

GOVERNMENT AND DEFENSE

SUCCESS STORY

Revolutionizing how the military does business

New Zealand Defence Force mobilizes their inventory process resulting in massive time and resource savings with an almost instant return on investment.

Company Snapshot

New Zealand's Defence Force's core task is to conduct military operations and be combat capable, ready to protect the sovereign territory of New Zealand and any areas under their responsibility, including the preparedness, protection and preservation of people, property and information.



Industry Focus

Government/Defense

Functional Scope

Mobility and automation

Number of Users

250 Users

Devices

AWS for cloud authentication and RFID Scanning

System Version

SAP ERP



Government Defense



Challenges

- Hand counting inventory was time consuming and led to many errors
- Internal communication was full of paper heavy, error prone processes



Solutions

- An app that integrated with readily available commercial hardware
- Seamless integration into existing SAP ERP system
- RFID scanning and readily available online and offline



Benefits

- Inventory checks that would take two people and half a day now take 40 seconds
- Stock-take mobilization has made massive time and resource savings
- Paper trails are history
- Trackable equipment from the moment it's deployed

The Success Story

Challenge: Manual processes were slow, labor-intensive, and error-prone.

Maintaining a well-trained, well-equipped armed force, able to rapidly respond to a crisis, help those in need, and protect New Zealand's territory and oceans is a big task. Working in partnership with many other government agencies, its operations are diverse. From running an extensive fleet of aircraft, ships, and land vehicles that deploy personnel and transport equipment around the globe, to responsibilities that extend to healthcare.

Keeping constant track of the huge volume of assets it calls on, is an ongoing challenge, and **with the vision of becoming a truly connected and empowered workforce in mind, one specific area in need of modernizing was inventory stocktaking.**

Physically counting — and often recounting — some 85,000 individual pieces of equipment every month was labor intensive, time consuming and wide open to errors. In 1999, a single inventory took three months. Accurate equipment counts were almost impossible: “the hours required to count equipment, coupled with the feeling that we couldn't really trust the numbers, made this project a really important one for NZDF”, admits Logistics Information Manager, Alan Rivers-Milliken.

Digitizing inventory management was needed to make it easier to access inventory information, increasing NZDF's ability to respond to events quickly and safely. The solution would also have to improve internal communication and engagement and make it quicker to process data by cutting out error-prone paper-based processes.

“Delivering on our vision of a connected and empowered workforce wouldn't be a feat completed overnight. It took the right technologies and the best partners to ensure we succeeded in this,” stated Robert Raines, ERP Architect at NZDF.

Solution: A mobile-ready app for use anywhere, online, and offline.

NZDF worked with its SAP partner, Zag, part of Accenture, who proposed Neptune Software's low-code rapid application development platform, **Neptune DXP, to make sure the proposed solution would be able to use readily available commercial hardware — as a military-specific kit can cost up to five times more and take 10 times longer to buy.** The digital inventory application also needed to use hardware that integrates with multiple vendor products, to keep working as newer product versions are released and deployed and have the capacity to scale quickly, to meet growing business and user demands.

With only minimal training required to use the Neptune DXP, the in-house dev team quickly set about designing an inventory app that would be mobile-ready and work offline so systems can be used on aircraft and in remote areas. And that could support GS-1 Barcode Standards and UHF RFID Tag Standards, to work with other third-party systems and be future-ready. **This would allow NZDF to make better use of its existing SAP investment, ensuring the core SAP ERP remains the single source of the truth.**

The app is deployed on NZDF's external portal — based in the AWS cloud — securely connecting a new employee self-service portal and SAP at the backend. Since the cloud supports authentication mechanisms and data for mobile devices, **any soldier given access can now use the app on any NZDF approved mobile device.** And supporting online and offline capability means soldiers can work, even without Wi-Fi. Barcoded inventory can be RFID scanned, linked in via Bluetooth.

“We have been really happy with the solution and it has met all our expectations. We are delivering on our digital strategy and have added value to a crucial business process.”

— Robert Raines, ERP Architect at New Zealand Defence Force

Results: Less time counting, more time on what's important.

Armory stock-takes look very different today. **Equipped with just an RFID scanner, personnel can stand at the opening of an armory storage aisle, boat hatch, or aircraft, and the system will automatically pick up every weapon or RFID-tagged asset within range.** No more pulling out racks of equipment, no more manually recording and verifying each serial number, no more errors or duplications.

And with the process now largely automated, checking 1000s of units — previously taking two people half a day — takes almost no time. **“With the RFID scanner in the same armory, it takes about 40 seconds”, explains Rivers-Milliken, “which is the amount of time it takes them to walk down the racks”.**

Checks are made even shorter, as there are fewer steps in the overall process. And with its world-class mobility solution now in place, there's no need to go into the SAP ERP for data capture. Put simply, **stock-take mobilization has made massive time and resource savings. Paper trails are history**, and valuable personnel can now get busy on more important or urgent tasks.

Cuts in manual labor and human error are just the start, the new user-friendly interfaces mean, employees are more engaged.

“Our people love the new solution” observes Rivers-Milliken. “They’ve been blown away with how easy it is now to get a count on equipment”.

To save even more man-hours, NZDF soldiers are now issued with RFID tags alongside their ID cards. Scanning these together with the 16 personal pieces of armory each carries on deployment, means all equipment can be tracked from the moment it's deployed —so it's always clear who is responsible for its return.

With Zag's help and using Neptune Software, NZDF has streamlined and modernized processes and improved data accuracy — with no major new infrastructure and no need to adjust the back end — delivering a near-instant return on investment. As Robert Raines sums it up: **“This is going to revolutionize how our business does business.”**

“Our people love the new solution. They've been blown away with how easy it is to now get a count on equipment,” says Alan Rivers-Milliken, Logistics Information Manager.

“We have been really happy with the solution and it has met all our expectations. With a combination of Neptune Software and the support of Zag, we are delivering on our digital strategy and have added value to a crucial business process,” adds Robert Raines, ERP Architect, NZDF.

About Zag, Part of Accenture

Zag is trusted by more than 80 organisations across Australasia to provide SAP, Cloud and Neptune Software solutions, support and consulting. Zag was formed in 1996 as a specialist SAP implementation partner and has delivered more SAP ERP projects in New Zealand (NZ) than anyone else. The aim was to build a business known for quality implementation advice and guidance at an affordable price. Since then, Zag has built the Zag Support Centre (Asia Pacific's first certified SAP Partner Centre of Expertise), was the first to achieve SAP Gold Partner status in NZ and became the exclusive NZ partner for Neptune Software. Zag has offices in Auckland, Melbourne, Sydney, and Wellington in addition to partners selling its products globally.

About Neptune Software

Neptune Software is a rapid application development platform vendor with more than 660 enterprise customers and over 3.5 million licensed end users globally that empowers IT departments to deliver tangible business outcomes. Neptune Software offers with its Neptune DXP, a leading low-code, SAP-centric, enterprise app development platform to digitize and optimize business processes and user interfaces – at scale and with ease. Neptune DXP provides a fast and cost-effective way to industrialize the development of custom applications - saving companies time and money on development, integration, and operations. More info at: www.neptune-software.com