Case Study

Time Machine® Enables Time Travel at the Equiniti Group
For Claybrook application testing in a Secure Active Directory Environment

About Equiniti Group
The UK’s Equiniti Group is a leading provider of complex administration and payment solutions for the biggest brands in the UK. Companies like British Telecom, Lloyd’s, and MyCSP trust Equiniti for outsourcing some of their most critical business processes. For example, providing share plans to BT’s 78,000 employees and making over £13 billion in payments to pensioners every year is no small task. But Equiniti is not just a share registration and pensions company. Their combined capability has enabled them to develop unique competencies around complaints handling, auto-enrollment, payments processing and complex administration.

Challenge: Time Shift Testing the Claybrook Compendia Pension Application in Windows Active Directory

Corporate enterprise technology is a significant driver of being competitive and of new business. Therefore, undertaking the critical Claybrook application deployment is a challenge task for the IT team at Equiniti to ensure critical business processes such as payments to pensioners annually are recorded correctly and reports generated daily is critical for end customers as well as compliance. It must comply with new pension legislation requiring enhanced functionality and testing of their Claybrook Compendia pension application in a secure Active Directory environment.

It's difficult for the IT team to conduct future and retro date testing in this complex n-tier environment. Furthermore, it’s almost impossible to test in Microsoft's Active Directory environment because it functions as the central security control in Microsoft networks as well as many mixed mode enterprises. It provides a variety of networking services such as LDAP, Kerberos-based authentication, Domain Name services, and single sign-on for domain access. It also allows administrators to assign policies, deploy software, and apply critical updates. Because Active Directory is so tightly coupled with the systems in it's domain it is nearly impossible to date & time test applications for future events. This is due primarily to Microsoft's Kerberos authentication process which prevents any system clock changes.

Quote
“It would not have been easy to comply with the new pension legislation without Time Machine, especially in Active Directory. The product works great!”

Tim Meadows
Project Manager
Changing the system time in an Active Directory environment can be problematic, and isolating a server doesn’t mirror production and adds unnecessary risk.

**Time Machine Solution**

Having learned about Time Machine, the IT Manager thought it just might be the perfect solution for their needs. After a successful demonstration and proof of concept, the teams were happy to learn that Time Machine’s benefits including allows virtual clock to be set to both physical and virtual machine, has the flexibility to assign user or group user to perform critical test cases in Windows Active Directory environment. The team unanimously agreed Time Machine is an ideal solution for the Claybrook implementation.

Time Machine was deployed across all tiers in their windows testing environments; web server, the application server, and SQL Server and the Time Machine Web Console was used to broadcast and synchronized virtual time across target servers from a single web interface. In testing, testers need to move the dates around to simulate existing and/or new policies when application changes, time test of pension interest rate, etc. The team got spontaneous response on any Time Machine questions. Even then, there were certain capabilities that were important to Equiniti’s process that the Web Console lacked initially; the team enjoys the agile responsiveness of the Solution-Soft support and engineering teams were able to evolve quickly to address their needs.

Time Machine enabled the Equiniti Claybrook team to future and retro date test their popular pension application for customers. Additionally, with Time Machine, multiple testers can work concurrently on the same server without impacting each other, or the system time, a huge value add for the team. Overall, the Time Machine solution has optimized Equiniti’s application testing and simplified the process resulting in significant savings and helped to prevent potential glitches that might put corporate business operation in danger.