Oblix NetPoint 4.0 AuthMark Performance

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Disclosure

Oblix Inc. sponsored the testing in this report. Mindcraft, Inc. conducted the performance tests described in this report at Sun's test lab in Menlo Park, California.

Acknowledgement

We thank Sun for providing the systems used for the tests and the support staff who helped configure the servers.

Executive Summary

Oblix NetPoint 4.0 delivers 103,200 logins per minute and 16,260 Extranet Sequences (178,860 operations) per minute for 1,000,000 users while demonstrating great scalability

Oblix NetPoint delivers the best login and Extranet performance of any product we have tested to date. In addition, NetPoint's performance scales exceptionally well as more CPUs are added to each Access Server and as more Access Servers are used.

Mindcraft® tested the performance of Oblix NetPoint 4.0 running on Sun Enterprise 450 servers. For these tests, we used Mindcraft's iLOAD MVP™ test tool running the AuthMark™ Login and Extranet Scenarios. These test scenarios simulate users accessing protected resources via Web servers. All tests were done using a 1,000,000-user directory.

Login Scenario

The Login Scenario measures the combination of one user authentication and one authorization for access to a resource (called a Login). The Result Analysis section in the second part of this white paper explains the benchmark results.

The NetPoint Access Server is the control point for all authentication and authorization. Our tests were structured to push the Access Server systems as close as possible to 100% CPU utilization. Table 1 summarizes the Login Scenario performance as a function of the NetPoint Access Server system(s) configuration. The Scaling Factor in Table 1 shows how much faster a configuration is compared to a single system with one CPU using one directory server, the smallest configuration.

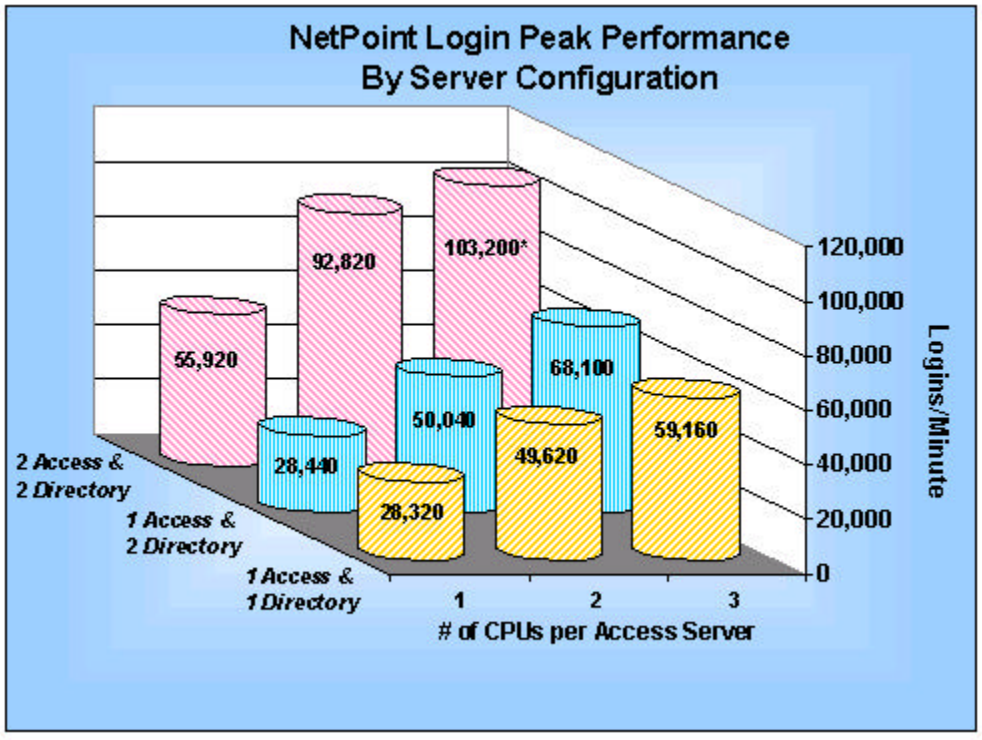
Table 1: NetPoint Login Performance Scalability - 1,000,000 User Database

Logins per Second	Logins per Minute	Scaling Factor	NetPoint Access Server Configuration	# Directory Servers
472	**28,320**	Baseline	1 system, 1 CPU	1
474	**28,440**	1.0	1 system, 1 CPU	2
827	**49,620**	1.8	1 system, 2 CPUs	1
834	**50,040**	1.8	1 system, 2 CPUs	2
932	**55,920**	2.0	2 systems, 1 CPU	2
986	**59,160**	2.1	1 system, 3 CPUs	1
1,135	**68,100**	2.4	1 system, 3 CPUs	2
1,547	**92,820**	3.3	2 systems, 2 CPUs	2
1,720*	**103,200***	3.6*	2 systems, 3 CPUs	2

* - There were not enough Web servers available in the lab to fully utilize the CPUs in the NetPoint Access Servers.

Figure 1 shows NetPoint's performance from Table 1 by server configuration.

Figure 1: NetPoint Login Scalability for a 1,000,000 User Database



Extranet Scenario

The Extranet Scenario measures the combination of one user authentication and 10 authorizations for access to resources (these 11 operations constitute one Extranet sequence). Table 2 compares the NetPoint Extranet Scenario performance to that of the Login Scenario for the same hardware configuration - two Access Servers each having one

CPU and two directory servers. The results in Table 2 demonstrate that the NetPoint Access Server performs authorizations 60% faster than authentications. The Extranet Scenario, because it uses a more realistic mix of operations than the Login Scenario, provides a better basis for capacity planning purposes.

Table 2: NetPoint Extranet and Login Performance - 2 Access Servers, 1 CPU Each

Measurement	Extranet Scenario	Login Scenario
Authentications/minute	16,260	55,920
Authorizations/minute	162,600	55,920
Total operations/minute	**178,860**	**111,840**

Conclusions

The benchmark results lead us to conclude that:

- Oblix NetPoint delivers the best login and Extranet performance of any product we have tested to date.
- NetPoint's authentication performance scales almost linearly with the number of CPUs and Access Servers.
- NetPoint's authorization performance is outstanding, exceeding its authentication performance by 60%.

Mindcraft Certification

Mindcraft certifies that the results reported accurately represent the performance of Oblix NetPoint 4.0 running on Sun Enterprise servers configured as specified herein and as measured by AuthMark benchmark.

Our test results should be reproducible by others using the same test lab configuration, the same Sun server configurations, and the same software configurations documented in this white paper.

Analysis and Test Details ▶

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