Case Study

Time Machine® helps Avanade & a Large U.K Bank Achieve Critical Delivery and Cost Savings for Mortgage Origination Project

About the Customer

This major global financial services provider is engaged in personal banking, credit cards, corporate and investment banking, and wealth and investment management. With over 300 years of history and expertise in banking, they currently operate in over 50 countries and employ 140,000 people. This financial institution moves, lends, invests, and protects money for customers and clients worldwide.

About Avanade Inc.

Avanade Inc., a subsidiary of Accenture plc. is a multinational IT consulting and software company that develops business software from a Microsoft products platform, provides business technology solutions and managed services. It’s our Microsoft expertise, rich customer experience, and unending helpfulness that set Avanade apart.

Challenges:


The customers “Mortgage Origination Project” (MOP) needed to be deployed within a very short timeframe. The component integration testing system provides employees with an “end to end” solution that facilitates the mortgage application process.

The environment consists of a Windows 2008 3-Tier architecture within Active Directory. There is a client software component containing the majority of the application logic, a backend database, and a reporting module to generate usage reports. The MOP is an end-to-end solution that facilitates the mortgage application process. It processes applicant’s information into the system and qualifies whether or not an applicant is approved. In order to verify the entire system will behave correctly policy test cases need to be evaluated in both past & present. A brief high-level overview of the types of testing needing to be done with applications at 10 days X happens, 30 days Y happens & 60 days Z happens. Testing around time-triggered (expiry) events such as these as well as end-of-month billing, etc., are essential for a mortgage application platform. Performing these tests in real time was not a possible solution and neither was simply changing the system dates due to the security provisions associated with Active Directory.
2. Training Users after Deployment

Additionally, in conjunction with deployment of the system, all of front-end users would need to be trained on the system with live walkthroughs of the processes. Over time, users could become familiar with how an action taken “today” would trigger something else in the “future”.

Time Machine Solution

After a quick evaluation, the joint team of Avanade and the customer found they could easily use Time Machine to simulate a future or past date within their Active Directory environment for just the MOP program while other users on the server would remain unaffected and see the current date & time. Time Machine solution was able to make SQL server think it was a certain time, which was critical, because workflow needed to be fooled thinking it was a certain time.

They were able to create a simulated date using Time Machine for each tester or training session. Whenever one of these users ran the program they can now see the required dates rather than the system date. Without Time Machine, they would have had to commit critical company resources and a substantial amount of time to validate the mortgage application by rebuilding the system after each test-cycle.

According to Mortgage Platform Architect Michael Chittock, “Without Time Machine, we simply would not have been able to accomplish this testing or training as it would have been way too much work and the wrong dates would have been seen in the program. Microsoft’s Active Directory essentially prohibits us from being able to move the system clock forward or back from real-time. Time Machine provided us the ability to get this done.” Avanade consultant Simon Bradbury adds, “as a member of Avanade’s delivery team, I would not hesitate to involve Solution-Soft in other testing schedules and look forward to working with them in the future.”

With Time Machine, Avanade’s team was able to efficiently test and train users of their mortgage processes. As a result, Time Machine allowed the customer to dramatically reduce their testing times, manpower, & system resource requirements 3-5 times less thereby saving their client hundreds of thousands of dollars in deployment costs.