

# Port Otago: integrating cloud-based asset management



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Port Otago's existing asset management system did not provide adequate information to support efficient maintenance planning, accurate budgeting, or effective inventory management for spare parts. So Port Otago worked with IBM Business Partner BPD Zenith to deploy MaxiCloud, a cloud-based enterprise asset management solution, and integrate it with the company's on-premise finance system.

Improved asset reporting helps extend asset life, reduce replacement costs, and facilitate safety compliance. Streamlined purchasing and inventory management save costs and increase productivity. The three key benefits are as follows:

- Saves time and costs by streamlining inventory purchasing and management
- Improves reliability and cuts maintenance costs with asset performance reporting
- Simplifies IT management with cloud-based software-as-a-service model

Port Otago Limited operates a primary deep-water, export-based container terminal at Port Chalmers in New Zealand's far south. With outstanding facilities and a committed team, Port Otago has built a customer-base that includes some of the largest manufacturing and supply organisations in the region.

Deploying a cloud-based asset management solution has helped Port Otago deliver a cohesive asset management strategy for efficient spare part inventory management and complete visibility over asset performance and maintenance needs.

BPD Zenith's expertise was vital to

this deployment. MaxiCloud allowed us to take advantage of all the benefits of an enterprise-level asset management solution and put our business in a stronger, more competitive position for years to come – without the need to hire additional support resources to manage it all.

## Gaps in data

Port Otago struggled with a basic asset management system which had a lack of functionality and its non-integration with other critical business systems created inefficiencies. Our asset performance data was always incomplete, with information in various locations. This made it difficult to develop any meaningful evaluation in a consistent manner.

It was also time-consuming to generate and update the reports we required, and interpreting inconclusive data was a complex and frustrating task. When predicting maintenance activities such as asset or component replacements, technical staff often had to rely on their instincts and experience to formulate lifecycle data decisions.

Port Otago also found it challenging to obtain detailed breakdowns of costs. With siloed business systems, it was often difficult to obtain adequate data on key metrics, which we needed for maintenance reports. The data we had only provided a high-level view, making our analysis unclear.

Port Otago also lacked a reliable inventory management system: for example, spare parts were not catalogued when they were purchased, which gave the business no ability to track usage or guide forward purchasing decisions. It was common to place orders for a component from a European supplier

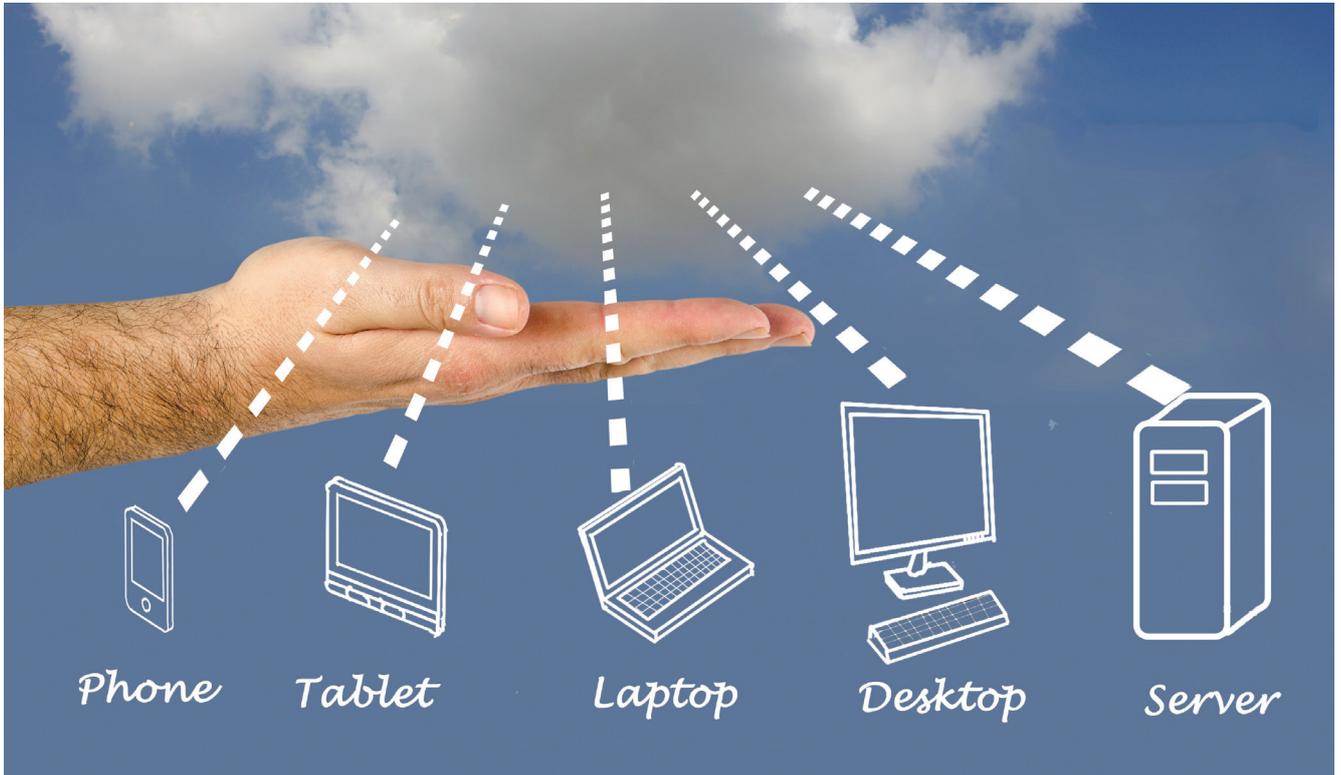
only to discover, just a few days later, that we needed additional items or different quantities from the same company. Random direct purchasing activities were widespread, increasing costs and impacting our ability to reliably plan and coordinate work activities. This was especially a problem when our work required the operation to commit to planned maintenance downtime of critical business assets.

## Cloud-based solution

Following an analysis of available enterprise asset management software and potential support partners, Port Otago worked closely with IBM Business Partner BPD Zenith to deploy New Zealand's first implementation of the BPD Zenith MaxiCloud solution. The solution is based on IBM Maximo Asset Management software, running in a cloud environment.

BPD Zenith's expertise was vital to this deployment. In addition to finding a supplier, I wanted to achieve a reliable partnership model where we could work closely to drive significant change across the business through modern and aligned systems and processes. My aim was definitely a journey with a collaborative partner rather than an event with a one-time supplier.

BPD Zenith's approach and the MaxiCloud solution allowed us to take advantage of all the benefits of a widely used enterprise asset management solution to deliver high asset availability, combined with reliable and predictable performance – and best practice-focused system development opportunities. Simply, it was a strategic approach to our future – without the need to hire additional support resources to manage it.



### From reactive to predictive

Maximo has enabled Port Otago to make significant progress towards its goal of a modern inventory base supported by streamlined usage reporting to reduce ad hoc purchasing. We are forecasting significant cost-savings and improvements to productivity in the near future. Our maintenance crew can approach routine planned tasks with the confidence that the necessary spares are available, which is quite a change from our previous process.

The initiative has already started to reverse Port Otago's previous 'planned versus reactive maintenance' work mix – from an estimated 30% planned vs 70% reactive to 60% planned vs 40% reactive. This will result in substantial cost and organisational savings. Safety compliance has also been improved by Maximo's work order system.

Many of our assets have significant statutory maintenance requirements because they include critical lifting gear and operate within a complex mix of heavy mobile and fixed assets and people. Our planned work order documentation now include references to known area hazard warnings, colored hazard warning pictograms, detailed safe operating procedures references and attachments, as well as PPE reminders – providing our staff with total work packages and added confidence in the outcomes across the business. In the unlikely event of a failure or incident, Maximo can also quickly provide us with detailed maintenance history report data to add to an investigation.

Encouraged by these early results, Port Otago plans to develop its Maximo

abilities out on the port, giving its employees access to work orders, inventory, and the raising of service requests from portable mobile tablets. Maximo gives us a range of organisational advantages, such as a greater ability to demonstrate

statutory compliance, increasingly accurate visibility over critical asset behaviors, and a more predictable, efficient, and safer organisation. The increased insights about the health of our business greatly improve our strategic decision-making abilities.

### About the author

Bob Smillie is a senior member of Port Otago Limited's Terminal Management Team. Bob is responsible for introducing the delivery of best practice reliability based maintenance activities, integrating business systems with a CMMS implementation, focusing on the rollout of common business processes, standard functionalities, and revised operating disciplines for critical assets. This approach includes an innovative vision that engages both employees and suppliers in maximising asset life cycle value across terminal operations, supporting the concept of sharing innovative practices and standardising equipment, processes and systems.

### About the organisation



BPD Zenith is an award-winning global provider of enterprise asset management systems. BPD Zenith combines top-level accreditation in IBM Maximo software with deep expertise in a range of industries and sectors, including oil and gas, facilities management, power generation, renewables and utilities, government and transportation. To learn more, please visit [bpdzenith.com](http://bpdzenith.com)



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