

Is your warehouse network ready for peak season?

Checklist



Get ahead of the surge with a seasonal check-in

Prep your warehouse for peak season network capacity challenges

Peak season for warehouse traffic will arrive before you know it, bringing a surge in demand and pressure to fulfill orders quickly. To meet customer expectations — and your revenue targets — you need to operate effectively and maintain uptime.

Success depends on the strength and resilience of your warehouse automation network and data systems. But how can you be sure they're ready for whatever the season brings?

By assessing, improving and expanding your networks and data capabilities to handle increased workloads and avoid costly unplanned system shutdowns.

Use this easy, two-part network checklist to gain a thorough understanding of your current state. By assessing your network backbone, you can identify potential gaps and risks and find ways to improve your network and data capabilities.

Your findings will help you to both prepare for the coming season and plan for future enhancements.



Evaluate your infrastructure

- » Accurately assessing your network's resilience and security requires granular visibility into the details of your field-level connectivity.
- » You'll want to conduct a full network health assessment, and your analysis should include an IT-OT hardware overview.
- » Confirm that you've got a segregated OT network with both wired and wireless Ethernet connectivity, creating a foundation for warehouse automation.
- » Focus on network traffic, health and redundancy.

Verify and catalog fixed and mobile assets across operational zones.

A high-level evaluation is your first step to digital maturity and new opportunities for growth.

A comprehensive assessment identifies where to eliminate bottlenecks and achieve maximum efficiency.

Complete an inventory of devices and hardware attached to your network.

Plug-and-play Ethernet capabilities allow rogue network devices to be added to networks with no management or documentation. The ability to detect these unauthorized devices helps you mitigate network issues.

And upgrading all firmware enables you to better address interoperability issues. In your inventory, include everything from frontline sensors to the cloud, noting:

- Manufacturer
- Model
- IP address
- Serial number
- Function
- Status of firmware upgrades



Evaluate your infrastructure

Inventory IT-OT convergence and interconnection, including edge capabilities.

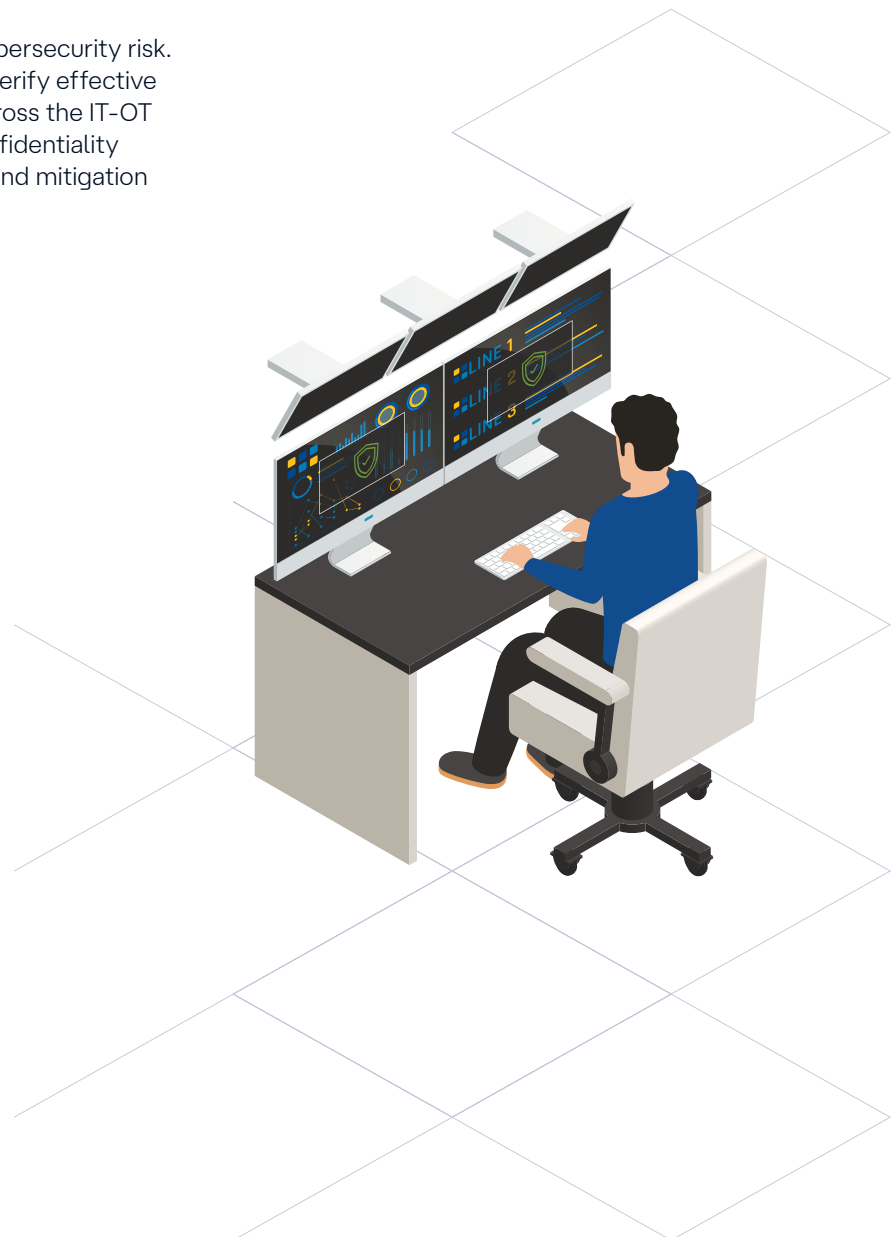
The goal is real-time data exchange, enhancing efficiency in both systems. Accurate, timely data tells a complete story that improves decision-making and streamlines operational processes.

Conduct a full security analysis.

Every connected device is a potential cybersecurity risk. A network security survey will help you verify effective segmentation within the network and across the IT-OT boundary. Audit and refine your data confidentiality practices and confirm that your update and mitigation plans are up to date.

Make sure your teams use cable management best practices.

Poor cable management contributes to a surprising number of outages and issues. Check the condition and layout of all cable connections and terminations. Are redundant cables located in separate areas to mitigate risk? Are any cables subject to physical or atmospheric stress?



Evaluate your facility workflow

- »» Assessing your operations and technology includes evaluating both the network's hardware and its security, resilience and redundancy.
- »» Seek input from IT, operations and maintenance employees.
- »» Their digital automation expertise and hardware knowledge, straight from the warehouse floor, give you a foundation for breakthrough business enhancements across equipment, systems and data capabilities.



Ensure your overall network is effectively segmented.

Segmentation can help harden your cybersecurity posture and facilitate smart, intentional communication and control. Keep data only where it's needed and eliminate vulnerabilities by preventing access across the network. Segmentation prevents the spread of problems caused by configuration errors or faulty equipment. And it helps prevent network congestion, ensuring that critical safety messages receive priority and arrive quickly.

Assess network management and monitoring to identify gaps.

Exposing those helps you invest in the right tools to effectively monitor and allocate network capacity. When combined with a predictive maintenance schedule, you can catch potential problems before they cause unplanned downtime.

Inventory and analyze your business's data capabilities.

Understand your current data access, assessment, acquisition and digitization to help expose any gaps.

Consider:

- Data flow mapping
- Data orchestration
- Visualization
- Management

Evaluate your facility workflow

Identify disparate systems, data and software.

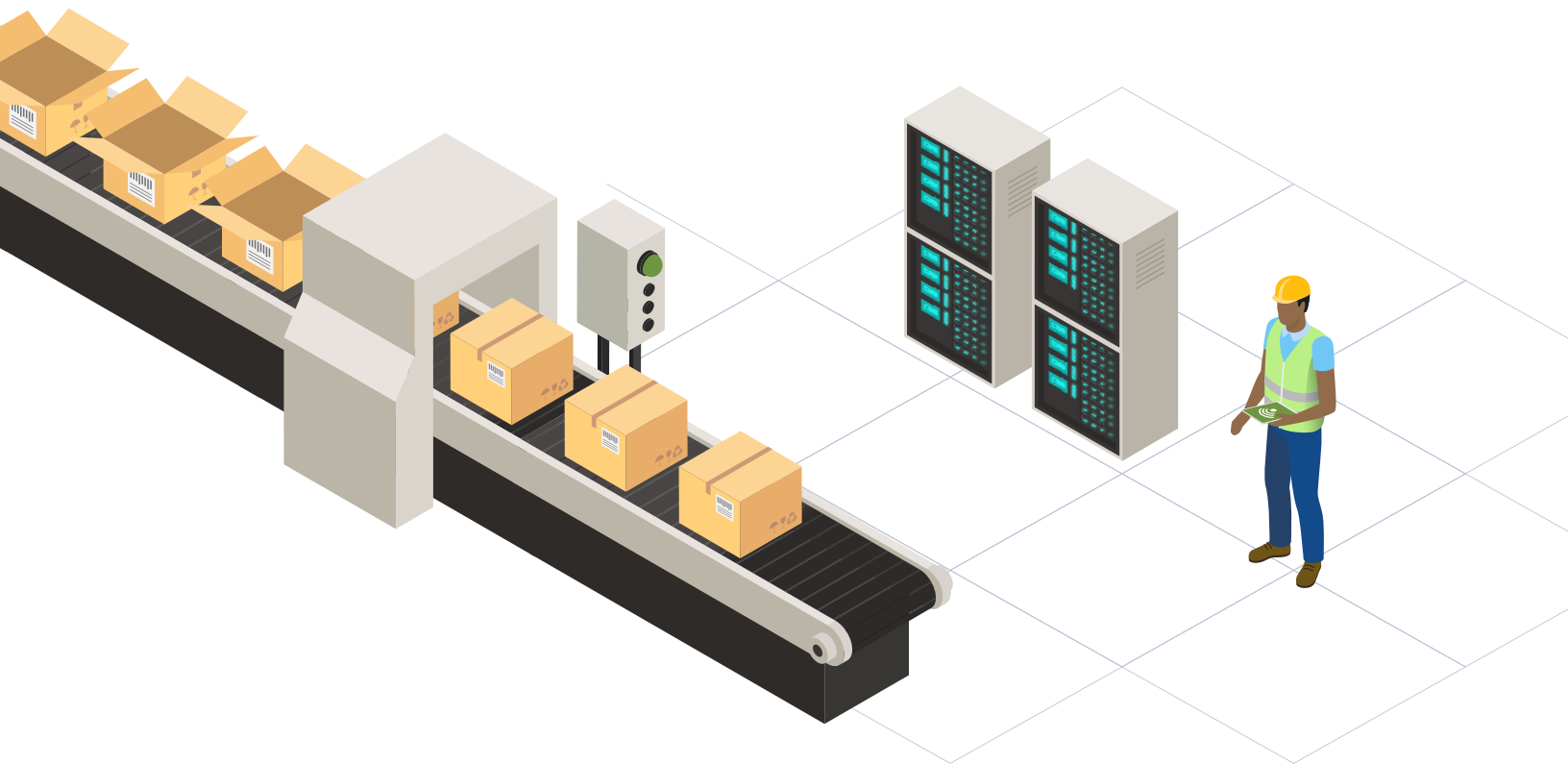
This step provides a roadmap for ensuring all systems and applications work together. Establishing connections across all devices and systems, regardless of vendors or protocols, creates the most favorable environment for data access and delivery. This agnostic interaction also helps improve system throughput and ROI.

Anticipate staffing and training needs and required skill sets.

Promote continuous learning to accelerate adoption, boost satisfaction and keep employees up to date on changing processes and technology. This will empower your workforce to make smarter, faster decisions and work more efficiently.

Gauge and understand business value and ROI.

Your company needs to confirm or establish clear goals and outcomes tied to value and ROI targets. Identify enhancements needed to align with your facility's specific business and operational key performance indicators.



Help from a trusted partner

Completing these thorough assessments can be complicated.

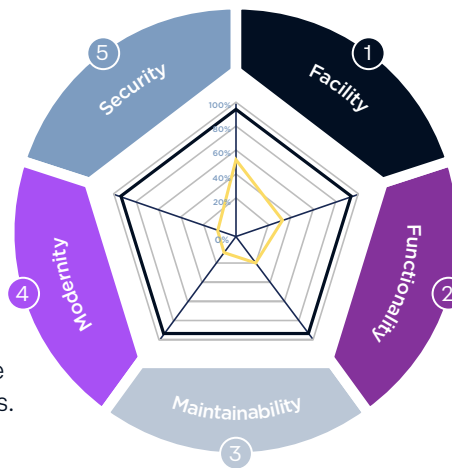
But don't worry — we're here to help. Working with us, you can avoid hassles, focus on the core elements of your business and reach ROI faster. **For example, a Belden client recently achieved a 182 percent internal rate of return.**

[Our Network Assessment Service \(NAS\)](#) includes a five-step evaluation of your network's strengths and weaknesses, plus guidance on how to prioritize and implement the targeted improvements we recommend based on our findings.

1 Optimize facility Ensure your network's application, environment and standards align with industry best practices.

5 Strengthen security
Safeguard your network from threats and vulnerabilities.

4 Embrace modernity
Stay ahead of the curve with the latest technology advancements.



2 Maximize functionality
Harness the full capabilities of your network to maximize availability.

3 Enhance maintainability
Streamline network maintenance for optimal performance and availability.

— initial status — future status

Following the NAS, we can create a customized solution design that securely bridges IT and OT networks and delivers digitized data for advanced analytics and process optimization. This scalable execution roadmap includes timeline milestones, insights and support from dedicated experts at each phase for full readiness by peak season.

Let's update your warehouse to operate more efficiently — during surge periods and throughout the year.

Talk with our experts [→](#)



Connect to what's possible.

Checklist



About Belden

Belden Inc. delivers complete connection solutions that unlock untold possibilities for our customers, their customers and the world. We advance ideas and technologies that enable a safer, smarter and more prosperous future. Throughout our 120+ year history we have evolved as a company, but our purpose remains – making connections. By connecting people, information and ideas, we make it possible. We are headquartered in St. Louis and have manufacturing capabilities in North America, Europe, Asia and Africa.

For more information, visit us at:
[belden.com](https://www.belden.com)

follow us on



© 2025 | Belden and its affiliated companies claim and reserves all rights to its graphic images and text, trade names and trademarks, logos, service names, and similar proprietary marks, and any other intellectual property rights associated with this publication. BELDEN® and other distinctive identifiers of Belden and its affiliated companies as used herein are or may be pending or registered or unregistered trademarks of Belden, or its affiliates, in the United States and/or other jurisdictions throughout the world. Belden's trade names, trademarks, logos, service names, and similar proprietary marks shall not be reprinted or displayed without Belden's or its affiliated companies' permission and/or in any form inconsistent with Belden's business interests. Belden reserves the right to demand the discontinuation of any improper use at any time.