Solutions for Networked Enterprises
Enterprise Networks

Today's enterprise spaces rely on a wide variety of IP-enabled systems that improve operational efficiencies and employee productivity, while reducing facility operating costs. Security, safety, lighting, environmental controls, audio/video, and other systems are now common in the enterprise, and a robust network that provides reliable, long-lasting performance is the foundation for these systems.

Panduit's comprehensive enterprise solution delivers best-in-class network performance with superior quality, operational efficiency and easy installation. For 60 years, Panduit has been the partner that businesses trust to provide the reliability and performance that enterprise systems demand.

Long recognized as the leader in network infrastructure, Panduit can help your organization optimize your network infrastructure to best support the technologies that effectively manage your enterprise space.

Panduit simplifies the design, installation, and operation of the enterprise network, with a comprehensive portfolio of products that provide a best-in-class networking solution.

- Copper Cabling Systems
- Fiber Cabling Systems
- Pre-Terminated Copper and Fiber Solutions
- Cabinets, Racks, and Cable Management
- Zone Enclosure Systems
- Cable Routing Systems
- Power and Grounding Systems

- DCIM Software and Hardware
- Surface Raceway Systems
- Labeling and Identification
- Faceplates and Modular Furniture Outlets
- Wire Management Systems
- Physical Security Systems
Networked – Work Area and Conference Rooms
Panduit delivers seamless modular outlet products to bridge work area computing/communication devices with the IP network. Aesthetically-pleasing surface raceway and cable routing systems provide maximum flexibility for routing, protection, and concealment of high performance cabling systems ........................................ pages 4 - 7

Networked – Zone Architecture
Panduit leads the industry with a complete line of zone cabling products for open office architecture applications, telecommunication enclosures, and network integration of building automation systems ........................................ pages 8 - 9

Networked – Telecommunication Room
Panduit offers the most comprehensive systems for copper and fiber cabling, racks and cable management, overhead cable trays, structural grounding, and asset identification ........................................ pages 10 - 11

Networked – Building Data Center
Panduit helps customers manage the convergence of voice, data, and video communication systems as well as power, computing, control, and security systems within an enterprise data center ........................................ pages 12 - 13

Networked – Operations Center
Panduit enables organizations to have a secure, robust, and reliable network infrastructure to support their enterprise network, building security, and facility operation center ........................................ pages 14 - 15

Networked – Entrance Facility
Panduit offers wall mount enclosures, bonding and grounding systems, fiber optic connection devices, and robust label identification products to ensure a reliable telecommunication network between public and private network service connections and campus-wide backbone connections ........................................ page 16

Networked – Backbone Cabling Systems
Panduit features 10 Gigabit/second multimode fiber optic distribution cabling, and Category 6A twisted pair copper cabling, as well as cable routing systems and J-Pro™ supports for routing and protecting the cable system ........................................ page 17

Networked – Central Plant
Panduit provides enterprise reliability and performance with grounding systems that offer safety and reliability. Building Automation System Enclosures integrate enterprise communications and building automation ........................................ pages 18 - 19
Copper Cabling Systems

Complete end-to-end Category 6A, 6, and 5e solutions (modular jacks, patch cords, cables, couplers) are designed to support enterprise technologies, including Voice over IP, HD video, Power over Ethernet, and desktop virtualization.

Mini-Com® Outlet Systems

Comprehensive selection of faceplates, surface mount boxes, modular furniture faceplates, and audio/video modules that is easily installed and provides an aesthetically pleasing solution that complements today’s workplace environment.

PanWay® Raceway Systems

Surface raceway products provide maximum flexibility for routing, protecting, and concealing high performance copper, voice, video, fiber-optic, and electrical wiring within any enterprise environment. Products are tamper resistant, offering increased safety benefits, discouraging unauthorized access, and protecting sensitive cabling from accidental damage and physical contact with electrical wiring.

PanZone® Zone Cabling Systems

Zone enclosures (in-ceiling, underfloor, raised floor, building automation systems, and wall mount consolidation points) serve as a main distribution point for open office architecture applications, wireless deployments, and network integration of building automation systems.

PanZone® Work Area Consolidation Point Enclosure

Serves as a consolidation point for telecommunication and computing devices, phones, computers, printers, and connected building devices, without requiring access to the telecommunication room.
Flexible and Fast to Meet Ever-Changing Business Needs

Today’s enterprise IP networks need to support voice, data, and video in a converged media as well as enable an open, engaging, and collaborative work environment. Furthermore, enterprise IP networks must be flexible and robust to support changes in the business market and future enterprise growth. Panduit Enterprise Networks are uniquely designed to deliver maximum network performance while being flexible, scalable, and modular to expand quickly as business needs evolve. Panduit Enterprise Networks also provide superior functionality, clear and precise identification, increased connectivity density, and improved network security to facilitate higher workplace productivity and satisfaction.

Mini-Com® MuTOA Outlet Box

Work area outlet products provide a broad range of solutions that are easily installed and offer absolute modularity. All products provide an aesthetically pleasing solution that will complement all types of work areas (office, schools, factories, etc.).

Identification and Labeling Systems

Comprehensive line of labeling systems and printers, each designed to fit a specific need, allowing you to create custom markers quickly and economically.

Copper and Fiber Blockout Devices

These devices snap into jack modules, either copper or fiber SC/LC and block unauthorized network access. Blockout devices are released with the tool, ensuring the safety and security of the network infrastructure and saving time and money associated with network downtime, data security breaches, infrastructure repair, and hardware theft.

Copper and Fiber Lock-In Devices

Network accessories block unauthorized access to existing network infrastructure. These devices are compatible with most existing copper or fiber LC patch cords, IP cameras, and other IP devices. Also compatible with VoIP phones and help prevent unauthorized tampering with connectivity to ensure E911 continuity.

USB Blockout Devices

These devices plug into either Type A or Type B USB ports, keeping them secure and reducing the risk of unauthorized access. Versions available that can be removed with a tool, or for permanent installation.

StrongHold™ Supports

Supports and fasteners manage and route cables in a variety of applications. Designed to provide bend radius control that helps prevent degradation of cable performance.

Representative offering only, visit www.panduit.com/enterprisenetworks
Networked – Conference Rooms

Mini-Com® Audio/Video Systems
Complete product line of audio/video modules (F-type, 50 Ohm BNC Coax, RCA, S-Video, 5-Way Binding Post, 3.5 mm Stereo), and RCA and D-Subminiature inserts to support multimedia and streaming video applications.

HDMI (High Definition Multimedia Interface) Coupler Modules
Coupler module that delivers audio and video signals in digital format, and is compatible with Panduit outlet modular products.

USB Coupler Modules
Coupler module that interfaces with data transmissions between devices such as scanners, digital cameras, printers and computers. Supports cable lengths up to 16 feet between devices and is compatible with Panduit outlet modular products.

StrongHold™ Supports and Fasteners
Supports and fasteners manage and route cables in a variety of applications. Designed to provide bend radius control that helps prevent degradation of cable performance.

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Collaborative and Mobile Work Environment to Accelerate Productivity

Successful office environments utilize conference rooms to foster face-to-face meetings, visual interaction, creativity, and engagement to increase employee innovation and productivity. Today’s conference rooms also utilize video conferencing technology to reduce travel and energy expenses, and improve employee work/life balance. Panduit Enterprise Networks offer a comprehensive product set of audio/video modules, HDMI coupler modules, and USB coupler modules to support all multimedia applications.

**Mini-Com® Outlet Systems**

Comprehensive selection of faceplates, surface mount boxes, and modular furniture faceplates that are easily installed and offer complete functionality and modularity. All products provide an aesthetically pleasing solution that complement today’s workplace environment.

**PanWay® Raceway Systems**

Surface raceway products provide maximum flexibility for routing, protecting, and concealing high performance copper, voice, video, fiber-optic, and electrical wiring within any enterprise environment. Products are tamper-resistant, offering increased safety benefits, discouraging unauthorized access, and protecting sensitive cabling from accidental damage and physical contact with electrical wiring.

**Identification and Labeling Systems**

Comprehensive line of labeling systems and printers, each designed to fit a specific need, allowing you to create custom markers quickly and economically. Identification solutions include computer printable labels and supplies, software, and a wide range of printers, including hand-held/portal printers and desktop printers.

**Abrasion Protection**

Abrasion protection products provide an economical and easy way to insulate, protect, harness, and identify electrical and electronic components and cable.

*Representative offering only, visit [www.panduit.com/enterprisenetworks](http://www.panduit.com/enterprisenetworks)*
Networked – Zone Architecture

PanZone® Work Area Consolidation Point Enclosure

Serves as a consolidation point for telecommunication and computing devices (phones, computers, and printers) and connected building devices, without requiring access to the telecommunication room.

PanZone® Active Wall Mount Enclosures

Enclosures are wall mountable, tamper-resistant, and exceed UL enclosure standards. Enclosures support flexible zone cabling solutions, and are designed to house patch panels, building automation devices, switches, hubs, routers, and UPSs.

PanZone® In-Ceiling Enclosures

Enclosures are available in active and passive versions to accommodate a full range of equipment with secure and accessible network connections. Enclosures are capable of accommodating network switches and UPSs. Constructed from lightweight aluminum for increased strength and easy installation.

PanZone® Underfloor Consolidation Point Box

24-port aluminum underfloor consolidation point box for use with MiniCom® Copper and Fiber Systems includes faceplate labels and preprinted numbered labels with writable surface for the inside cover.

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Scalable Architectures to Enhance Business Agility

Facility and IT network teams are being challenged to build-up or remodel their enterprise buildings to provide an innovative and satisfying office environment, while still having the vision to allow for future business growth, enable new connected devices, and conserve limited resources. Panduit Enterprise Networks are designed to promote open and flexible network infrastructure architectures, employing zone cabling solutions to facilitate future expansion and the deployment of new intelligent network and building automation solutions. PanZone® Zone Cabling Systems also expand architecture options to allow customers to design the network’s physical infrastructure to match their unique business requirements.

Fiber QuickNet™ Systems
An end-to-end pre-terminated, factory-tested fiber cabling system with cassette and trunk cable assemblies, offers maximum deployment flexibility in enclosures or patch panels. Fiber cabling components utilize SC, LC, or MTP multi-fiber array connectors for high-density, consistent performance, and high reliability.

Copper QuickNet™ Systems
An end-to-end pre-terminated, factory-tested copper cabling system assures quick “plug-in” network deployment and consistent performance while minimizing rework and scrap. System is engineered for maximum design flexibility and offers 100% factory tested cable assemblies in custom lengths and configurations.

StrongHold™ Supports and Fasteners
StrongHold™ Cable Accessories are designed to work as a system to route, manage, and support communication cables, to reduce time and cost associated with cable management practices.

PanZone® Wall Mount Cabinet
The wall mount cabinet is a zone cabling system for connecting up to 96 users in applications where a telecommunication room is not available or when security is a concern. It is capable of managing 12 rack units of active and passive networking equipment plus two additional rack units for power strips and small electronic devices, such as modems and routers.

Representative offering only, visit www.panduit.com/enterprisenetworks
**Fiber Optic Cable Systems**

Complete end-to-end singlemode and multimode fiber optic solutions (cable, connectors, adapter modules, adapter panels, cassettes, patch cords, cable assemblies) that meet today's 10 Gb/s requirements.

**Fiber Enclosures**

Fiber Enclosures provide a flexible system suitable for managing fiber terminations, connections, and patching in all types of applications. Integral cable management, bend radius control, and slack management features protect fiber optic cables, patch cords, and connectors ensuring end-to-end signal integrity for increased network reliability.

**Passive Optical LAN Solution**

Delivers converged IP voice, video, data, and building automation at gigabit speeds, to multiple devices via a single strand of singlemode fiber.

**Wyr-Grid® Overhead Cable Tray System**

Designed to route and manage copper data cables, fiber optic cables, or power cables. Innovative features provide quick, easy assembly for reduced installation costs and faster deployment.

**Copper Cabling System**

Complete end-to-end Category 6A, 6 and 5e solutions (modular jacks, patch cords, cables, couplers) that meet the most demanding high-speed and bandwidth-demanding data and telecommunication applications.
Advanced Network, Building Automation, and Asset Management

The telecommunication room is a vital point of aggregation of enterprise network and building control systems. The telecommunication room is designed to build flexibility and scalability into the enterprise network infrastructure and to allow for future business growth. Panduit enterprise network products are designed to maximize real estate utilization, thermal management, network security, asset management, and network uptime.

2 and 4 Post Open Equipment Racks

Comprehensive product offering to address cable management challenges, enhanced network reliability, and optimized space utilization. The foundation of the telecommunication room, racks support infrastructure cabling and equipment.

StructuredGround™ Grounding System

Grounding system provides a high quality, visually verifiable, and dedicated grounding path to maintain system performance, improve network reliability, and protect network equipment and personnel. Highest reliability is ensured; this grounding system meets all applicable grounding and bonding industry standards.

Identification and Labeling System

Comprehensive line of labeling systems and printers, each designed to fit a specific need, allowing you to create custom markers quickly and economically. Identification solutions include computer printable labels and supplies, software, and a wide range of printers including hand-held/portable printers and desktop printers.

TakTy® Hook & Loop Cable Ties

Comprehensive line of cable ties in a wide range of sizes, styles for fastening, bundling, clamping, and identifying a variety of network applications facilitating frequent moves, adds, and changes.

SmartZone™ Software

The SmartZone™ Software Suite enables complete network infrastructure management. Working with PanView iQ™ (PVIQ™) System Hardware, and select third-party devices, the SmartZone™ Software Suite provides continuous, local, and remote visibility of connectivity, power usage, asset tracking and utilization, and environmental conditions within a telecommunication room in real-time.

PatchRunner™ Cable Management

Cable management rack system manages high density network equipment and patch panels in up to half the number of racks required by traditional cable management systems. Modular design and compatibility with all Panduit networking products for a comprehensive and aesthetically pleasing infrastructure solution with the flexibility to facilitate system upgrades.

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Networked – Building Data Center

Net-Access™ Cabinets, Racks, and Cable Management

Comprehensive product offering to address power, cooling, space, and cable management challenges, enabling reduced energy consumption, enhanced network reliability, and optimized space utilization. Cable management rack system manages high density network equipment and patch panels in up to half the number of racks required by traditional cable management systems.

Fiber QuickNet™ System

An end-to-end pre-terminated, factory-tested fiber cabling system with cassette and trunk cable assemblies offers maximum deployment flexibility in enclosures or patch panels. Fiber cabling components utilize SC, LC, and/or MTP®/MPO multi-fiber array connectors for high-density, consistent performance, and high reliability.

Fiber Enclosures

Fiber enclosures provide a flexible system suitable for managing fiber terminations, connections, and patching in all types of applications. Integral cable management, bend radius control, and slack management features protect fiber optic cables, patch cords, and connectors ensuring end-to-end signal integrity for increased network reliability.

FiberRunner® Routing System

Routing systems consist of channels, fittings, and brackets designed to segregate, route, and protect fiber optic and high performance copper cabling. Used to route cables from distribution areas to equipment cabinets or racks.

Copper QuickNet™ System

An end-to-end pre-terminated, factory-tested copper cabling system assures quick “plug-in” network deployment and consistent performance while minimizing rework and scrap. System is engineered for maximum design flexibility and offers 100% factory tested cable assemblies in custom lengths and configurations.

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Reducing Operational Risk to Mission-Critical Business Applications

The enterprise network delivers mission-critical voice, data, video, building automation, and security applications to meet a wide range of operational and functional requirements. The data center is a secure and environmentally controlled area used to manage and store disparate network, security and building information. Panduit enterprise networks integrate physical and logical architectures within a building data center to provide interoperability, increased performance, security and a clear migration path for future 40 Gb/s and 100 Gb/s applications.

SmartZone™ Software PanView iQ™ (PVIQ™) System Hardware

The SmartZone™ Software Suite enables complete network infrastructure management. Working with PanView iQ™ (PVIQ™) System Hardware, and select third-party devices, the SmartZone™ Software Suite provides continuous, local, and remote visibility of connectivity, power usage, asset tracking and utilization, and environmental conditions within a data center in real-time.

Rack Power Distribution Units (PDUs)

Rack PDUs safely and efficiently manage and distribute power to allow multiple pieces of equipment to share a single power connector to enhance scalability of network build outs. Built-in power meters and circuit breakers provide the critical power information and protection for improved network reliability.

PanZone® Raised Floor Enclosures

Enclosures are an ideal raised floor data center solution as a consolidation point for server arrays, or network storage arrays. The raised floor enclosure saves valuable real estate on the rack or cabinet by providing space below the raised floor for patching.

StructuredGround™ Grounding System

Grounding system for data centers provides a high quality, visually verifiable, and dedicated grounding path to maintain system performance, improve network reliability, and protect network equipment and personnel. Highest reliability is ensured; this grounding system meets all applicable grounding and bonding industry standards.

Representative offering only, visit www.panduit.com/enterprisenetworks
Networked – Operations Center

SmartZone™ Software PanView iQ™ (PVIQ™) System Hardware

SmartZone™ Software enables complete network infrastructure management. Working with PanView iQ™ (PVIQ™) System Hardware, and select third-party devices, the SmartZone™ Software provides continuous, local, and remote visibility of connectivity, power usage, asset tracking and utilization, and environmental conditions within a operational center in real-time.

Copper and Fiber Keyed Connectivity

Keyed copper and fiber cabling systems allow the design of secure, modular, end-to-end connectivity for communication and computing elements within an operation control center. The keyed functionality increases network security integrity by providing positive and negative keying features that distinguish network connections mechanically. Keyed connectivity offers network security in the work area as well as the operations center to facilitate higher workplace productivity and satisfaction.

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Improving Information Management for Better Decision Making

Today’s enterprise organizations utilize operation centers as a central area to monitor, process, and respond to building security, environmental, asset, and network information. Panduit enterprise networks enhance information security measures at the physical layer by deterring unauthorized network access and physical system changes. Panduit enterprise networks also allow for information to be shared across various applications and offer a secure, robust, and reliable physical infrastructure to support facility operational center requirements.

Mini-Com® Audio/Video Systems
Complete product line of audio/video modules (F-type, 50 Ohm BNC Coax, RCA, S-video, 5-way binding post, 3.5 mm stereo), and D-subminiature inserts to support multimedia and streaming video applications.

HDMI (High Definition Multimedia Interface) Coupler Modules
Coupler module that delivers audio and video signals in digital format, is backwards compatible with previous versions, provides digital content protection, and is compatible with Panduit outlet modular products.

Mini-Com® Outlet Systems
Comprehensive selection of communication outlet products (faceplates, surface mount boxes, MuTOA, modular furniture faceplates, audio/video modules) that are easily installed and provide an aesthetically pleasing solution that complements today’s workplace environment.

Copper and Fiber Blockout Devices
These devices snap into jack modules, either copper or fiber SC/LC and block unauthorized network access. Blockout devices are released with the tool, ensuring the safety and security of the network infrastructure, saving time and money associated with network downtime, data security breaches, infrastructure repair, and hardware theft.

Copper and Fiber Lock-In Devices
Network accessories block unauthorized access to existing network infrastructure. These devices are compatible with most existing copper or fiber LC patch cords, IP cameras and other IP devices. Also compatible with VoIP phones and help prevent unauthorized tampering with connectivity to ensure E911 continuity.

USB Blockout Devices
These devices plug into either Type A or Type B USB ports, keeping them secure and reducing the risk of unauthorized access. Versions available that can be removed with a tool, or for permanent installation.

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Secure Infrastructure to Connect to the World Wide Network

The entrance facility of an enterprise space serves as the bridge point between the World Wide Network and the enterprise building – the interconnection to the local exchange carrier and the enterprise campus. It is paramount that this demarcation point is secure, safe, and reliable. Panduit enterprise networks provide secure enclosures, lightning protection through robust grounding solutions, and reliable and flexible fiber and copper connection modules.

**Networked – Entrance Facility**

**Structured Ground™ Telecommunications**

Meets applicable standards for network systems grounding applications. Made of high conductivity copper and tin-plated to inhibit corrosion applications.

**Gel-Free® Fiber Optic Outside Plant Armored Cable**

Fiber optic cable can be used in aerial and duct applications, and has an armored construction that provides superior crush resistance for direct burial applications. Available in singlemode (OS1/OS2) and multimode (OM1, OM2, OM3, and OM4) fiber types, and in standard fiber counts up to 48 fibers as a "stranded tube" design.

**Fiber Optic Connectors – Pre-Polished and Field Polish Terminations**

Factory pre-polished and field polish fiber connectors are TIA/EIA-604 FOCIS-10 compatible and exceed TIA/EIA-568-C.3 requirements.

**Gel-Free® Indoor/Outdoor Interlocking Armored Cable**

Armored cable provides UV resistance, water-blocking, high density, and easy installation in transitional aerial and duct applications and entrance facilities. Interlocking aluminum armor provides a smaller crush-resistant pathway for lower installed cost.

**Opticom® Wall Mount Enclosures**

Wall mount enclosures are designed to manage and organize fiber distribution in an entrance facility from outside the facility. Enclosures are completely modular and can manage both fiber and copper cables.

**Outside Plant Copper Cable**

Category 6 UTP copper cable has a gel-filled construction to prevent moisture migration in underground and wet applications.

*Gel-free cable is not available in EMEA.

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**Opticom® Gel-Free® Fiber Optic Outside Plant All-Dielectric Cable**

Gel-free fiber optic cable features a non-metallic construction that eliminates the need to bond or ground and provides superior outdoor durability and faster installation. Dry water-blocking technology allows rapid cable preparation and termination (no messy gel required). The UV resistant cable sheathing withstands harsh environmental demands and meets the light absorption requirement by Telcordia GR-20, Issue 2 and ICEA 640. All-dielectric cable construction requires no grounding or bonding.

*Gel-free cable is not available in EMEA.*
Networked – *Central Plant*
Reliability and Performance from the Ground Up

Efficient and dependable electrical power and grounding are key building blocks for the enterprise central plant. Panduit provides industry leading solutions to reliably connect and manage power throughout the enterprise, from the central plant through the backbone to the work environment.

**StructuredGround™ Direct Burial Compression Grounding System**
Provides the highest performance and most reliable compression connection in the industry.

**UL and CSA Listed Copper Compression Lugs for Code, Flex and Metric Conductors**
Panduit copper compression lugs and splices are UL Listed, CSA Certified, and are the first and only connectors to meet Network Equipment-Building Systems (NEBS) Level 3 Requirements as tested by Telcordia Technologies.

**Lithium-Ion Battery Powered Crimping Tools**
Full line of battery powered, dieless, pneumatic, and manual installation tools that feature ergonomic designs, controlled cycle mechanisms, and quick crimp cycle times for improved productivity and regulatory standards compliance.

**Safety and Facility ID**
Panduit provides comprehensive Lockout/Tagout products and signage. Panduit safety products lock out a full range of energy sources and have a complementary array of warning tapes that illuminate affected areas.

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Converged Building Systems Become a True Business Asset

Panduit Enterprise Networks cabling architecture supports TIA/EIA-568 and -569 telecommunications cabling standards, which cover building network systems design and installation practices. These standards will help further drive convergence among building systems. By placing all network cabling in the building through common pathways and labeling it to TIA standards, networks are more secure, controlled, and available.

**Networked – Central Plant**

Mini-Com® BAS Connector Module
BAS module supports deployment of fieldbus networks and low voltage system wiring within the IT network pathways. The module creates a demarcation point for fieldbus cabling to be “patched” along with other building networks (Ethernet, video, audio) within the zone enclosure, from the controller out to the endpoints.

PanZone® Building Automation System Enclosure
Designed to accept panel-mounted building automation and control systems, this enclosure provides pathways, power access, and patching capability to the building network.

Data Access Port with GFCI and Category 5e Coupler
Provides a safe and secure means to maintain and monitor performance of PLCs, VFDs, and industrial networks with integrated security features that prevent the intentional disruption of service by unauthorized personnel.

Panduit® PanelMax® Wiring Duct
Panduit® PanelMax® Wiring Duct is the premium wire management product for routing and concealing wiring in control panels, offering space optimization and noise mitigation capabilities.

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