

Date and Time Simulation (DTS) Testing

Business Challenges

Date and time logic is pervasive in most applications and yet also prone to error due to the often-complex nature of date/time computations and comparisons and the occurrence of conditions such as leap years that are not properly addressed in application logic.

You need to have your global businesses functioning in their local time zone, even though your mainframe systems may be physically located far from your business centers.

Date and Time Simulation

Date and Time Simulation (DTS) time travel software lets you certify your applications for correct date and time logic by allowing you to test them on apparent future dates and times. Date and time logic is heavily embedded in most business applications. For example, certain events must take place at start of week, end of month, policy anniversary, payment due date, and so on. There are many more such examples. It is essential that application behavior on these significant future dates and times is tested to ensure application quality and reliability. DTS software helps you do this by letting you set "virtual system clocks" for the applications to be tested. To these applications, it appears that the simulated date and time is the true system date and time. However, the actual system date and time are not altered, and other work running on the same physical system is unaffected.

An additional use of time travel is where user communities are in different time zones to the data center. By shifting the system time appropriately, correct local time can be presented to all users of the data center. This simple solution can often eliminate significant expense by helping remove the need for separate physical systems for the different, distributed user groups.

Features

Softdate/z SOA supports all apps and systems on z/OS mainframes such as DB2, CICS, IMS and COBOL with exclusive support for CICS MRO, full Parallel Sysplex and much more, plus the unique options: Java & WebSphere Application Server (WAS) for z, Software AG's Natural & ADABAS for z and Beyond-2042 support.

Softdate/z exclusively consumes only 0.01% or less background CPU overhead in comparison to the 2% to 5% of old MVS-based competitors, saving many MSUs/MIPS. At a valid average

- **Test z/OS programs with a simulated past or future system date and time**
- **Support z/OS user communities in different time zones by presenting local time to them instead of data center time (Global Time Zone Virtualization)**

estimate of USD 4,500 per MIP per year. Softdate/z always immediately and substantially reduces mainframe costs.

With Softdate/z for IBM's z/OS Global Time Zone Virtualization (GTZV) you can dramatically reduce the complexity and cost of running and maintaining multiple specialized z/OS LPARs.

Softdate's simple yet powerful rules-based facility lets you easily define groups of users and/or applications, all sharing the same z/OS image, and the local time zones they are to see. Each user group will see the local time zone that is correct for them.

Reducing complexity not only delivers direct cost savings, but also facilitates increased organizational agility and productivity of your developers and testers, plus support and administration personnel.

Advanced Technologies

Thanks to its exclusive Dynamic Intercepts technology, Softdate/z is the only product that does not require permanent modifications to key system routines and does not impose a heavy background CPU load on all other work running in the same z/OS image.

User Interface

Softdate/z features a simple yet powerful user interface. Softdate/z can be turned on at the job or job step level via JCL in the job or job step or via a very comprehensive ISPF-based rules facility. The rules facility is the most powerful and granular available, with full wild-card specification supported for all job selection criteria.

All ISPF rules functions can also be executed from batch jobs. The virtual clock settings in running jobs can be dynamically altered via operator commands or batch jobs. Full security controls are available for all functions.