



# SUSTAINABLE FOOD LEADER KOPPERT REFRESHES WAREHOUSE OPERATIONS WITH MIST WIRELESS AND JUNIPER WIRED NETWORKING

## Summary

**Company:**

Koppert Biological Systems

**Industry:**

Agriculture & Horticulture

**Business Challenges:**

Use barcode scanners in warehouses and operations to improve performance and speed order delivery.

**Technology Solution:**

- Mist Wireless LAN Platform
- Marvis Virtual Network Assistant
- Mist Wi-Fi Assurance
- Mist Wired Assurance
- EX2300 Ethernet Switch
- SRX300 line of Services Gateways

**Business Results:**

- Improved operations at warehouses and distribution centers
- Empowered staff with efficient barcode scanners
- Increased productivity with AI-driven troubleshooting
- Easily supported increased use of video conferencing apps

Will a population of 10 billion people forecast by 2050 have enough to eat? How can we secure the production of healthy food in ways that are safe and healthy for both people and the environment? Using large amounts of chemical pesticides creates a vicious cycle that ultimately leads to resistance. Innovation in agriculture is a priority, and Koppert Biological Systems is a leader in sustainable cultivation and biological crop protection.

The Netherlands-based company is the world’s largest producer and marketer of beneficial insects like parasitic wasps and bumblebees for natural pollination. Koppert specializes in producing biological products for controlling pests and diseases for small and large-scale agriculture producers.

Koppert’s business has grown steadily since its inception, averaging 12 percent each year since 1967 to reach a global scale of subsidiaries in 27 countries. With demand for its products increasing, Koppert took a close look at its operations and started planning for improvements.

“We decided to implement barcode scanning in our warehouses,” says Gertjan de Vogel, senior system administrator at Koppert. “To support our scanners, we wanted the best possible Wi-Fi performance and a modern cloud architecture that supported automation, AI, and more advanced technologies.”

*“Wireless network performance has been exceptional, and we’re looking forward to rolling the Mist network out across all our warehouses.”*

- Gertjan de Vogel, senior system administrator, Koppert Biological Services

## AI-Driven Networking Simplifies Operations

After researching state-of-the-art wireless LAN solutions, Koppert migrated to the AI-driven Wireless LAN Platform from Mist, a Juniper company. “In every category that we investigated and compared solutions, Mist was the best,” de Vogel says.

The Mist Platform is built on a modern microservices cloud architecture that automates tasks to improve Wi-Fi reliability, accelerate troubleshooting, and provide insight to user experiences. The Mist Platform ensures that Koppert has a modern, future-oriented wireless network that will serve both its business and warehouse operations.

Mist had another solid advantage. Koppert's wired network was already powered by Juniper Networks® EX2300 Ethernet Switches and protected by Juniper Networks SRX300 line of Services Gateways. Built-in integrations between Mist wireless and Juniper wired solutions simplify operations by giving network administrators visibility into both networks from a single dashboard.

"A single network operations platform gives us lots more information and details that help pinpoint what is going on in the network," says Fer Wijker, coordinator, infrastructure team at Koppert. He also enjoys having a single vendor for both networks. "Having everything from one provider has led to much better support. With the proactive insight and automatic root cause determination that the AI delivers, we are able to resolve issues quickly and easily make improvements across the wired and wireless networks."

### Automatically Eradicate Network Pests

Koppert turned to global integrator Infradata to design and implement the new Mist Wireless LAN Platform, along with Wired Assurance and Marvis Virtual Network Assistant. Infradata installed more than 300 access points in the company's Netherlands head office and warehouse.

"The support and knowledge at Infradata made what could have been a hard transition very easy," de Vogel says. "The Infradata team was always available to answer questions, and they guided us in the right direction for a best-of-breed wireless LAN that met all our business and technical requirements."

For employees working in the office and for production teams in the warehouses, Mist delivers unparalleled network user experiences. Even notoriously fickle applications like Microsoft Teams and Skype run flawlessly.

A cohesive approach to operating wired and wireless networks optimizes that user experience. The Koppert IT team can instantly view dashboards in Marvis, an integrated AI engine that simplifies IT operations through client-level insight, rapid wired and wireless troubleshooting, trending analysis, anomaly detection, and proactive problem remediation.

"With Marvis we can quickly pinpoint any network issues," Wijker says. "Everything works together very smoothly, and we can easily navigate through the dashboards to identify potential network and performance issues."

Having visibility into network performance that can impact critical applications simplifies operations for the IT team. Support teams can ask Marvis natural-language queries such as "Why can't Olga connect to the network?" or "Why is the scanning app slow?" Guided remediation identifies the root

cause and takes automated actions when possible, delivering on the Self-Driving Network™.

Wired Assurance provides AI-powered automation and service levels for Koppert's EX Series switches as well as the Mist access points. Service-level expectations are measured and administrators are proactively notified if there's a deviation in switch performance—before users notice. The root cause of wired and wireless problems is quickly identified and, with self-driving remediation, Wired Assurance can take automated actions such as adding missing VLAN configurations or correcting switch port misconfigurations.

### Solve Network and App Performance Mysteries

In the Netherlands warehouse and distribution areas, all Koppert products are labeled with barcodes—including bumblebee hives, parasitic wasps, bio fungicides, soil additives, and blowers, drones, and other products.

The production, packaging, and logistics teams scan the barcodes with a Zebra scanner to streamline the pick-and-pack fulfillment process that occurs after an order is placed online. Picking information lets the team know proper quantities of each product and its location in the warehouse. Packing information identifies the items to be packed, along with packing materials and documentation.

*"People always like to blame the network when there is a problem. With Mist, we can see the Internet, Wi-Fi, AP coverage, and device activity. We can show that the performance issue is on the application or a server."*

- Fer Wijker, coordinator, infrastructure team, Koppert Biological Services

"We are able to scan the same template worldwide and the information is sent over Wi-Fi to streamline our delivery operations," de Vogel says. "Wireless network performance has been exceptional, and we're looking forward to rolling the Mist network out across all our warehouses."

Now that the scanner app and processes are in production, the network team relies on Mist to address performance complaints at the warehouse. "People always like to blame the network when there is a problem," Wijker says. "With Mist, we can see the Internet, Wi-Fi, AP coverage, and device activity. We can show that the performance issue is on the application or a server, ultimately speeding up issue resolution regardless of where in the network the problem arises."

Mist can also play a role in helping to find misplaced scanners. The high-accuracy location services in the Mist Platform can track missing scanners and activity in the warehouse. "With the integrated virtual BLE technology in our deployed Mist access points, we hope to add location services to help employees find their scanners and prevent the scanners from inadvertently leaving the building," Wijker says.

## Global Rollout Aligns with Future Business Growth

As global food demand increases, Koppert is continuously looking for new solutions to support growers across the world. Bumblebees, beneficial insects, microbial products, sticky traps, and pheromone traps are a more sustainable way to control pests and diseases, encourage pollination, and promote crop growth and resilience.

The efficiencies and warehouse improvements realized at its Netherlands headquarters will spread to the company's distribution centers when the global rollout of Mist wireless and Juniper wired is complete.

"The proven solutions of Juniper AI-driven networking will take us into our next phase of business development," Wijker says.

## For More Information

To find out more about Juniper Networks products and solutions, please visit [www.juniper.net](http://www.juniper.net).

## About Juniper Networks

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