



# OPTA2000

## Virtual Clock & Time-Zone Simulator for Time-Sensitive Applications

### Features

No application modifications required

Supports multiple virtual clocks and virtual time zones on one NonStop server

Supports Daylight Saving Time (DST) transitions

Supports major third-party apps.

Exclusion lists ensure normal system operations for backups, EMS logging, TMF, and other apps.

Enables the consolidation of multiple environments onto NonStop Integrity or Blade servers

SystemView for selective access to specific CPUs

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### Overview

TANDsoft's OPTA2000™ is a clock and time-zone simulator for HP NonStop servers - S-series, Itanium, and Blades. It allows existing backup, development and production systems to support worldwide consolidated applications. OPTA2000 eliminates the need to change system clocks in order to test environments that are time-sensitive. It also supports multiple time zones on a single server. No application modifications are required.

### How It Works

OPTA2000 uses intercept libraries to provide virtual system times arbitrarily offset from current time. For time-zone simulation, the libraries create virtual times offset from a system's actual time by an amount expressed as a deviation from GMT time (Greenwich Mean Time). For clock simulation, the virtual system times can be arbitrarily offset to whatever time is required for the testing, maintenance, etc., of an application.

Services are offered via flexibly defined application groups that can consist of a specified set of programs, processes, users, the descendants of a common ancestor, and so on. If an application is not defined within any application group, it continues to operate off the normal system time. A system can host many application groups, and each application group can specify its own time offset. No matter the application, programming language, system type, program type, or operating environment, all time calls ultimately generate a system call to a handful of operating-system procedures. Employing a command interface, a user can enter a date, time and time zone to be used by an application group. Thus, whenever a process within the application group makes a time call, OPTA2000 will intercept it and will return a time appropriately offset from the system clock.

Supports All HP NonStop Application Types and Platforms (TNS, TNS/R, and TNS/E)

### OPTA2000 Benefits

- Consolidation saves costs of hardware, licenses, and IT resources.
- Simplifies load balancing.
- Tests third-party solutions' impacts on stable production systems.
- Increases productivity • Tests round the clock.
- Virtual system times can be arbitrarily offset both to future times *and* past times.
- Evaluates multiple applications simultaneously.
- Tests overnight runs for date continuity.
- Expedites disaster-recovery efforts by allowing several weeks' work to run at same time.
- Sets artificial times for use in the training of staff.
- Evaluates "what if" scenarios.
- Identifies program inconsistencies at future dates.



