



CASE STUDY
RETAIL NETWORK SECURITY

One network. Every store. Fully secured.

How Cloud Group's iShield Unified Threat Management Device secures multi-site retail networks, checkouts and customer Wi-Fi nationwide.



The challenge

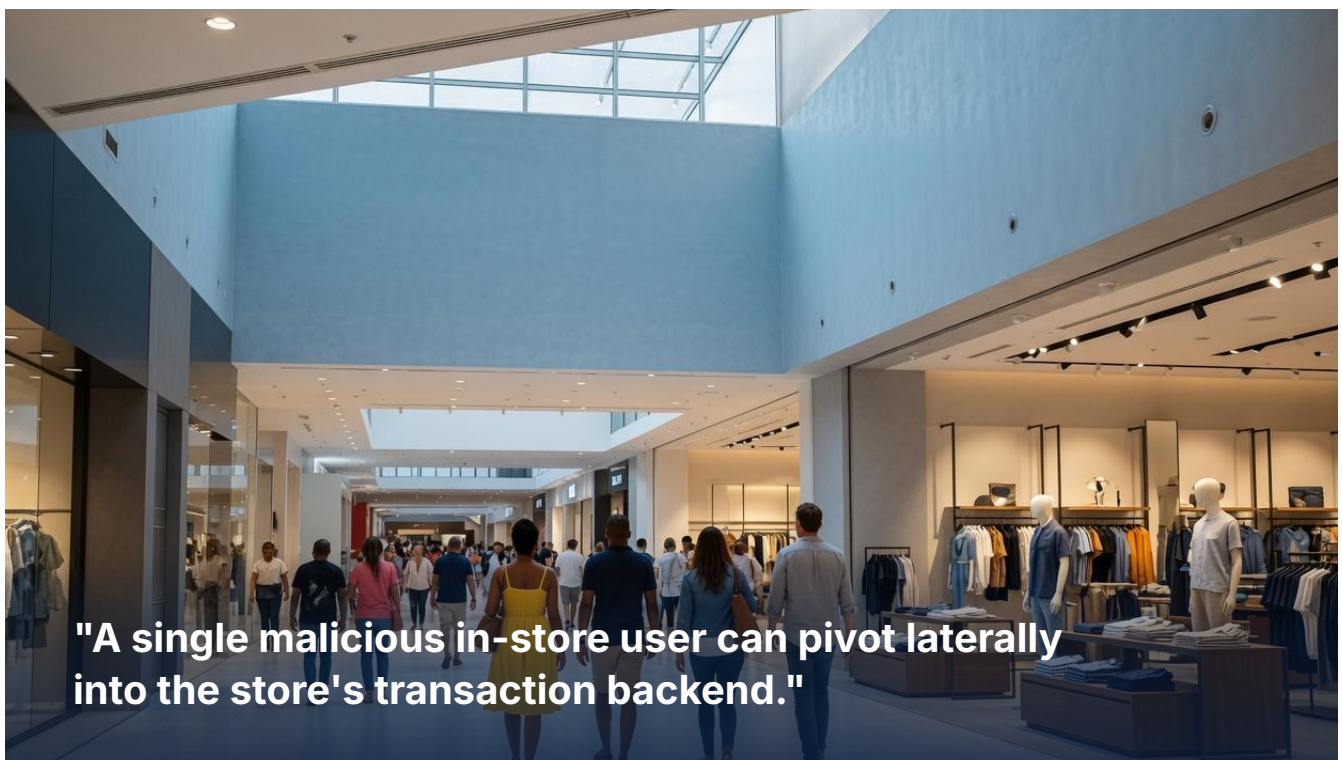
SECURING RETAIL NETWORKS

National retail groups, franchise networks and chain store operators face unique technical hurdles managing digital connectivity across geographically dispersed stores—each supporting central POS systems, automated stock replenishment databases, live inventory trackers, administrative networks and integrated security endpoints on a single footprint.

Globally, this vulnerability was underscored by major extortion campaigns targeting national supermarket chains, locking regional checkouts and paralysing supply chains. Locally, South African retail giants have experienced severe data breaches exposing names, delivery addresses and payment card records — highlighting intense compliance pressure under **POPIA** and **PCI-DSS** to secure transactional perimeters.

Free customer Wi-Fi is essential for driving foot traffic, but unmanaged guest access poses severe liabilities: a single malicious in-store user can intercept neighbouring shoppers' data or pivot laterally into the store's transaction backend.

Operationally, retail locations suffer erratic bandwidth strain—high-volume customer browsing can starve critical bandwidth, dropping card transactions, lengthening checkout queues and interrupting cloud communications with head office. Securing independent store boundaries across a national footprint adds massive architectural complexity for retailers and IT partners alike.



"A single malicious in-store user can pivot laterally into the store's transaction backend."

The solution

iSHIELD DEPLOYMENT

Cloud Group works closely with its extensive network of IT professionals and resellers to deploy iShield—a next-generation Smart Access Unified Threat Management Device—across diverse national retail landscapes. Deployments cleanly interconnect massive retail footprints, corporate warehouses and individual franchise outlets under a unified, ultra-secure management framework.

Partners receive comprehensive training, certification and remote technical support to execute seamless, phased installations designed to wrap around trading hours, ensuring zero downtime for live tills or customer checkouts. iShield combines robust on-premises hardware control with a centralised cloud-based management platform, giving retail operators absolute command over their network boundaries.

KEY FEATURES IMPLEMENTED (VIA PARTNER-LED DEPLOYMENTS)

- ☐ **Multi-site WireGuard VPN architecture:** High-speed encrypted site-to-site WireGuard VPN networks seamlessly interconnect hundreds of national branch outlets directly to centralised corporate data servers, financial mainframes and logistics warehouses.
- ➔ **Captive portal session management:** Public guest Wi-Fi access is controlled strictly by preset session lifetime limits to regulate connection times, preventing prolonged network camping and naturally cycle guest connections to protect bandwidth.
- 🛡 **Strict tenant and backend isolation:** Advanced VLAN and network segmentation cleanly quarantines public customer Wi-Fi from critical business operations, keeping till software, card machines, payroll and admin databases hidden from guest visibility.
- ☐ **Intelligent payment path prioritisation:** Strict traffic shaping rules guarantee dedicated, high-priority bandwidth for credit card transaction gateways, banking links and inventory syncing apps over public customer traffic.
- 🔄 **Automated link failover for continuous trading:** Dual-WAN redundant links ensure that if a primary fibre line suffers a localised outage, the store instantly and transparently switches to a backup connection, keeping checkouts online and moving.
- 📄 **Centralised cloud portfolio oversight:** Retail franchise groups and IT partners can monitor connection status as well as setup automated email notifications in the event of ISP downtime, along with being able to assign a DynDNS to remotely access and manage each firewall.

The results

OUTCOMES & NEXT STEPS

01 ✓ Flawless multi-branch network integration: Encrypted WireGuard tunnels maintain rapid, secure communication across all national branches, allowing on-demand updates to stock counts and POS processing without architectural latency.	02 ✓ Controlled and predictable guest access: Strict session lifetimes prevent unmanaged bandwidth hoarding, ensuring customers receive functional connectivity while naturally mitigating long-term network drainage.
03 ✓ Uninterrupted checkout and till continuity: Dedicated traffic shaping ensures card terminals and financial gateways process transactions instantly even at peak occupancy, eliminating lines caused by network lag.	04 ✓ Ironclad corporate data perimeter protection: Network separation helps prevent the spread of malware from a shopper's phone to neighbouring networks.
05 ✓ Streamlined compliance alignment: Structured identity logging, secure segmentation and robust access rules align seamlessly with POPIA and PCI-DSS, shielding the brand from liability and reputational exposure.	06 ✓ Drastically reduced IT maintenance costs: A free-to-use DynDNS assigned from the dashboard lets IT partners log in remotely to troubleshoot and update firewall policies, minimising on-site callouts.

Operating a national retail chain means our network must be completely bulletproof to handle thousands of transaction sweeps every minute, yet flexible enough to offer a stable digital experience to shoppers. iShield solved our largest headache. We have established an incredibly fast, encrypted WireGuard mesh across all our stores, regulated public Wi-Fi usage strictly through automated session limits, and isolated our checkout lines entirely. Our IT partners can update security rules for any branch across the country in seconds from a single cloud panel.

— Cloud Group IT Partner & National Retail Infrastructure Specialist

Ready to secure your retail network?

Contact Cloud Group to learn more about our partner programme or to book a demo.

www.cloudgroup.net
010 593 4493
sales@cloudgroup.net