



EXTRAORDINARY SCALABILITY — 14,000 CONCURRENT USERS

eBusiness Challenge

Companies and organizations across the globe are dramatically expanding interactions with their customers by using more effective online ebusiness solutions such as Siebel Systems' eBusiness Applications. These organizations need to be certain that the infrastructure systems they implement—from the network to the various levels of servers—will not only support additional computing loads and a far greater growth in concurrent users, but will also provide the response times necessary to gain the advantages of moving online. As companies adopt ebusiness models, the number of concurrent users jumps from hundreds to thousands. This order of magnitude, referred to by Sun Microsystems as “the nth degree”, can reveal scalability bottlenecks that are not problems at lower usage levels.

Objectives

Recognizing a customer's need to understand and plan for these scalability issues, Sun Microsystems developed benchmarking tests to demonstrate high-end scalability using business scenarios that reflect a dynamic and extremely active call center. The aim behind these tests was to:

1. Document and certify a scalability exercise with a criteria of a minimum of 10,000 concurrent users performing multiple realistic tasks with sub-second response times;
2. Utilize Sun Microsystems Enterprise™ servers and the Sun Solaris™ operating environment exclusively to implement an infrastructure supporting users running the Siebel Systems' eBusiness Web Client;
3. Further aid in sizing and configuration guidelines for implementing Web-centric Siebel Systems-on-Sun Microsystems solutions.

Test Description

The scalability team, consisting of Sun Microsystems and TGT Systems in collaboration with Siebel Systems, converted the major functions of five business scenarios under the Siebel Systems' eBusiness Call Center application to a Siebel Systems' HTML thin-client with the use of Siebel Systems' Tools. This conversion effort took less than one week. The Siebel Systems' Product Marketing team provided the business scenarios which are based on studies of existing Siebel Systems' Call Center users where call loads were the highest. Testing was performed at Sun's benchmarking facility in Beaverton, OR, and the Sun iForce Ready Center in Menlo Park, CA, during the fourth quarter of 2000.

Test Environment

The Oracle 8.1.6 (64 bit) database server was run on a 40 CPU and 40GB of memory domain by one (1) Sun Enterprise 10000 server. The Siebel Systems' Servers were run on two (2) Sun Enterprise 10000 server domains configured with 48 CPU and 48GB of memory. The Siebel Systems' Gateway and Sun iPlanet Web servers were run in a separate domain on one (1) Sun Enterprise 10000 server configured with 20 CPU's and 20 GB of memory.

A database size of 250GB was utilized for the test which contained the following data:

20,000	Employees
1,200,000	Accounts
6,000,000	Account Contacts
4,000,000	Service Requests
7,800,000	Activities
4,000	Campaigns
4,000,000	Campaign Prospects