Delphix and Solution-Soft

The combination of Delphix and Solution-Soft offers application testing teams the ability to engage in code validation cycles that require database refresh and time travel processes. There is no need to engage the infrastructure support teams, resulting in a highly efficient and reliable test process.

Struggles in Time Travel Testing

Time-traveling application and database configurations are a common need when testing date and time-sensitive logic such as month-end, quarter-end, year-end processing, billing cycles, policy life cycles, and regulation change dates. These processes could take days to complete and may suffer testing cycle interruption when the infrastructure teams are called on to focus on high priority ticket items.

The time travel testing process in many large enterprises still relies on mountains of manual work, which is slow, expensive, unreliable, and prone to errors. Many enterprise testing teams are still expending considerable effort and time in orchestrating testing features through the software pipeline. While there has been an explosion of tools in the software testing market, it has been difficult for companies to find the best combination of tools to independently run test cycles without depending on multiple teams to complete a standard test.

Successful Time Travel Operations

Organizations need to look no further. Delphix and Solution-Soft have partnered to provide a unified best-of-breed solution capable of transforming enterprise software delivery—including the customer success and support necessary for enterprises. The unique combination of technologies eliminates low-value efforts that developers, DBAs, test teams, release managers, and operations teams must otherwise perform, and allows teams to focus on efficiently and effectively building and releasing software.
The Delphix DataOps Platform allows testing teams to instantly refresh, move, and provision secure data. Testers can bookmark or version datasets, without the need to engage the infrastructure team for support. Delphix runs on any server, storage, and supported hypervisor either on-premises or in a cloud environment.

Solutions-Soft’s Time Machine provides software virtual clocks to time travel applications into the future or the past, facilitating time shift testing on date and time-sensitive application logic. Time Machine eliminates the need to reset the system clock, allowing testers to move their systems to the targeted time points quickly and easily. Testers can continually test without needing to pause, shut down, and then restart their server by their infrastructure teams, as required when adjusting system clocks.

Better Together

Delphix can travel datasets back and forth on a timeline based on bookmark and rewind features. Solution-Soft Time Machine can time travel the application using virtual clocks. Together both data and application can be time traveled to the same time point with ease.

Both products also provide APIs to support test automation which is critical for CI/CD success. Mutual customers can shorten agile test cycles and perform regression testing automatically on premise or in the cloud.

- Delphix time travels data using bookmarks to version control data like code
- Solution-Soft Time Machine time travels the infrastructure system clock using virtual clocks
- Together we provide a complete solution for our mutual customers

Time Shift Testing

Companies often need to ensure an application behaves as expected in a time-specific scenario such as quarter-end processing, invoice aging, or contract expiration. To facilitate time shift testing, Solution-Soft and Delphix coordinate both the system and database operating system times to move in sync when testing application logic over time.

The virtual infrastructure system clock is set to any number of future timeline dates using Solution-Soft, and Delphix is used to bookmark these dates in the virtual database timeflow. These milestones dates are bookmarked so test teams can easily move forward and backward for functional testing.

- Delphix DataOps Platform time travels the data with virtual databases & bookmarks
- Solution-Soft Time Machine time travels the system clock with virtual clocks
- Together we provide a complete solution for time travel testing
FIGURE 1 Time travel example
To test quarter-end processing, an insurance company can time travel the policy management virtual database to Q1 year 2021 and also time travel the virtual system clock to March 31, 2021. Test teams can then time travel the virtual system clock to year 2030 when the policy will be expiring to test if the application behaves correctly with Solution-Soft’s Time Machine. Using Delphix to create past or future bookmark dates in the virtual database, testers match the bookmarks with the desired Solution-Soft virtual clocks to retest with ease.