

Assuring Inland Revenue's shift to Oracle



CASE STUDY

Changing systems of record is a significant challenge for any organisation. With Inland Revenue (IR) playing a key role in the lives and businesses of all New Zealanders, its shift to the cloud is part of a strategic goal to achieve cloud-based services for Enterprise support, allowing Inland Revenue to focus on its core mission of collecting and distributing monies for New Zealand. IR has engaged Assurity Consulting for the delivery of testing and quality assurance services on its Enterprise Support Services in the Oracle Cloud, de-risking the process and delivering certainty to changes in a complex application environment.

Inland Revenue plays a critical role in improving the economic and social wellbeing of New Zealanders, collecting 80% of Crown revenue, as well as collecting and disbursing social support programme payments and providing the government with policy advice. Since 2014, IR has embarked on a \$1.8-billion business transformation project to make it simpler and faster for New Zealanders to pay their taxes and receive their entitlements.



Situation

Enterprise Support Services (ESS) is, in this context, a NZ Government term for the internal core systems supporting daily operations and providing oversight and management of internal activities. ESS encompasses Human Resources (HCM - Human Capital Management), Finance, EPM (Enterprise Performance Management), Procurement and Recruitment.

With Oracle Cloud Applications selected for ESS, IR's implementation provides a reference account for other agencies. "We started our ESS transformation on the basis that as a government agency, we don't need any specialisation in our ERP systems," explains Lara Ariell, Inland Revenue CFO. "That's why we've used a common process model for back-office transformation which can serve as a template for any other government agencies."

System standardisation means the necessary testing which assures service quality prior to rollout can also be standardised. "The theory is that with software as a service configured to common processes, others can pick up and use our implementation and artifacts and get the same result. And that's where Assurity comes in; they have worked with us to create a set of use cases, test scripts, and other testing tools to get our system up and running. We know these artifacts work, and that means other agencies don't have to invest in the creation of these assets again."

IR's ESS systems integrate extensively with internal and external applications, interfacing with multiple other solutions. As a result, a key challenge in replacing incumbent systems with Oracle Cloud Applications is testing of every system with which it integrates.

"ESS is the glue that holds an organisation together, and you know your ESS is performing when you don't notice it. We wanted to be sure of this outcome, and testing is an essential part of making sure information flows as it should," says Ariell.

She adds that testing must span integrations and applications, considering IR's commitment to provide its employees with 'work anywhere' functionality. "No-one teaches you how to use a smartphone because it's obvious. We wanted our applications to be that intuitive, so we don't have to continually invest in training – and a big part of that is investing in testing at the front end. That tells you quickly if you're on the right track."

Solution

Assurity delivered Business Analysis, Managed Testing and Automated Testing Services to assure the delivery of IR's Oracle applications. This included the introduction of highly automated testing wherever possible, and the creation of about 750 standard tests.

"The team has worked with us to ensure that everything that can be automated is automated. Where repetitive testing is necessary, it happens automatically in the background, providing a high level of quality assurance," confirms Ariell.

As master data was migrated from the legacy system to Oracle, the integrations were simultaneously established, with exhaustive testing of the links. In some cases, the integrations were 'like for like', and behaved in similar ways. In other cases, enhancements were made adding new capabilities through data exchange for greater automation, reducing manual interventions and further driving out any potential for errors associated with manual processing.

Through its responsibility for testing integration between Oracle cloud applications and other systems, Assurity built enduring assets which now support automated regression testing for quarterly Oracle Cloud upgrades (regression testing confirms that program or code changes do not adversely affect existing features).

"There's a very narrow window for testing quarterly patches, so it's an intense process. Assurity's work streamlines this crucial task; without the support of automated testing, it's hard to see how managing these updates would be feasible," notes Ariell.



Results

In all, Assurity has provided testing and assurance for a total of 26 integrations with other systems within and external to IR. Each cloud product has its own change cycle with constant updates, patches and improvements; whenever there is a change to any of these systems, or indeed to the Oracle applications, the automated testing framework provides a mechanism for confidence that the systems will continue to deliver a business outcome consumable by IR.

From Ariell's perspective, each time a new function is introduced she looks to her Head of Testing Chris Hourigan. "I ask him 'how comfortable are you?' His answer is a barometer of programme health. More often than not, Chris isn't worried and that's an indicator of the value delivered by the test team. If Chris is worried, I'm worried and we use the insights we get from testing to troubleshoot and solve problems"

Automated quality assurance reduces maintenance cost and overheads, accelerating time to market for the Oracle cloud – and that's led to learnings and ways of working from IR's ESS implementation being shared as the reference for a number of other government agencies.

By taking a holistic approach to testing the entire customer/ data ecosystem, Assurity's work has helped guide the Oracle system configuration vendor. It also allowed for reframing of User Acceptance Testing – effectively extending the coverage and quality of 'systems-wide' testing.

Examples of the successes of this approach include the automation assets identifying (and correcting) a 7 second network latency issue. Regression tests now take just 6 hours; an equivalent manual test would take 15 person-days.

Finally, test assets are potentially transferable to support other government initiatives, setting the scene for accelerated migration to modernised applications and processes across the wider public service. "Automated testing and reusable test assets go beyond the value delivered to IR. It means each agency can access proven artifacts along with the reference architecture for systems implementation. And that means taxpayers get more value for their money as government agencies transform for the future," concludes Ariell.

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LARA ARIELL, CFO, INLAND REVENUE



At a glance



Inland Revenue
Te Tari Taake

Company:
Inland Revenue

Industry:
Public Sector

Situation:

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Solution:

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Outcomes achieved:

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To learn more about Assurity Oracle Cloud ERP testing solution, visit <https://assurity.nz/services/digital-delivery/oracle-cloud-erp/>