



# Mainfreight delivers faster with wireless networks and rugged mobility



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## Company Overview: Mainfreight

Mainfreight is New Zealand’s leading supply chain provider and manager. Established in 1978, the company was listed on the New Zealand stock exchange in 1996 and its founders remain significant shareholders in the business. Mainfreight’s services incorporate domestic freight solutions, supply chain logistics and international freight forwarding. Each week, a team of 3,200 processes more than 100,000 consignments spanning New Zealand, Australia, Asia and the USA. Mainfreight is the largest less-than-container-load (LCL) consolidator out of China. Its annual revenue worldwide is almost \$1billion, of which 60 per cent comes from the ANZ region.

## The Challenge: Getting the work done where it happens

Managing logistics and distribution is a complicated business requiring speed and accuracy, especially for a company like Mainfreight, which deals with such a high volume of consignments. Communication, in all its forms, is critical to the success of Mainfreight’s business and is something it constantly strives to enhance.

Previously in Mainfreight’s ANZ operations, the teams that unloaded linehaul units arriving by road, rail or sea reconciled this freight against a paper manifest, which was then signed off and handed to the office for data entry. If necessary, photos would be taken of any damaged freight and also downloaded in the office to be reconciled with the manifest.

Kevin Drinkwater, Mainfreight CIO, explains, “These manual systems were labour intensive, taking up to half a day before all the information was logged into our systems. Not only was this inefficient but it also left room for human error. We knew there had to be a way to improve the velocity of delivering key information to our customers and notifying the sending branch more quickly of any issues with freight.”

Communication within its warehouses was another factor Mainfreight wanted to enhance. Kevin continues, “We have sites as large as 20 acres, and with team members dispersed across such expansive areas, communicating



## Customer Profile



**Company**  
Mainfreight

**Location**  
Auckland, New Zealand

**Industry**  
Supply chain and logistics

**Products**

- MC9063-S and MC70 Mobile Computers
- WS5100 wireless switch
- AP300 access ports

**Partner**  
Gen-i

## Application(s)

Tailor made applications to

- Scan freight using the MC70 handhelds and automatically log freight arrivals and departures into system.
- Identify the driver who is closest to collection destinations as jobs arise using GPS.
- Communicate within its warehouses using VOIP.
- Record any damages using the in-built camera.

## Benefit

- Reduced inventory update process from half a day, to minutes



about arrivals or locating freight in the warehouse was difficult at times. Loudspeakers aren't always practical and mobile phones are too costly. We knew VoIP was the way to go, but we needed a wireless infrastructure strong enough to 'carry-over' voice between widely dispersed flexible enough to support future applications."

As Mainfreight's business expanded to have 600 drivers on the road in New Zealand and 200 drivers on Australian roads at any given time, it also required an accurate means of tracking drivers' locations. Mainfreight wanted the ability to quickly and accurately identify which driver was closest to collection destinations as jobs arose, thus increasing efficiency and minimising fuel costs.

"This led us to explore mobile devices that offered GPS tracking systems, but we also needed devices that would be durable enough to withstand the harsh realities of life on the road and warehouse floor," said Kevin.

### **The Solution: rugged, powerful handhelds and flexible wireless coverage**

Mainfreight can be considered a true pioneer of enterprise mobility, having adopted handheld devices from Motorola's Enterprise Mobility Solutions (then known as Symbol Technologies) as far back as 1991, and introducing wireless coverage from Motorola in 2006.

As Kevin explains, when researching the market for mobile and wireless devices Motorola stood out from the pack, "Over the years we tried a number of alternatives to speed up the unloading process, but it was a challenge to find anything that could meet the level of durability we required for our business. It was critical that we didn't implement devices that would require constant investment in support and repairs."

It was Mainfreight's partner Gen-i that introduced the company to its first Motorola handheld, the MC9063-S. As a member of the Telecom Group, Gen-i works alongside 3,000 corporate, government and business customers to deliver seamless and integrated ICT solutions across New Zealand and Australia.

"A key factor in our decision to go with Motorola back in 1991, and to continue working with them today, is the ruggedness of their devices. We started out using the MC9063-S and have more recently begun working with the MC70. Motorola develops devices with long lifecycles in mind. When you couple their rugged form factor with their ability to support large, complex business applications you have a very powerful device."

Gen-i also introduced Mainfreight to Motorola's 802.11 a/b/g wireless switches. "Our primary reason for choosing Motorola's wireless switches," states Kevin "was their ability to maintain voice handover between access ports, which is critical when wireless coverage is being implemented on the large scale we are working with.

"We've implemented various devices from Motorola over the years and while it's unavoidable that there are hiccups to iron out, the process is painless and the Motorola team are willing to help overcome any challenges we might face."

### **The Benefits: Complete enterprise mobility increases efficiency and customer service**

Mainfreight has now implemented more than 635 of Motorola's MC9000 series handhelds, and 250 MC70s across Australia and New Zealand.

In 2006 it implemented its first Motorola wireless network on the internal and external perimeters of a 20-acre site in Auckland. Still to be completed,

“We’ve introduced powerful mobility for our team members on the ‘dock’ where they can now scan freight as it arrives, using Motorola MC70 handhelds and automatically logging its arrival or departure into our system. This process, which used to take half a day, now happens almost instantly.” - Kevin Drinkwater, Mainfreight CIO

the company has since begun rolling out wireless networks at all of its ANZ sites, most recently within a 48,000sqm Sydney super site.

“We’ve introduced powerful mobility for our team members on the dock where they can now scan freight as it arrives using the MC70 handhelds and automatically log freight arrivals and departures into our system. This process, which used to take half a day, now happens almost instantly,” explains Kevin.

“They can also record any damages using the in-built camera, uploading it instantly to our system to notify branches and customers. In the freight business, this is an extremely important capability.”

Similarly, the team members at Mainfreight’s wharf and container divisions now use the MC70s. The cellular architecture of the device lets workers remotely update Mainfreight’s systems with information about container arrivals and departures. This detail immediately feeds back into portals that allow customers to check the progress of their deliveries.

“Our drivers are also benefiting hugely from this forward thinking technology. We have a mix of MC9063-S and MC70 devices being used by pick up and delivery drivers managing domestic freight, mostly for track and trace purposes.

“The significant benefit of the MC70s in particular has been the ability to combine them with GPS via an external third party connection. Having detailed knowledge of where our drivers are means we can make logical choices about which drivers are closest to the next job that needs collection. Not only does this make the pick up and delivery process more efficient, it also means we can reduce fuel costs and better manage our impact on the environment. In the near future, we plan to roll-out Motorola’s next generation of this product, the MC75, which has in-built GPS and 3G capabilities.”

Motorola’s MC70 has taken mobility to the next level for Mainfreight, as Kevin highlights, “We’ve been able to give team members access to full Windows capabilities, so that they basically have a desktop PC in their hand. The flexibility and functionality of this is very powerful; the devices can handle applications that have been tailor made for Mainfreight which means team members can work efficiently inside and outside our wireless network.

Currently, every driver in Australia and New Zealand uses handheld devices from Motorola. Scanning capabilities will soon be introduced to all of Mainfreight’s docks, as will wireless coverage be rolled out to all of its ANZ sites in the next two years.

“For us, implementing Wi-Fi coverage was about future proofing. We’ve got extensive plans for expanding enterprise mobility in the future, such as leveraging active Wi-Fi tags to manage 800 of our container fleet across 33 New Zealand sites. We’re also keen to introduce RFID capabilities, which we’ve already begun testing successfully,” Kevin concluded.

#### About Motorola

Motorola is known around the world for innovation in communications and focused on advancing the way the world connects. From broadband communications infrastructure, enterprise mobility and public safety solutions to high-definition video and mobile devices, Motorola is leading the next wave of innovations that enable people, enterprises and governments to be more connected and more mobile. Motorola (NYSE: MOT) had sales of US \$22 billion in 2009. For more information, please visit [www.motorola.com](http://www.motorola.com).



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