About USDA WIC (Women, Infants, Children)

The Special Supplemental Nutrition Program for Women, Infants and Children – better-known as the WIC Program serves to safeguard the health of low-income pregnant, postpartum, and breastfeeding women; infants; and children up to age 5 who are at nutritional risk by providing nutritious foods to supplement diets, information on healthy eating including breastfeeding promotion and support, and referrals to health care. This Food and Nutrition Service (FNS), a Federal agency of the U.S. Department of Agriculture, is responsible for administering the WIC Program at the national and regional levels.

The WIC software is developed by a top-tier consultancy described as a “global leader in providing technology enabled business solutions and services,” and is utilized by many states to implement and deploy the WIC program. This global leader of more than 50 years develops smart, technology-enabled solutions to solve their clients' toughest challenges, demonstrating a commitment to excellence and a passion for exceeding expectations.

Challenges: Testing ongoing Date-Triggered Events, Duplicating State issues with the software, Benefit Expiration Rules, and future date testing new releases of the software suite

WIC participants (U.S. states and Indian Nations) using the software needed a way to date test both pre- and post-deployment of the software under Windows Active Directory environment, and the developer needed to be able to duplicate these issues in-house:

- Participation Counting
- Certification Periods
- Benefit Issuance
- Report Validation
- Rebate Testing

Windows Active Directory prevents changing the system clock, as network login would fail if the system clock were even five minutes away from the domain server’s clock. For instance, Benefit Issuance verification requires a 3 month or more test cycle. The problem is that benefits can’t and are not paid out more than three months in the future.
Without Time Machine, the software developer and the state participants would have to wait until a specific date to run tests to determine the issues being without Time Machine, the software developer and the state participants would have to wait until a specific date to run tests to determine the issues pertaining to a particular client. This created a backlog of cases and often a large bottleneck of testing to be done in a very small window of time. It also provided no real window to look into the issues being created. Often the WIC participants would have to implement a fix and just wait until the future date became current, and run the application to see if the fix actually worked.

Time Machine Solution

With Time Machine, the software developer is now able to mimic or recreate the issues by adhering to the same configuration and rules as well as running a similar database as the participating states running the WIC software. Running the Time Machine software in conjunction with the similar configuration and database allows the software developer to easily duplicate the issues, identify the problems, and determine the fixes in an organized and timely fashion without the time clock looming over head as their window of opportunity to test slips by. The Time Machine software enables the software users to perform tests that would otherwise be almost impossible to perform based on Microsoft’s Active Directory and the limited window of time available to perform each series of tests needed to be completed to determine the solution. As new releases of the software become available, certain applications (Participation Counting, Certification Periods, Benefit Issuance, Report Validation, and Rebates) need to be tested at dates in the future. The Time Machine software affords this action to be completed quickly and efficiently because it’s so easy to set a virtual date and run the applications.