NZ Department of Conservation relies on HP to deliver efficient and responsive applications





Department of Conservation Te Papa Atawbai "HP's solutions have enabled us to introduce a consistent testing methodology, which gives us the ability to streamline our development process and keep track of defects across the agency."

Tony Charles, Applications and Development Manager, Information Services Unit, Research, Development and Improvement, Department of Conservation, New Zealand.

HP customer case study: NZ Department of Conservation Industry: Government

Challenges:

As the agency responsible for conserving the natural and historic heritage of New Zealand, the Department of Conservation relies heavily on delivering accurate information in a timely manner to its 1600 staff. Supporting a number of mission-critical and specialised applications ranging from time recording through to visitor maintenance and asset management systems, the Department's Information Services Unit sought to formalise the application quality management process and gain closer alignment between business and IT.

Solution:

The NZ Department of Conservation selected HP Quality Center software to formalise the quality assurance process.

Highlights:

HP's testing solutions enabled the NZ Department of Conservation to:

- Be in control of its systems development and management, resulting in significant improvements in quality and productivity, as well as reduced costs.
- Deliver quality applications that perform as expected, are reliable and stable and benefit the various parts of the Agency.
- Minimise risk to the business of new application development, including potential adverse impacts on users.
- Align IT with business processes, by providing users with an avenue to voice their needs and requirements.

Summary

As the agency responsible for conserving the natural and historic heritage of New Zealand, the Department of Conservation (DOC) knows it is imperative that its applications process information quickly and accurately in an efficient manner. So when DOC sought to formalise the application production process and gain a closer alignment between business and IT, the agency turned to HP.

Tasked with a dual role of delivering scientific research and managing about a third of the country's land area, the agency's responsibilities are both unique and diverse. DOC plays a significant role in halting the loss of natural heritage in New Zealand's terrestrial, marine, and freshwater environments, while protecting threatened species and delivering effective management services of parks, reserves and other protected areas. The agency's 1600 staff manage approximately 8 million ha of land and 1.3 million ha of marine reserves on behalf of all New Zealanders.

In addition to providing mission-critical IT systems for key business functions including finance, the Department's Information Services Unit also supports a number of specialised applications ranging from time recording through to visitor bookings and a purpose-built asset management system which is currently being redeveloped to more adequately manage a broad range of assets such as fire-fighting equipment, radios, visitor centres, fences, and huts. The Information Services Unit also manages BIOWEB, a biological diversity system that keeps track of endangered species and details the pest control measures undertaken to eliminate rats or mice. With a focus on keeping pace with evolving technology and delivering valuable tools in the hands of its people, the Agency sought to automate software quality testing and management across a wide range of application environments.

Benefits:

The NZ Department of Conservation has:

- Built an automated testing and consistent defect-tracking environment to support effective deployment of new and updated applications, in order to minimise business risk and make go-live decisions with confidence.
- Formalised the production process and responded to user requirements by providing a repository for logging bright ideas, enhancements, defects, change requests, user support issues and suggestions.
- Prioritised defects/issues according to a riskbased framework and maximised resources to deliver problem-free applications and satisfy user requirements.
- Gained visibility into application status and streamlined the decision-making process.
- Saved time, effort and money.

Application quality critical to conservation

With a variety of applications impacting the agency's operations, the quality of DOC's systems is paramount. In an environment where nearly half the application development is outsourced and builds are released on a weekly basis, it became essential to formalise and automate testing processes to minimise risk to the agency.

As a result, HP TestDirector and HP QuickTest Professional were selected to standardise and manage the entire quality process across the group and to improve application quality and reliability, while reducing deployment risk. Although HP QuickTest Professional is yet to be implemented, DOC has established a robust testing strategy around HP TestDirector, to ensure the functionality of new versions and keep track of defects. According to Tony Charles, Applications and Database Manager, Information Services Unit, Research, Development and Improvement Division, Department of Conservation, "HP's solutions have enabled us to introduce a consistent testing methodology, which gives us the ability to streamline our development processes and keep track of defects across the agency. Ultimately, this allows us to deliver applications with confidence, while users benefit from increased quality and more efficient access to critical information and data."

Automated testing delivers visibility

Responsible for development, testing and implementation of twelve mission critical systems and a dozen smaller applications, Tony's team directly undertakes all testing management and defect tracking using HP Quality Center. HP QuickTest Professional, once operational, will provide automated regression testing to ensure builds work as intended, particularly as the Agency's systems become increasingly integrated.

"HP TestDirector allows us to keep track of what's going on with a particular release," says Tony. "We use it for applications in development and systems in production. We have a test suite that replicates as much of our test environment as possible and we apply an overall risk-based approach."

Tony adds, "The real value of HP TestDirector for DOC is in tracking defects - not only during testing but also in a live environment. We've extended the access to TestDirector to our business users, so bright ideas, enhancements, defects, change requests, user support issues and suggestions can be recorded in the one repository. This is particularly useful as it allows us to gain visibility into application status, determine key priorities and reduce risk. But most importantly, it saves us time, effort and money." "My team reaps the benefits of HP Quality Center on a daily basis by having a consistent, repeatable process for gathering requirements and managing defects. Fundamentally, it's a good product, it suits our needs, and its ease of use means that any user can gain benefit from it quickly. And, the reports are extremely easy to access and they provide insightful information that simplifies the decisionmaking process."

Tony Charles, Applications and Development Manager, Information Services Unit, Research, Development and Improvement, Department of Conservation, New Zealand.

Defect tracking drives continuous improvement

DOC is deriving considerable value from TestDirector on a daily basis. It has realised improvements and resolved a number of key issues during the course of development. It has also changed the production environment as users now have a formal avenue to voice their requirements.

Tony explains, "HP TestDirector provides a vehicle for users to become more involved in how the applications will work. By giving them access to HP TestDirector and being receptive to their contributions, we've gained greater acceptance for our methodology. For example, following our recent SAP Financials implementation, as soon as our finance people realised we had HP TestDirector, they started to use it extensively to track defects and issues thus ensuring resolution occurs."

Tony adds, "If it's not in HP TestDirector, then it can't be that important. We take the defects and issues which have been entered very seriously. We review the data regularly and use a risk-based framework to assign priority and severity on a scale of one to five. The ranking is then used to dictate the type of action to be taken to ensure resolution. Another advantage of using HP TestDirector as a repository for all defects is that when we come across a new issue, our first rule is to check to see if a similar problem has occurred previously and more often than not we find that we already have a resolution."



HP TestDirector simplifies decision-making

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HP TestDirector has changed the role of Tony's Department and strengthened the lines of communication between IT and key business units. It has formalised the production process and has identified areas of improvement in other parts of the business. In addition, as resources are limited and maintenance budgets stretched, the product has been used to build business cases for fixing enhancements and undertaking application maintenance overhauls based on the logged defects.

"HP TestDirector creates an end-to-end quality management infrastructure for our mission-critical systems," says Tony. "In essence, it allows us to get a handle on a lot of nebulous information and make sense of it, while ensuring actions are taken. Overall, it gives us total confidence in our systems and ensures builds or enhancements have no adverse impact on business operations."

Looking to the future

HP Quality Center will continue to play a key role in helping DOC deliver quality applications to its key stakeholders. The next task for Tony is to implement HP QuickTest Professional and start harnessing the power of building functional and regression test suites.

"As the number and complexity of the Agency's systems rises, regression testing will become increasingly important, especially as we conduct maintenance," details Tony. "We're looking forward to deploying HP QuickTest Professional and empowering our users to ensure correct functionality across all environments, data sets, and business processes."

On the whole, HP's testing solutions is enabling the Department of Conservation to manage the entire application quality process more effectively, by providing reliability, stability and consistency in the development process.



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