WebSphere. software

IBM Workload Simulator for z/OS and OS/390®

Highlights

- **Helps prepare your network for peak transaction volumes**

- **Enables testers to conduct reliable tests on stress, performance and capacity as well as regression and function tests**

- **Simulates different terminals, terminal features, and terminal operator actions**

- **Provides support for enhanced TCP/IP support, SNA and CPI-C (LU 6.2)**

- **Helps manage the test process**

- **Offers several options for creating scripts to use in simulations**

- **Provides screen images, data and reports during simulations**

- **Helps testers compute and analyze test results**

Be prepared

Today not only do transaction volumes vary, but also the changes can be very abrupt. A sudden, unplanned spike in transaction volumes can tax the traffic-handling capabilities of your network. In the end, the profitability of your business can be seriously impacted. IBM Workload Simulator for z/OS and OS/390® can help you test your networks and determine if your infrastructure is capable of handling the additional workload.

A comprehensive test tool

Workload Simulator provides the ability to simulate terminals and the associated messages. It also lets the user alter message loads during a run. It can be used to generate a large volume of messages to evaluate the reliability and approximate performance characteristics of a network under expected operating conditions. Simply stated, anything that a real user can do at a terminal, Workload Simulator can do faster, more reliably, and typically at less cost.

Transmission Control Protocol/Internet Protocol (TCP/IP)

- *Workload Simulator provides native support of multiple client applications that run "on top" of TCP/IP; that is, TCP/IP handles all routing and delivery between the Workload Simulator host and the system under test. Workload Simulator implements its connection to TCP/IP on the local host using the macro API. Telnet 3270, 3270E, and 5250 clients Workload Simulator simulates Telnet 3270 and 3270E clients connecting to a Telnet 3270 server or 3270E server to enable simulation of Telnet 3270E terminals. It can also simulate Telnet 5250 clients connecting to a Telnet 5250 server.*

- *Telnet Line Model Network Virtual Terminal (NVT) clients. Workload Simulator simulates Telnet Line Mode NVT clients connecting to a Telnet server.*

- *Simple TCP and User Datagram Protocol (UDP) clients. Workload Simulator offers simple TCP and UDP client simulation; it provides a means of transferring data to and from simulated clients through TCP/IP connections.*

- *File Transfer Protocol (FTP) clients. Workload Simulator simulates multiple users transferring files of varying sizes and characteristics to test applications and networks to gauge how FTP sessions affect the system.*

System Network Architecture (SNA)

SNA logical units (LUs) can be simulated by Workload Simulator while executing as a VTAM application program. General support is provided for LU types 0 to 7, with special support for the LU 2, LU 3, LU 6.2 and LU 7 data streams.

Common Programming Interface Communications (CPI-C)

The expanded SNA portfolio provides CPI-C (LU 6.2) transaction program simulations to test existing LU 6.2 applications, execute stress or performance testing, and test applications still under development.

Workload Simulator Test Manager (WTM)

WTM guides the user through the test process. WTM can help users develop and manage test causes,

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automate test runs, and analyze results. For even more flexibility, WTM offers three modes of operation that control the amount of that interaction the user can observe through Workload Simulator.

Flexible generation of scripts

- *Structured Translator Language (STL). STL is a high-level REXX-like language for defining what information Workload Simulator should send, what it will receive, and what actions it should take.*
- *Interactive Data Capture (IDC). IDC provides a quick and simple method for capturing session traffic to and from a live 3270 session. This information can be converted to a Workload Simulator script for replay, or edited and used as a basis for more complex simulations.*
- *NPM/LU 2 Reformatter. This refomatter can convert a 3270 session data from VTAM® buffer trace or a Network Performance Monitor (NPM) VTAM log into a format readable by the Workload Simulator utilities, including the IDC Script Generator.*
- *Script Generator. This generator produces Workload Simulator scripts from full VTAM buffer traces or NPM VTAM log data sets; it also generates Workload Simulator CPI-C STL programs from OS/2® Communications Manager and Communications Server traces.*

Extensive run-time support

Workload Simulator offers various utilities for users as they test their networks:

- *ISPF Interface. Workload Simulator has an Interactive System Productivity Facility (ISPF) panel interface that helps both new and experienced users set up and start the application and its utilities.*
- *Display Monitor Facility. Simulated 3270 screen images and the data stream sent and received by simulated devices* can be

displayed during a simulation run.
- *Run-time reports. The data sent and received as well as the message rates, terminal status and inactive terminals can be displayed during and at the end of a simulation run.*
- *ITPECHO. This VTAM application echoes received data. ITPECHO can be used as a target application either on the same host with Workload Simulator or on a different host of network testing.*

Powerful post-test analysis

- *Loglist. The simulation run log can be formatted in a selective, time-linear fashion for post-run analysis and debugging.*
- *Log Compare. 3270 display records from two simulation runs can be compared, and the differences listed. Specific screen areas can be ignored or compared.*
- *Response Time. The response time of the system user test can be retrieved from the Workload Simulator log and printed to a report.*

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IBM Optim Move for DB2, Version 6.1:
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IBM Workload Simulator for z/OS and OS/390, Version 1.1:
ibm.com/software/awdtools/workloadsimulator

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IBM System z tools at a glance
Hardware requirements
Workload Simulator for z/OS and OS/390, Version 1.1, runs on any hardware configuration supported by the licensed programs specified here.
Software requirements
Workload Simulator for z/OS and OS/390, Version 1.1, runs under the control of, or in conjunction with, the following programs and their subsequent releases, or their equivalents.
Required licensed programs
• IBM z/OS, Version 1 (5694-A01) or later • IBM OS/390 Version 2 Release 10 (5647-A01) or later

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