operational efficiencies, or to improve overall network performance.

One of the toolsets used by Panduit to deploy these highly optimized data centers is a library of documents that provide guidance and a general framework around the integration of specific technology deployments within the data center to align the physical infrastructure to the logical systems infrastructure. These reference architectures, design, and application notes, which, together, create a library of solutions, demonstrate implementations that drive consistency in planning, increase confidence, and shorten decision cycles.

When combined with Panduit's robust ecosystem of partners, who offer joint development and delivery of flexible, proven, interoperable physical and application layer solutions for our mutual customers, Panduit Smart Data Center Solutions offer more than a "system" of discrete components. They provide an integrated and comprehensive "solution" for smart organizations looking to drive operational efficiencies and financial advantages from their data center.





Real-World Solutions to Ensure the Success of Our Customers

With a proven reputation for excellence and technology innovation, a robust ecosystem of global partners, and long-term alliances with top industry leaders, Panduit is a valuable, trusted partner offering strategic vision and real-world solutions to ensure the success of our customers.



Innovative Technology Leadership

Panduit is an industry leader in developing innovative technology solutions that meet the rapidly evolving needs of our customers around the world. Our commitment to continued leadership is supported by significant ongoing investment, dedicated manufacturing facilities, strategic technology alliances, and collaborative R&D with other industry leaders.



Global Business & Commitment

Panduit's ongoing commitment to excellence and our technology alliances with key industry leaders such as Cisco Systems, EMC, Emerson, IBM, etc., enables our highly skilled and knowledgeable global sales, systems engineering, and technical support teams to engage with critical customer challenges that range from initial problem determination all the way to resolution. Local specialists, trained to global standards and competencies, provide consistent regional support that brings value to local business. Our global value chain, which combines manufacturing, distribution, and service, provides prompt responses to customer-related issues, and streamlines procurement and delivery to any global destination.



Best-in-Class Partner Ecosystem

Panduit employs a consultative approach to identify customer needs and engage appropriate partners in a collaborative fashion to serve our customers. Panduit's robust ecosystem of architects, consultants, engineers, designers, systems integrators, contractors, and distributors offer a full portfolio of lifecycle services. Our partners are trained on relevant services to Plan & Design, Build & Deploy, and Maintain & Operate to deliver predictable and measurable results.



Worldwide Alliances

Panduit has established long-term strategic alliances with top global industry leaders such as Cisco Systems, EMC, HP, IBM, Liebert, and Rockwell Automation to develop and integrate innovative, holistic solutions for our customers. We continually invest in relationships and resources for solving our customers' greatest business challenges.



Eco-Sustainability & Global Citizenship

With a long-standing commitment to environmental excellence, Panduit continually develops and implements solutions designed to protect, replenish, and restore the world in which we live and operate. This commitment is demonstrated by Panduit's LEED-certified new world headquarters and future green building plans using its own revolutionary Unified Physical InfrastructureSM vision to enable convergence of critical systems for driving sustainability.

