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## Overview

### Business challenge

Port Taranaki needed to upgrade its asset management processes. It relied on a 20-year-old PC-based system for floating assets and paper records for shore-based equipment, in order to get a total view of the company's assets and inventory.

### Solution

The port company has deployed IBM's Maximo Asset Management system to take care of purchasing and inventory management of everything from ballpoint pens to forklift wheels and to manage maintenance of equipment for all civil, mechanical and marine operations.

### Business Benefits

- Automated maintenance scheduling
  - Extended plant life
  - Integrated maintenance, inventory and purchasing
  - Broad scope — everything from stationery to vehicle parts
  - Project management functionality.
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# IBM's Maximo Asset Management software keeps Port's assets ship-shape

## Introduction

Port Taranaki, the key export gateway on the North Island's west coast, has been in operation for 136 years. The company's 121 staff and fleet of three tugs handle several hundred ships a year and load and unload more than 3 million tonnes of cargo.

## The Challenge

### Lives and property depend on timely plant maintenance

When lives and millions of dollars of cargo are at stake, there's a good incentive to ensure gear doesn't fail at a critical moment. For Port Taranaki, that means having a strict regime of preventative maintenance of its tug fleet, cargo-handling equipment and other shore facilities.

Until recently, the Port had two systems, a 20-year-old PC-based maintenance management program that was used to keep the Port's tugs and other floating plant in working order, and a paper-based process that managed shore-based assets. Links from the two with the company's financial and inventory management systems were almost non-existent.

"There was an awareness we needed to move in that direction," says Grant Squire, a marine engineer who, along with the company's IT manager, had the job of updating the Port's asset management processes.

"We could see from the marine side, because we'd had previous experience with computerised maintenance management, that there was a need to integrate inventory and possibly purchasing into the system, which would make preventative maintenance much easier.

"We were starting from a very basic point. The integration with our financial system and inventory management was green-fields stuff — we had to start from the beginning and develop a lot of it."

The project — to implement Maximo® Asset Management — was undertaken by Auckland-based IBM® business partner and Maximo specialist Certus Solutions. Squire says Certus was key in showing the Port's staff the ropes, some of whom were using computers for the first time in their work.

"In terms of education and support, Certus was wonderful," he says.





– **Grant Squire**, Maximo project implementation leader, Port Taranaki  
– **Natalie Souness**, Asset management coordinator, Port Taranaki

## The Solution

### Preventative care through integrated maintenance, inventory and purchasing

The Port's onshore and offshore asset processes are now all managed through Maximo, which is used by about three-quarters of Port staff.

Squire, the Port's Maximo implementation project leader, says the software extends right across the company, taking care of purchasing and inventory management of everything from ballpoint pens to forklift wheels. Maintenance-wise, it manages all the company's civil, mechanical and marine operations.

"Wharves, buildings, forklifts, container cranes, tugs, vehicles — everything is managed through the system," says Squire.

Natalie Souness, who joined the Port company as asset management co-ordinator and led a project to upgrade to Maximo version 7, says the system even handles project management. The Port's health and safety officer, for instance, is using the system's work order functionality to manage a health and safety permit review project.

Having returned to his role of managing the Port's marine maintenance, Squire is finding he has a much better picture of work that's in progress and coming up.

"One of the biggest things is that preventative maintenance is working smoothly because we now have good inventory and purchasing integration, which makes life a lot easier. The guys on vessels can manage work knowing they have the necessary parts — it's all dealt with for them."

Previously, a report of the coming month's marine maintenance jobs would be printed and pored over by engineers, who would manually requisition the necessary parts. Maximo, in contrast, with an electronic record of how many hours vessels have done, will automatically schedule an oil change, say, making sure replacement oil and filters are in stock.

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*"We now have a system that is deployed across the business and handles much of the critical aspects of the company."*

– Grant Squire, Maximo project implementation leader, Port Taranaki

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## The Benefits

### Broad scope

It's been a big undertaking, with equally big benefits. What all the Port staff who worked on the project learned as they went was Maximo's broad scope.

"It was a big culture change for a lot of people in the company so even in the implementation phase there was a lot of education just in getting them used to the concept, let alone the nuts and bolts of it," says Squire.

"I don't think we appreciated the actual scale of Maximo — how big it is and what you can make out of it.

"There's a lot of configuration possible within Maximo and initially I was coming to grips with some of that.

"We now have a system that is deployed across the business and handles much of the critical aspects of the company"

### Just-in-time inventory

Improved inventory management means stock is now replenished on a just-in-time basis, Souness says.

"We're stocking more, but it is the stuff we need."

### Control of costing

"At the moment we have all purchasing going through Maximo, so we can look at a work order for maintenance of an asset and see how much it is costing in terms of materials and services, but we have no idea of the labour cost.

"We want to bring that into Maximo so we can get an overall picture of how much things are costing us. Then we can do better planning of labour hours, see whether we need to take on people... just how much work we have in the pipeline."

### Longer plant life

Maximo can be expected to extend plant longevity by ensuring preventative maintenance takes place. The software's automatic maintenance scheduling, integrated with inventory and purchasing, means there is less likelihood of jobs being deferred because the necessary spare parts aren't to hand.

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## Solution components

### Industry

- Transport

### Software

- Maximo Asset Management software

### Business Partner

- Certus Solutions
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— Grant Squire, Maximo project implementation leader, Port Taranaki

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## Additional Resources

**IBM Maximo Asset Management** solutions gives a single point of control over all types of assets — production, infrastructure, facilities, transportation and communications — by managing them all on a common platform. This platform allows sharing and enforcement of best practices, inventory, resources and personnel and it can optimise the performance of your assets and maximise return on investment.

For more information visit:

[ibm.com/software/products/nz/en/maximoassetmanagement](http://ibm.com/software/products/nz/en/maximoassetmanagement)

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