Solution-Soft

Time Machine® helps to streamline State's Health Insurance Exchange (a.k.a. Obamacare) Project.

Saving countless hours and expense on its web project launches, ongoing development, and operational needs.

Quote

"We were in a severe time crunch in our project. In just 15 minutes we had Time Machine up and running. In the relatively short period Time Machine has been deployed, it has already saved us weeks in our regression testing and development costs. Highly recommended product and worth every penny spent!"

-Sr. Technical Architect on the HIX project.

About the Consulting Vendor

One of the world's leading consulting firms, helping clients to translate leading ideas and technologies into sustainable, competitive, and strategic advantage. Professionals here are uniquely known as the industry's only authentic consultants. They work collaboratively with clients to marry strategy to technology, driving complex change initiatives that deliver real value.

US State Health Insurance Exchange

The US State's official health insurance marketplace was established to satisfy the requirements of the federal Affordable Care Act. Their mission is to increase the number of state residents who are insured, lower their costs, promote health, and eliminate obstacles to getting health care.

Challenge:

As part of the State's HIX web deployment and ongoing development, operations and maintenance needs, they need to test applications in the past, present & future times to ensure they properly handled all enrollment time-based processes appropriately. This includes policy and rate changes, regression testing for both small and major development release updates, and notices sent via batch job. Also critical was the ability to do "what-if" analysis. In the State's initial test methodology, as correctly pointed out by their partner, a number of critical issues that would not allow for proper and efficient testing arose when using Microsoft's Active Directory (AD) or attempting to circumvent it. With AD in place the fundamental issue was a side effect of the Kerberos security method, integral to Microsoft's AD, which prevented successful future and past date testing. And with AD circumvented, critical issues around Domain accounts not being available and SSL Certificates becoming invalid prevented successful and efficient testing. Additionally, as the testing system is shared by many users and projects, they could not simply change the system's real time without impacting other applications and users working in

the same environment. And even if they could move the system clock on the server, the resulting date change to critical system files would have enormously negative effects on the operating system and database stability, which could require a complete restore of the system, database, or both after each test iteration.

Time Machine Solution

The consultant's Senior Technical Architect, who had used Time Machine on an earlier and different client project with great success, turned to Solution-Soft's Time Machine, a past, present and future date testing, therefore simulating their project's processes and their "what-if" analysis freely and efficiently! The ability to change the virtual clock at any time without having to change the actual system clock definitely gives test teams the entire freedom to run critical test cases including policy and rate changes, regression testing for both small and major development release updates, and notices sent via batch jobs.

Time Machine helps the team to overcome another critical issue when running test cases in Microsoft Active Directory environment. It enables applications to time travel in the Active Directory environment. When testers begin, Active Directory continues to see the system time, so the authentication will be successful. When applications ask for time, they will see the virtual clock. Time Travel with Time Machine is transparent to the applications and data base. Not a single line of code needs to be modified for time travel.

Many of their testing is in a severe time crunch situation, with Time Machine they are able to avoid lengthy, costly and sometimes impossible processes; to test compliance change to ensure the key functionality is correct and properly handled for all enrollment time based processes appropriately. In addition, the same testing can be done against the code change, upgrade of the data source and on the same virtual machine as the tester executing the regression test. Time Machine simplifies their test strategy and enables a more collaborative atmosphere. The test teams really appreciate Solution-Soft's product and support!

The Sr. Technical Architect on the HIX project said, "We were in a severe time crunch in our project. In just 15 minutes we had Time Machine up and running. In the relatively short time period Time Machine has been deployed, it has already saved us weeks in our regression testing and development costs. Highly recommended product and worth every penny spent!"