Physical Infrastructure Management Solutions

PANDUIT®

building a smarter,
unified business foundation

Connect. Manage. Automate.

Physical Infrastructure Challenges Require Innovative Solutions

The Need for In-Depth Network Intelligence.

With increased acceptance of virtualization, cloud computing, Web 2.0, and Software as Service, comprehensive physical infrastructure management is becoming more important today and will increase in importance going forward. As technologies continue to advance, system-wide consolidation and convergence of under utilized assets helps to improve efficiencies and conserve scarce resources in the data center and throughout the building. Additional factors that are driving the need for advanced physical to logical systems visibility include power, cooling, and space challenges which impact provisioning, uptime, and costs. Faster identification and resolution of network problems and security threats is then essential to achieving optimal availability and agility in the data center and managing business risk.

Maintaining network security has traditionally meant restricting points of network access (both wired and wireless) and protecting the network infrastructure from data corruption, viruses or physical damage. Additionally, new industry standards, requirements and regulations are forcing organizations to improve strategies for safer and more secure transmission of sensitive data and information. All while user access to mission critical applications must remain uninterrupted.

Because enterprises will continue to face these and other stringent demands, and due to the complexities of these demands on network infrastructures, a unified approach to physical and logical systems architecture is imperative to pave the way for innovative solutions that address requirements for reduced risk, lower costs, increased agility, and enhanced sustainability.

Enhance Your Physical Infrastructure

Overcome Challenges. Optimize Resources.

Enterprises have the opportunity to transform their infrastructures into more valuable assets by addressing a range of rapidly changing needs:

- Real-time data and service delivery
- System agility/responsiveness
- Space limitations
- Flexibility of operations
- Greater performance requirements
- Enhanced systems security
- Sustainability

As consolidation and convergence continue at rapid rates, the potential for business risk increases proportionately. For example, underutilized server and switch ports can reduce the effectiveness of consolidation, which in turn results in protracted return on investment and increases total cost of operation.

To help avoid these interdependent risks, a unified management system must leverage an integrated physical-logical network to provide the monitoring and reporting capabilities that are crucial to timely diagnosis and troubleshooting of infrastructure problems. 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 also offers enterprises distinct business advantages:

- Greater visibility, tracking and control of critical systems that identify, report and monitor capabilities allows users to react to problems before they affect enterprises
- A flexible, scalable system that has the capacity to expand as business needs increase and accommodate changing user needs, from mobility services to environmental controls
- Managed movement of network devices, servers and resources from site to site
- Optimized installation of disparate network cabling, which results in reduced initial deployment time and ongoing maintenance costs
- Physical to logical mapping through integration with existing network management systems enhances manageability

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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 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   power   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 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 a service-oriented architecture framework and is designed to deliver tangible infrastructure and business process improvements for increased functionality, interoperability and manageability of mission critical operations across the enterprise.

Empower Your Enterprise With Physical Layer Intelligence

Panduit's Physical Infrastructure Management System

As converging data center and building systems technologies continue to evolve and become more complex, so too are the demands that they place on physical infrastructures. Today's networks are the backbone of organizations, automating business operations and processes to provide security and deliver greater service to customers. Data centers must be able to support these requirements, as well as other current needs including reliable, high speed data transport, greater energy efficiencies and space optimization.

Driven by the industry's most comprehensive approach to physical infrastructure unification, Panduit helps manage the integration of key elements with solutions that enable systems consolidation and network convergence, reducing the risks associated with availability, interoperability and security.

Panduit's unique and robust Physical Infrastructure Management System combines industry leading software and intelligent hardware to empower enterprises to meet current and future requirements for:

Convergence: With built-in resources that visually monitor, map and automate network tasks, maintaining control of converging systems and applications has become much easier to manage. Web-based accessibility further enables control of all network and enterprise systems from anywhere in the world, at anytime.

Security and Reliability: Real-time monitoring of patch field connectivity speeds alerts of changes or security risks to administrators. This can also facilitate multiple notifications to other management systems via email or pager.

Efficiency: Scalability and modularity of systems enable cost-effective growth as business and market needs continue to change. Greater operational efficiencies of existing resources are achieved through process improvement and resource management, including the reduction of mean time to repair.

Asset Management: Effective asset utilization and capacity management reduce network operating costs, as well as reducing overall installation, configuration and maintenance expenses.

Unified Physical Infrastructure

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An Intelligent,
Integrated Physical Layer Management Solution

As the number of enterprise network devices continues to grow, infrastructure cabling in data centers and telecommunications rooms is becoming denser and more complex. A single patch cord disconnection can bring down critical segments of a network, allowing a potential security breach or severely impacting network efficiency.

Panduit's PanView iQ (PViQ™) System, which seamlessly feeds information directly into the Physical Infrastructure Manager (PIM™) Software Platform, provides continuous real-time patch field monitoring and visibility of physical layer connectivity, for enhanced system reliability and security. Information can be accessed on-site or remotely through a web-based interface and also has the capability to guide technicians through moves, adds and changes for greater efficiency and cost-savings.

With a unique hardware design, Panduit's PanView iQ™ System allows intelligent modules to be installed on the back of patch panels, eliminating the need for additional rack space and permitting phased installations. The system offers further flexibility, as the intelligence can be applied to both interconnect and cross-connect architectures.

As Panduit continues to address complex challenges beyond connectivity, future PIM™ Software Platform capabilities will capture other critical physical infrastructure data points, such as power, cooling, and space for improved management and performance. It is through this commitment to innovation that Panduit delivers value-added solutions that make the infrastructure more relevant to the business.

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Panduit's Physical Infrastructure Management System

Maximize Performance. Reduce Risk.

Panduit's Physical Infrastructure Manager (PIM™) Software Platform brings visibility and control to monitoring, managing and automating network tasks through intelligent asset identification and tracking to the physical layer through:

- Real-time information on patch field connectivity status
- The capability to facilitate planning, implementation and documentation of connectivity moves, adds and changes (MACs)
- The ability to monitor and alert administrators of patch field changes and potential security risks
- Greater access to networks from geographically dispersed and remote locations via a web-based system
- Virtual mapping to logical devices to enable more comprehensive asset tracking
- Efficient capacity planning

Increase Reliability

- Minimize downtime through the identification of failed connections, thereby allowing more rapid isolation, notification and restoration
- Facilitate faster record retrieval and network configuration
- Increase the accuracy of work orders to reduce the risk of mistakes and improve the speed of execution
- Simplify field installations, upgrades and maintenance
- Tailor solutions that leverage existing equipment and resources

Lower Costs

- Provide scalability through a modular system that offers cost-effective growth as business needs evolve
- Lower installation, configuration and maintenance costs/time that result in lower total cost of operation
- Provide automated reporting that reduces overall operational costs
- Deploy a more effective network management tool and access to vital information that optimizes the use of IT resources
- Reduce network operating costs through guided, end-to-end MACs

Physical Infrastructure Management System Components

Connect. Manage. Automate.

Physical Infrastructure Manager (PIM™) Software Platform

Operates with PanView iQ™ System Hardware to map physical layer and network resources and deliver automated, accurate documentation for improved asset management and greater network visibility.

PIM™ Software – Ensures integrity throughout the enterprise, while providing asset and work order management, real-time change notifications, and remote and on-site accessibility to network systems for enhanced visibility and control.

The completely integrated PIM™ Platform:

- Offers vital access to real-time network information anytime, from anywhere in the world
- Provides auditable event logs that help to comply with industry regulations
- Provides a scalable system to meet future demands
- Lowers installation, configuration and maintenance costs
- Increases network reliability and performance
- Reduces downtime and total cost of ownership

PanView iQ (PViQ™) System Hardware

PanView iQ™ Intelligent Modules – Two module types that can sense connections and/or disconnections from each port and relay status information back to the PIM™ Platform database. The PViQ™ Panel Manager consolidates patch field scanning and management functions into a single, removable module. It contains an embedded web interface for remote management and access to connectivity information. The PViQ™ Expansion Module cost-effectively expands the scanning and management capabilities of the panel manager to additional patch panels.

PanView iQ™ Patch Panels – PViQ™ Patch Panels have been developed with functionality, scalability and consideration for rack space. The innovative patch panel design provides opportunities for phased installations that allow an organization to install passive connectivity now and upgrade to a fully managed system at a later time. Available in flat and angled solutions for UTP and STP copper connectivity, as well as tray-based configurations for fiber connectivity.

PanView iQ™ Copper and Fiber Patch Cords (Interconnect and Cross-connect) – Interconnect patch cords that support connectivity from non-PViQ™ enabled ports (switches, servers, etc.) to a PViQ™ Panel and are offered in basic and enhanced versions. The enhanced version improves accuracy of patching and tracing through LEDs integrated directly into the patch cord plug. Cross-connect patch cords manage and map the patch field between two PViQ™ Patch Panels.

The Panduit Difference

Realize Benefits Across the Enterprise.

Panduit provides the ability to align the physical infrastructure to the logical systems infrastructure by creating reference architectures that are mapped to industry-wide best practices.

All of Panduit's solutions meet or surpass rigorous quality management standards to assure compliance with industry requirements. Our unique, robust partner ecosystem combined with our lifecycle services offers innovative modeling, predictable execution and operational excellence.

As the only vendor in the industry with a fully integrated physical infrastructure solution portfolio, Panduit enables enterprises to Connect, Manage and Automate all communication, computing, control, power and security systems. This comprehensive approach to infrastructure design, deployment and management allows benefits to be realized across the entire enterprise.

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 Infrastructure℠ vision to enable convergence of critical systems for driving sustainability.