

## CASE STUDY

# HOW GOODFELLOW RESOLVED CONNECTIVITY ISSUES ACROSS A 3.5M SQ. FT. INDUSTRIAL SITE

*Axsera helped Goodfellow investigate persistent device connectivity issues across a large industrial environment, **identify a root cause** that extended beyond Wi-Fi, and support a practical remediation path ahead of a critical **inventory audit**.*

## OVERVIEW

Goodfellow's main site spans approximately 3.5 million square feet across multiple buildings, outdoor areas, and a mixed network architecture.

The site relies on wireless barcode scanners and printers to support daily inventory workflows. When those devices began experiencing intermittent connectivity issues, the visible symptom was Wi-Fi. The issue showed up on Wi-Fi, but the cause sat deeper in the network.

## THE ROOT CAUSE

Axsera's investigation found that what appeared to be a **Wi-Fi issue was actually a deeper network configuration problem**. Recent segmentation changes were intended to place barcode scanners and printing computers on separate VLANs, but the switch-port configuration did not consistently align with how devices and access points were connected. As a result, some devices were landing on the wrong network and were not receiving their assigned IP addresses. The problem appeared on the wireless network, but the **root cause sat at the switch and VLAN configuration level**.

## ABOUT GOODFELLOW

Goodfellow is a North American distributor and manufacturer of wood products, flooring, and building materials, headquartered in Québec. Its operations rely on large industrial and distribution sites, where reliable connectivity supports inventory management, labelling, and day-to-day workflows.

## ABOUT AXSERA

Axsera is a wireless and network infrastructure services firm specializing in enterprise Wi-Fi, telecom equipment integration, structured cabling, and field services. For complex sites where connectivity issues affect real operations, Axsera helps teams assess the live environment, identify root causes, and define a practical path to more reliable performance.

## THE CHALLENGE

The site was large, operationally complex, and technically diverse.

The network included multiple buildings, indoor and outdoor wireless coverage, fiber connections, aerial cabling, point-to-multipoint links, mesh access points, and controller-managed Wi-Fi.

For users, the issue was simple: devices were not staying connected reliably. For the IT and network teams, the cause was less obvious.



### ! The problem could have been coming from several areas:

- > RF coverage gaps
- > access point placement
- > channel planning or interference
- > device roaming behavior
- > VLAN or switch configuration
- > backhaul connectivity
- > legacy or unmanaged infrastructure
- > physical installation issues

Because the connectivity issues affected inventory workflows, the timing mattered. Goodfellow was preparing for an inventory audit, and the team needed the network to reliably support barcode scanning and labelling.

## AXSERA'S APPROACH

Axsera worked through the site methodically, combining wireless field experience with practical network troubleshooting.

### 1 Site Documentation

Captured AP locations, photos, heights, GPS coordinates, and layout details.

### 2 Environment Review

Assessed the existing controller-managed wireless environment and switch connectivity.

### 3 VLAN Diagnosis

Verified device IP addressing and confirmed the VLAN issue by moving an AP to a correctly configured port.

### 4 VLAN Remediation

Coordinated with the IT team to correct VLAN assignments and switch-port configuration across affected switches.

### 5 Final Validation

Corrected physical AP issues and completed end-to-end testing back to the head office.

## ADDITIONAL FINDINGS

After confirming the primary VLAN issue, Axsera uncovered additional reliability risks across the site, including unmanaged switches, a managed switch with failed ports, a network loop involving wireless and point-to-multipoint infrastructure, and several physically misinstalled access points.

While these were not the original cause, they posed real risk in an environment of this size. Axsera identified, documented, and addressed them as part of the broader remediation.



## RESULTS

Based on Axsera's findings, Goodfellow and its IT partners corrected the network configuration issues affecting device connectivity.



### Restored device-network mapping

Barcode scanners and printing computers were moved onto the correct network paths, allowing each device to receive its assigned IP address.



### Improved inventory workflow reliability

With connectivity restored, Goodfellow continued inventory and labelling workflows ahead of the planned audit.



### Additional infrastructure issues corrected

Axsera identified and addressed several secondary issues affecting reliability across the network, including switch-level failures, a network loop, and misinstalled access points.



### Final validation completed

After remediation, Axsera completed communication testing across the site to confirm that access points, switches, and the connection back to the head office were operating as expected.



## CONCLUSION

In large industrial environments, Wi-Fi problems are not always just Wi-Fi problems. A scanner dropout may be the visible symptom, but the real cause can lie anywhere from the device to the switch, VLAN, backhaul, or physical installation.

Goodfellow's project shows the value of having a field partner who can troubleshoot across those layers. Through on-site investigation and practical network troubleshooting, Axsera helped Goodfellow move beyond assumptions and restore reliable connectivity for critical workflows.

## EXPERIENCING SCANNER DROPOUTS, DEAD ZONES, OR CONNECTIVITY ISSUES?

Axsera can assess your live environment, identify the real cause, and provide a practical remediation plan.

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