Up to 75% of data center downtime is caused by human error. While no data center is capable of being completely immune to mistakes, implementing the right training and technology prevents them from occurring in the first place. Belden can help you design a data center that minimizes the potential for human error so you can maximize data center availability.
Simple Product Design

A standard product look and feel can simplify function, and guard against human error during installation, repair, maintenance and replacement. When products operate using a common methodology and footprint, they’re intuitive to learn and easy to work with. Belden manufactures all of its products in-house, so everything is designed to work together.

AngleFlex™ Patch Panels
- Patent-pending angles provide intuitive left, right or bidirectional patch cord routing to minimize mistakes
- Removable angled inserts provide front access for fast and easy termination and maintenance, keeping systems running smoothly
- Angled design provides more labeling space for clearer identification

KeyConnect Series
- Quick work area outlet reconfiguration to ensure availability for users
- Suits any data, voice, video or multimedia application
- Easy insertion and removal from any keystone-style opening
Easy Upgrading

Don’t let system migration or upgrades cause unplanned downtime and harm productivity and business revenue. Achieve a data center that effectively handles fluctuating demands and changes without impacting availability.

Hydra Assemblies

- Easily upgrade from 10 Gb/s to 40 Gb/s or 100 Gb/s without downtime
- Eliminate downtime and replacement costs when switching out MPO-to-LC cassettes for MPO frames

Open Bridge Racks

- Transform quickly from TIA/EIA rails to Open Compute rails in the field to minimize business interruption during conversion
- Reduce deployment time and costs with three configurations in one rack: networking, server and Open Compute
Incorporate Color Coding and Labeling

Make it easy for anyone to find and access the right data center components with color coding and labeling; it also makes your data center look more organized and professional.

**Erika Violet OM4 Fiber Cable and Connectivity**
- Easily identify, recognize and classify OM4 fiber
- Differentiate between OM3 and OM4 fiber to prevent inadvertent splicing or connections

**Pre-Terminated Copper and Fiber Cabling**
- Reduce the chance for mistakes with clear labeling to indicate attachments
- Intuitive plug-and-play action with simple, reusable components
- Eliminate testing requirements with built-in reliability
- Less downtime and labor expense with fast moves, adds and changes
Control Access

Incorporate security technology to not only keep intruders out, but also to minimize human error by preventing accidental access to the wrong cabinet or piece of equipment.

**Smart Cabinet Access System**
- Establish zones to grant user access only to certain cabinets
- Verify user access through biometrics, RFID card or coded locking handles
- Receive automated audit trails of cabinet access to track causes of downtime

**High-Performance Fiber and Copper Cabling**
- Limit downtime risk with multi-level distribution
- Allow access to only one circuit at a time to prevent mistakes
Provide Protection

By preventing accidental damage, you can reduce liability and keep your data center environment conducive to uptime.

Cable Management Solutions
- Properly manage cabling and keep it off the floor to prevent trip hazards and accidental disconnections
- Protect servers and other equipment from failure-causing dust, debris and damage

Ladder Rack Runways
- Prevent downtime from cable damage by managing bend radius, number of cables in a tray and weight placed on cables
- Fast deployment to stay on schedule and within budget, with minimal business interruption
- Flexible swivel design simplifies installation, making it fast and easy to route around plumbing and electrical systems

Hot or Cold Aisle Containment
- Cap aisles to prevent waste heat from mixing with cool air, providing lower IT inlet air temperature to reduce failure-causing hotspots
- Keep hot and cold air in place with sliding doors that connect magnetically
- Transition between flat roof and vertical containment quickly and without costly upgrades

Passive and Active Rack Containment
- Prevent mixing of hot and cold air to reduce hotspots that lead to downtime
- Remove high heat loads to save up to 50% on cooling costs and prevent equipment overheating with intelligent controllers
Apply Automation and Technology

Manual monitoring and tracking opens the door to human error. Solutions that automatically monitor your data center environment and alert you to potential problems can prevent unplanned downtime.

Remote Climate Monitoring
- Detect environmental hazards (temperature, airflow, humidity and dew point problems) that impact availability
- Receive notifications via cell phone or email so you can take quick action and stop potential failure

Power Distribution Units (PDUs)
- Prevent downtime due to power overload by receiving alarms when conditions exceed thresholds
- View real-time power load assessments
- Monitor data center power usage effectiveness (PUE)

Traceable Bonded-Pair Patch Cords
- Accelerate troubleshooting and prevent disconnection errors with built-in LEDs and activation switches on both ends
- Quickly find correct patch cord connections within densely populated patching areas
- Bonded-pair cable offers better stability and electrical performance, despite bending, coiling or pulling
What Makes Belden Stand Out Out

We’re more than just a manufacturer offering data center products that minimize mistakes and human error. You can find data center components from a variety of companies – our services are what set us apart. Our data center knowledge allows us to work closely with every data center team member: low-voltage contractors, electrical contractors, IT staff, infrastructure specialists and facilities managers.

Guaranteed performance through ChannelMATE Warranties, Networking System Warranties and HDBaseT System Warranties ensure 25 years of coverage on products and labor. Our systems are designed and built to last much longer than you’ll probably use them, protecting against downtime due to product failure. Our extensive product testing ensures optimal, reliable performance.
Assessment Services
- Identify data center pain points that impact availability
- Uncover costly performance concerns
- Resolve issues that waste time, money, energy and floor space

Consignment Services
- Minimize downtime by storing Belden products onsite and paying for them when needed for fast fixes and replacements
- Decrease freight costs through large orders packaged and bundled together

Data Center Ready Solution Sets
- Improve deployment time with copper, fiber and accessories that ship pre-installed to prevent delayed availability
- Support and enhance active equipment performance with customized enclosures

Virtual Inventory Services
- Keep necessary products in stock at a Belden warehouse, ready to ship within 24 hours when products are needed for repair or maintenance
- Eliminate space dedicated to storing extra equipment

Visit info.belden.com/data-center to learn more about how Belden reduces the likelihood of human error by offering solutions that are intuitive to use, designed for simplification and easy to install and repair.