



INTRODUCING SNUFFY; ERMA'S SIMPL TEST CERTIFICATION SYSTEM



The Background

ERMA was established under the Hazardous Substances and New Organisms (HSNO) Act in 1996. It is made up of:

- The Environmental Risk Management Authority - a quasi-judicial body,
- Ngā Kaihautū Tikanga Taiao - a committee to advise the Authority on Māori issues,
- The Agency – established to carry out operations in support or on behalf of the Authority. It is made up of five groups: New Organisms; Hazardous Substances; Strategy and Analysis; Corporate Services and Maori.

One of the Agency's tasks is to approve test certifiers who work in the field assessing sites, facilities and individuals against regulatory requirements of the HSNO Act. Test certifiers are independent auditor/assessors who issue test certificates when sites, facilities and individuals comply with their regulatory requirements of HSNO. A number of Regulatory or Enforcement Agencies ensure that the provisions of the HSNO Act are complied with e.g. the Department of Labour,

who are responsible for enforcing the requirement of the HSNO Act at places of work. Most test certificates are associated with places of work.

The HSNO Act requires ERMA to keep and maintain a register of all test certificates issued by test certifiers. Regulatory or Enforcement Agencies may search the register of test certificate information to support their compliance and enforcement work. To achieve this ERMA requires a seamless, secure, exchange of information with test certifiers and enforcement. After more than 10 years of operation, with ERMA's IT systems and infrastructure changed significantly, an upgrade or re-development of the old test certificate register was required.

The Situation

ERMA affectionately names its servers after children's TV characters and it did not take long for the upgrade project to become known as SNUFFY after Sesame Street's lovable elephant-like 'Snuffleupagus'.

According to ERMA's Technology Manager, Mark Harris, SNUFFY's story began quite some time ago. "It is primarily a collection of test certificate information, created by test certifiers, that needs to be held in a register by ERMA. The system had been in place for some time but everyone involved (the test certifiers, ERMA staff and the regulatory agencies) needed more flexibility, security and greater reporting capability," he says.

SNUFFY also had to deliver against a range of high level business requirements:

- The system needed to be compatible with ERMA's existing Microsoft infrastructure
- Interoperability with ERMA's Document Management System (FELIX), Customer

Management System (BERT) and other agencies and stakeholders via open web standards was essential

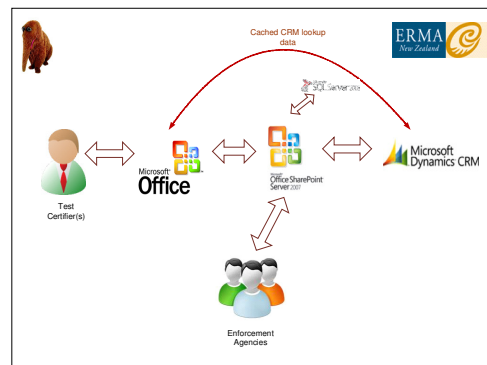
- Non-technical people needed to be able to create and modify Test Certificate Forms and configure reports
- Deliver comprehensive reporting, auditing and security
- The solution had to be scalable (horizontally and vertically) to meet ERMA's future growth needs
- It had to be compliant with e-Government and other relevant standards and requirements

In developing the new system, ERMA also needed better alignment of its underlying infrastructure to streamline the data collection process and restrict access to various areas of the database to those who needed it. Simpl was initially engaged to create a Requirements Document based on the old system and how ERMA now wanted it to work. "At the same time as the Requirements gathering took place, we were looking internally at the range of technical solutions open to us," explains Mark Harris. "It helped us to decide whether to go with a bespoke build, versus customising an out of the box solution, adding onto the existing infrastructure or outsourcing the entire thing. We examined a large range of options and created a formal Request For Proposal which was wrapped up with the Requirements Document."

Simpl also responded to the RFP and was successful in putting forward a Microsoft based solution utilising InfoPath, SharePoint and Microsoft CRM, building on existing ERMA platforms and aligning the system to the desired business processes. Microsoft also assisted the SNUFFY project through its 'Deployment Fund'; "We are grateful to Microsoft for enabling us to do more extensive requirements development and build a more robust solution than we would have otherwise been able to put in place," says Mark Harris.

The Solution

"Simpl did exceptionally well to not only implement a new system but install an entirely new environment for it to operate on - they bent over backwards to help us." Mark Harris



The "SNUFFY" process starts with the test certifiers who are themselves certified and listed as "approved" within BERT (ERMA'S HSNO Application Management System) and automatically given access to the Certificates they are qualified to issue within SNUFFY via automated workflows developed by Simpl. Standardised template based electronic forms were developed to enable the certifiers to enter information in an intuitive and secure manner when both connected to the internet or offline.



The forms are able to be configured and published by in-house ERMA staff through a flexible set of menus. This is an important requirement as when ERMA first started there were only about seven certifications that could be offered, today there are 23. "We hoped to

leverage the new tools to create a structure where we didn't need to be totally reliant on external partners," says Mark Harris, "We no longer need to get developers in every time we want to make a system change and that has given us a lot more flexibility."

Simpl also delivered a very real and secure environment, both online (by being connected to the internet to web based forms) and offline (via local form and email). As the Test certifiers largely operate in the field the ability to work off-line and then email new certifications or updates through InfoPath has greatly improved their overall efficiency. They can now go on-site with just a PDA or Notebook and complete the paperwork as they go.

When online, each test certifier has their own ERMA 'SNUFFY Site' a secure and authenticated area that they can log into to access data that they are entitled to see. The test certifier can also access any previously submitted forms that require renewal or have been rejected for some reason. Following approval, the test certificate is automatically imported into BERT.

Standardised and ad-hoc reporting functionality has enabled ERMA staff to report on any step in the submission and approval process, as well as reporting retrospectively on approved and rejected test certificate forms. External agencies can also access and report on this data through a secure extranet portal, enabling data to be accessible whilst maintaining strict records management principles and protocols.

The SNUFFY project rapidly became much more than just a solution installation. "We made a whole bunch of changes to the system architecture at the same time," says Mark Harris. "It involved re-engineering the perimeter edge networks to better support

SNUFFY and to provide a more secure platform for a forthcoming public facing website; from an implementation perspective alone it was a really great achievement." When this was combined with integrating the new solution on top of the structural changes the project shifted into being a major learning and development exercise for all of the stakeholders involved.

ERMA now offers a very secure, easy to use management system that is fully integrated across all of its business process and enables flexible, real time, access for all of its staff and stakeholders.

The Challenges.

"The deadlines for the project were very, very tight," admits Mark Harris, "and when the Christmas holidays intervened it pushed the timeframes out further than originally anticipated. This was not necessarily a bad thing as it was also a big learning experience for everyone involved. Simpl did exceptionally well to not only implement a new system but install an entirely new environment for it to operate on - they bent over backwards to help us."

Change management was another challenge for the SNUFFY project. Not only did ERMA's own staff need to come to grips with the changes but over 100 Test certifiers and enforcement officers from a range of different agencies also needed to be able to seamlessly transfer to the new system. Given that ERMA deals with issues of national safety and security, it was paramount that any system upgrade resulted in continuing to enhance its integrity as an organisation.

Both Simpl and ERMA went to a lot of effort to ensure internal and external feedback was received at every stage of development. Groups of Test certifiers were flown in to assess the system as it evolved, making any

changes an iterative process as opposed to waiting for them to review at the end of the implementation. “That part of the process was very well received,” says Mark Harris. “It also identified features that the Certifiers would like to have but are not being provided as yet.” Prior to launch SNUFFY was given some extremely robust internal testing and was presented at a series of training workshops which involved all of the Test certifiers who would be using the system. Simpl produced training manuals following the workshops that offer a complete “how-to” guide that should enable any new user to very quickly be able to utilise SNUFFY to its full potential.

The system is proving so easy to use that there is really no excuse not to use it and according to Mark Harris the feedback to date has been really positive from all the stakeholders involved; “The difference between the old and new systems is quite simply incredible,” he says.

- Well managed project execution combining an extensive system architecture rebuild plus a major new solution implementation.

Outcomes

- Smart integration of a new solution into existing systems that leveraged ‘out-of-the-box’ solutions to create a very unique work environment
- Building on existing well-understood, Microsoft technology to create a low-risk, user-friendly upgrade
- Interfaces developed that ensured product flexibility was not impacted through inflexible integration.
- Off-site and on-site secure access
- No longer dependent on external providers – able to self-manage most updates
- A strategic platform for publishing information to partners whilst adhering to records management principles and relevant Government standards
- Improved productivity and efficiency through better business process management, customer service and collaboration with stakeholders
- Greater flexibility; the system can now change with ERMA as it evolves and develops
- Exceptional change management – stakeholder involvement in the development process

