Case Study

Time Machine® Helps University of Buffalo on PeopleSoft Campus Solutions Deployment and Ongoing Support

About University of Buffalo

The State University of New York at Buffalo is a public research university with campuses in Buffalo and Amherst, New York. It is commonly referred to as the University at Buffalo (UB) or SUNY Buffalo and was formerly known as the University of Buffalo. It is the de facto flagship campus of the State University of New York (SUNY) system, with the largest enrollment, largest endowment and research funding as a comprehensive university center in the SUNY system. The university was founded in 1846 as a private medical college, but in 1962 merged with the SUNY system.

The Project and Challenge

UB needed to implement the Oracle/PeopleSoft Campus Solution for higher education, which consisted of a suit of modules that included Course Catalogue, Administration Recruiting, Financial Aid, Human Resources, Class Scheduling, etc. The project was to be a rolling go live over a 12-24 months period. Solaris UNIX (mostly) and Windows were initially the OS environments in the initial implementation 2010, though in 2014 they migrated to a totally Linux OS platform. The PeopleSoft application test and development environment consisted of an Oracle Database Server, Application Server, Web Server, Process Scheduler, and VMWare.

For the project’s success, the UB team needed to be able to test the algorithmic codes they place in the PeopleSoft Campus module to meet government requirements around financial aid and rules changes, as well in date, fee, admissions, class schedule dates (start, end, add and drop dates) changes, and that for all have an ongoing periodic need. To do this effectively and timely they needed a way to application test in the future “without” changing the system clocks real time, in part because it would administratively cumbersome and time consuming, but also and perhaps more importantly as the test and development environment is shared by other users and projects. Changing the system’s real time would impact other applications and users working in the same environment, and any date changes 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.

Quote

"We can now test all our time sensitive code changes, updates and deployments quickly and simply, and projects move along easier and faster now. Changing the date/time on any of the PeopleSoft Campus components in the environment is a breeze."

- UB UNIX/Linux Admin for Test & Development Environment
Additionally, because of the Kerberos network security authentication protocols in Kerberos UNIX and Microsoft Active Directory environments, users login in with a time-based ticketing system. If the user’s system clock is more than five minutes different than the Domain Controller's system clock, the login would fail. As a result, resetting the system clock for forward date testing is not possible in such environments. Thus Time Machine is the unique solution that let the secure login process see the current system time and allow different applications and users to see the virtual clocks.

The Time Machine Solution

In search of a solution to their future date testing needs above, UB Manager of Application Development spoke with Tony O., CIBER Consultant and PeopleSoft expert (Campus module included). Tony highly recommended Time Machine, a tool he knew well and of its time and costs saving benefits from his heavy involvement on the University of Houston PeopleSoft Campus project—and where Time Machine was used extensively. Upon hearing this UB quickly requested an evaluation of Time Machine from Solution-Soft and after successful testing soon purchased Time Machine licenses.

“With Time Machine,” UB UNIX/Linux Admin for Test & Development Environment said, “we can now test all our time sensitive code changes, updates and deployments quickly and simply, and projects move along easier and faster now. Changing the date/time on any of the PeopleSoft Campus components in the environment is a breeze. And the folks at Solution-Soft in support of Time Machine have been awesome as well. When we have an issue, like the time we upgraded to the new and just released v4 Linux kernel, they were on it right away and had a new release of Time Machine to fix the problem to us in just 72 hours.”

As of this writing, UB has now been a happy Solution-Soft Time Machine customer for 6 years and counting, starting with their original PeopleSoft Campus implementation on Solaris (UNIX) in 2010, their migration to the Linux OS, and ongoing periodic testing needs throughout.