

Hitachi Adaptable Modular Storage 2300 Dynamically Provisioned 13,600 User Exchange 2007 Storage Solution

Tested with: ESRP – Storage Version 2.1

Test Date: November 2009

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Overview

This document provides information on a Hitachi Adaptable Modular Storage 2300 storage solution using Hitachi Dynamic Provisioning for Microsoft Exchange Server 2007, based on the Microsoft® Exchange Solution Reviewed Program (ESRP) – Storage program. For more information about the contents of this document or Hitachi Data Systems' best practice recommendations for Microsoft Exchange Server 2007 storage design, see <http://www.hds.com/solutions/microsoft/exchange.html>.

The ESRP – Storage program was developed by Microsoft Corporation to provide a common storage testing framework for vendors to provide information on its storage solutions for Microsoft Exchange Server software. For more information about the Microsoft ESRP – Storage program, see <http://www.microsoft.com/technet/prodtechnol/exchange/2007/esrp.mspx>.

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Features

The purpose of this testing was to measure the ESRP 2.1 results on a Microsoft Exchange 2007 environment with 13,600 users and eight servers. This testing used a Hitachi Adaptable Modular Storage 2300 storage system using the Hitachi Dynamic Provisioning feature in a two-pool RAID-1+0 configuration (one for databases and one for logs). These results help answer questions about the kind of performance capabilities to expect with a large-scale Exchange deployment on the 2300.

The test configuration was capable of supporting 13,600 users with a 0.576 IOPS per user profile and user mailbox size of 2GB. A 2300 with 240 450GB 15K RPM SAS disks, 16GB of cache and eight 4Gbit/s host paths was used for these tests. Testing used eight SunFire 4270 servers with 32GB of RAM, two quad-core Intel E5540 processors with 2.53GHz CPUs each, 16 Emulex 4Gbit/s Fibre Channel adapters, and Windows Server 2008 Enterprise with Service Pack 1.

The Hitachi Adaptable Modular Storage 2300 is a medium-sized, high-performance, highly reliable midrange storage system that can scale to 240 disks while maintaining 99.999% availability. It is highly suitable for a variety of applications and host platforms and is modular in scale. With the option of in-system and cross-system replication functionality, the 2300 is fully capable of being used as the core underlying storage platform for high-performance Exchange Server 2007 architectures.

Solution Description

Deploying Microsoft Exchange Server 2007 requires careful consideration of all aspects of the solution architecture. Host servers need to be configured so that they are robust enough to handle the required Exchange load. The storage solution must be designed to provide the necessary performance while also being reliable and easy to administer. Of course, an effective backup and recovery plan should be incorporated into the solution as well. The aim of this solution report is to provide a tested configuration that utilizes the Hitachi Adaptable Modular Storage 2300 to meet the needs of a large Exchange Server deployment.

This solution uses Hitachi Dynamic Provisioning software, which is enabled on the 2300 via a license key. In the most basic sense, Hitachi Dynamic Provisioning software is similar to the use of a host-based logical volume manager (LVM), but with several additional features available within the 2300 and without the need to install software on the host or incur host processing overhead. Hitachi Dynamic Provisioning software is a superior solution. Hitachi Dynamic Provisioning software provides for one or more pools of wide striping across many RAID groups within a 2300. One or more Dynamic Provisioning virtual volumes (DP-VOLs) of a user-specified logical size (with no initial physical space allocated) are created against each pool.

Primarily, Hitachi Dynamic Provisioning software is deployed to avoid the routine issue of hot spots that occur on logical units (LUs) from individual RAID groups when the host workload exceeds the IOPS or throughput capacity of that RAID group. By using many RAID groups as members of a striped Dynamic Provisioning pool underneath the virtual or logical volumes seen by the hosts, a host workload is distributed across many RAID groups, which provides a smoothing effect that dramatically reduces hot spots and results in fewer mailbox moves for the Exchange administrator.

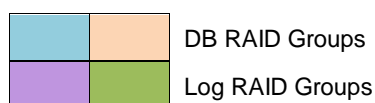
Hitachi Dynamic Provisioning software also carries the side benefit of thin provisioning, where physical space is mapped as needed from the shared pool to the DP-VOL in 32MB segments, up to the logical size specified for each DP-VOL. A pool can also be dynamically expanded by adding more RAID groups without disruption or requiring downtime. Upon expansion, a pool can easily be rebalanced so that the data and workload is wide striped evenly across the current and newly added RAID groups that make up the pool.

For an Exchange Server 2007 environment the performance and capacity utilization improvements of wide-striped pools and the enhanced management efficiencies are the primary benefits of Hitachi Dynamic Provisioning software when compared with a traditional, static storage configuration. For more information about Hitachi Dynamic Provisioning software, see <http://www.hds.com/products/storage-software/hitachi-dynamic-provisioning.html>.

For the targeted 13,600-user Exchange environment, a 2300 configured with 240 disks and eight host servers was used. Table 1 illustrates how the 2300's disks were organized into RAID groups for use by databases and logs. Each set of numbered disks represents a RAID-1+0 (4D+4D) group. Except for RKA-0 (with 15 internal disks), each RKA is an external disk enclosure with 15 SAS disks.

Table 1. Adaptable Modular Storage 2300 RAID Groups by RKA Tray Layout

<i>Drive Slot</i>	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
RKA 15	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30
RKA 14	27	27	27	27	27	27	28	28	28	28	28	28	28	28	29
RKA 13	25	25	25	25	25	26	26	26	26	26	26	26	26	27	27
RKA 12	23	23	23	23	24	24	24	24	24	24	24	24	25	25	25
RKA 11	21	21	21	22	22	22	22	22	22	22	22	23	23	23	23
RKA 10	19	19	20	20	20	20	20	20	20	20	21	21	21	21	21
RKA 9	17	18	18	18	18	18	18	18	18	19	19	19	19	19	19
RKA 8	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17
RKA 7	14	14	14	14	14	14	14	15	15	15	15	15	15	15	15
RKA 6	12	12	12	12	12	12	13	13	13	13	13	13	13	13	14
RKA 5	10	10	10	10	10	11	11	11	11	11	11	11	11	12	12
RKA 4	8	8	8	8	9	9	9	9	9	9	9	9	10	10	10
RKA 3	6	6	6	7	7	7	7	7	7	7	7	8	8	8	8
RKA 2	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6
RKA 1	2	3	3	3	3	3	3	3	3	4	4	4	4	4	4
RKA 0	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2



Two Dynamic Provisioning Pools were created, one for the databases and other for the logs. The database pool was created from 27 RAID-1+0 groups and the log pool was created from three RAID-1+0 groups. From the database pool, 200 DP-VOLs (each specified to have 200GB size limit) were created for 400 storage groups (50 per server). From the log pool, 200 DP-VOLs (each specified to have a size limit of 20GB) were created for 400 logs (50 per server).

Table 2 outlines the port layout for the servers.

Table 2. Hitachi Adaptable Modular Storage 2300 Port Layout

<i>Server</i>	<i>Primary Path</i>	<i>Secondary Path</i>
SUN158	0A	1A
SUN159	0B	1B
SUN160	0C	1C
SUN161	0D	1D
SUN169	1A	0A
SUN170	1B	0B
SUN163	1C	0C
SUN164	1D	0D

Table 3 outlines the port layout with the database DP-VOL assignments for the servers.

Table 3. Hitachi Adaptable Modular Storage 2300 Port to Database DP-VOL Layout

<i>Port</i>	<i>Database DP-VOL</i>	
0A	0-24	100-124
0B	25-49	125-149
0C	50-74	150-174
0D	75-99	175-199
1A	100-124	0-24
1B	125-149	25-49
1C	150-174	50-74
1D	175-199	75-99

Table 4 outlines the port layout with the log DP-VOL assignments for the servers.

Table 4. Hitachi Adaptable Modular Storage 2300 Port to Log DP-VOL Layout

<i>Port</i>	<i>Log DP-VOL</i>	
0A	200-224	300-324
0B	225-249	325-349
0C	250-274	350-374
0D	275-299	375-399
1A	300-324	200-224
1B	325-349	225-249
1C	350-374	250-274
1D	375-399	275-299

Table 5 provides the detailed specifications for the storage configuration, which uses RAID-1+0 (4+4) groups and 450GB 15K disks. Dynamic Provisioning pool 0 is dedicated for the databases and Dynamic Provisioning pool 1 is dedicated for the logs.

Table 5. Hitachi Adaptable Modular Storage 2300 Configuration Details

<i>Host</i>	<i>Port</i>	<i>Pool</i>	<i>DP-VOL</i>	<i>Size (GB)</i>	<i>Description</i>
SUN158	0A/1A	0	0-24	200	Storage groups 1 - 25
SUN159	0B/1B	0	25-49	200	Storage groups 26 - 50
SUN160	0C/1C	0	50-74	200	Storage groups 51 - 75
SUN161	0D/1D	0	75-99	200	Storage groups 76 - 100
SUN169	0A/1A	0	100-124	200	Storage groups 101 - 125
SUN170	0B/1B	0	125-149	200	Storage groups 126 - 150
SUN163	0C/1C	0	150-174	200	Storage groups 151 - 175
SUN164	0D/1D	0	175-199	200	Storage groups 176 - 200
SUN158	0A/1A	1	200 - 224	20	Logs 1 - 25
SUN159	0B/1B	1	225 - 249	20	Logs 26 - 50
SUN160	0C/1C	1	250 - 274	20	Logs 51 - 75
SUN161	0D/1D	1	275 - 299	20	Logs 76 - 100
SUN169	0A/1A	1	300 - 324	20	Logs 101 - 125
SUN170	0B/1B	1	325 - 349	20	Logs 126 - 150
SUN163	0C/1C	1	350 - 374	20	Logs 151 - 175
SUN164	0D/1D	1	375 - 399	20	Logs 176 -200

The ESRP – Storage program focuses on storage solution testing to address performance and reliability issues with storage design. However, storage is not the only factor to take into consideration when designing a scale-up Exchange solution. These factors also affect server scalability:

- Server processor utilization
- Server physical and virtual memory limitations
- Resource requirements for other applications
- Directory and network service latencies
- Network infrastructure limitations
- Replication and recovery requirements
- Client usage profiles

These factors are all beyond the scope of the ESRP – Storage program. Therefore, the number of mailboxes hosted per server as part of the tested configuration might not necessarily be viable for some customer deployments.

For more information about identifying and addressing performance bottlenecks in an Exchange system, see Microsoft's [Troubleshooting Microsoft Exchange Server Performance](#).

Targeted Customer Profile

This solution is designed for medium to large organizations that plan to consolidate their Exchange Server 2007 storage on high-performance, high-reliability storage systems. This configuration supports 13,600 Exchange users with the following specifications:

- 8 Exchange Servers
- 1,700 users on a single Exchange Server
- 0.576 IOPS per user
- 2GB mailbox size
- 400 storage groups
- 1 database per storage group (400 databases total)

Tested Deployment

The following tables summarize the testing environment.

Table 6. Simulated Exchange Configuration

<i>Number of Exchange mailboxes simulated</i>	13,600
<i>Number of hosts</i>	8
<i>Number of mailboxes per host</i>	1,700
<i>Number of storage groups per host</i>	50
<i>Number of mailbox stores per storage group</i>	1
<i>Number of mailboxes per mailbox store</i>	34
<i>Number of mailbox store LUs per storage group</i>	1
<i>Simulated profile: I/Os per second per mailbox (IOPS, include 20% headroom)</i>	0.576
<i>Database LU size</i>	100GB
<i>Log LU size</i>	10GB
<i>Total database size for performance testing</i>	27,200GB
<i>% storage capacity used by Exchange database**</i>	55.4%

Table 7. Primary Storage Hardware

Storage type	SAN
Storage connectivity	Fibre Channel
Storage model and OS/firmware revision	1 Hitachi Adaptable Modular Storage 2300 Firmware :0872/E - M WHQL listing: Hitachi Adaptable Modular Storage 2300
Storage cache	16GB
Number of storage controllers	2
Number of storage ports	8
Maximum bandwidth of storage connectivity to host	32Gbit/s (8 x 4Gbit/s ports)
Switch type/model/firmware revision	Brocade 5320, Fabric OS v6.1.1c
HBA model and firmware	Emulex LPe11002,FW: 2.82A3
Number of HBAs/host	2 dual-ported HBA per host, 1 4Gbit/s port used per HBA
Host server type	Sun Fire 4270 2 2.54 GHz quad-core Intel Xeon CPUs, 32 GB memory
Total number of disks tested in solution	240
Maximum number of spindles can be hosted in the storage	240

Table 8. Primary Storage Software

HBA driver	STOR Miniport 7.2.1.4
HBA QueueTarget setting	0
HBA QueueDepth setting	32
Multipathing	Hitachi Dynamic Link Manager v6.2.0
Host OS	Microsoft Windows Server 2008 Enterprise x64 Edition Service Pack 1
ESE.dll file version	08.01.0240.005
Replication solution name/version	N/A

Table 9. Primary Storage Disk Configuration (Mailbox Store Disks)

Disk type, speed and firmware revision	SAS Disk 450GB 15K 4C57
Raw capacity per disk (GB)	450GB
Number of physical disks in test	216 (Dynamic Provisioning pool)
Total raw storage capacity (GB)	97,200GB
Disk slice size (GB)	N/A
Number of slices per LU or number of disks per LU	N/A
RAID level	RAID-10 (4+4) at storage level
Total formatted capacity	44,172GB (Dynamic Provisioning database pool)
Storage capacity utilization	45.4%
Database capacity utilization	81.5%

Table 10. Primary Storage Disk Configuration (Transaction Log Disks)

Disk type, speed and firmware revision	SAS Disk 450GB 15K 4C57
Raw capacity per disk (GB)	450GB
Number of spindles in test	24 (Dynamic Provisioning pool)
Total raw storage capacity (GB)	10,800GB
Disk slice size (GB)	N/A
Number of slices per LU or number of disks per LU	N/A
RAID level	RAID-1+0 (4+4) at storage level
Total formatted capacity	4,908GB (Dynamic Provisioning log pool)

Streaming Backup

N/A

Replication

N/A

Best Practices

Microsoft Exchange Server 2007 is a very disk-intensive application. It presents two distinct workload patterns to the storage, with 8KB random read/write operations to the databases, and sequential write operations of varying size (between 512 bytes up to the log buffer size) to the transaction logs. For this reason, designing an optimal storage configuration can prove challenging in practice. Based on the testing run using the ESRP framework, Hitachi Data Systems recommends these best practices to improve the performance of the Hitachi Adaptable Modular Storage 2300 running Exchange.

For more information about Exchange 2007 best practices for storage design, see the Microsoft TechNet article [Planning Storage Configurations](#).

Core Storage

1. Use Microsoft's diskpar or diskpart to create track-aligned disk partitions. For the 2300, using an offset of 64KB is optimal. This is optimal in the case of using Windows Server 2008.
2. Keep the Exchange workload isolated from other applications. Mixing another I/O intensive application whose workload differs from Exchange can cause the performance for both applications to degrade.
3. Due to the difference in I/O patterns and to enhance availability and recoverability, isolate the Exchange database DP-VOLs from the log DP-VOLs by creating one dedicated Dynamic Provisioning pool for the databases and a separate pool dedicated for the logs.
4. Hitachi Data Systems recommends using RAID-5 or RAID-1+0 groups for the database pools and RAID-1 or RAID-1+0 groups for the log pool. Use of RAID-1+0 allows for more writes at a lower response time under heavier loads. RAID-1+0 also has a shorter RAID group rebuild time on failure of a disk. Hitachi Data Systems does not recommend LU concatenation.
5. Size the storage solution for Exchange based primarily on IOPS performance criteria. The number of disks, RAID level and percent utilization of each disk directly affect the level of achievable performance. Factor in capacity requirements only after performance is addressed.

6. Disk size is unrelated to performance with regards to IOPS or throughput rates. Disk size is related to the usable capacity of all of the LUs from a RAID group, which is a choice users make.
7. The number of disks, coupled with the RAID level, determines the physical IOPS capacity of the RAID group and all of its LUs. If there are too few RAID groups (disks), the response times grow to large values very quickly.

Backup Strategy

N/A

Test Result Summary

This section provides a high-level summary of the test data from ESRP and the link to the detailed HTML reports that are generated by ESRP testing framework.

Reliability

A number of tests in the framework check reliability spanning a 24-hour window. The goal is to verify the storage can handle high I/O load for a long period of time. Following these stress tests, both log and database files are analyzed for integrity to ensure that no database or log corruption occurs.

- No errors were reported in the event log file for the storage reliability testing
- No errors were reported for the database and log checksum process
- Backup to disk test is N/A
- Database checksum on the remote storage database is N/A

Primary Storage Performance Results

The primary storage performance testing exercises the storage with maximum sustainable Exchange type of I/O for two hours. The test shows how long it takes for the storage to respond to an I/O under load. The following data is the sum of all of the logical disk I/Os and average of all the logical disks I/O latency in the two-hour test duration.

Individual Server Metrics

Individual server metrics show the sum of I/Os across storage groups and the average latency across all storage groups.

Table 11. Individual Server Metrics for Exchange Server (SUN158)

Database I/O	
<i>Database Disk Transfers/sec</i>	1480 IOPS
<i>Database Disk Reads/sec</i>	801 IOPS
<i>Database Disk Writes/sec</i>	679 IOPS
<i>Average Database Disk Read Latency (ms)</i>	12
<i>Average Database Disk Write Latency (ms)</i>	4
Transaction Log I/O	
<i>Log Disk Writes/sec</i>	564 IOPS
<i>Average Log Disk Write Latency (ms)</i>	2

Table 12. Individual Server Metrics for Exchange Server (SUN159)

Database I/O	
<i>Database Disk Transfers/sec</i>	1486 IOPS
<i>Database Disk Reads/sec</i>	804 IOPS
<i>Database Disk Writes/sec</i>	682 IOPS
<i>Average Database Disk Read Latency (ms)</i>	12
<i>Average Database Disk Write Latency (ms)</i>	4
Transaction Log I/O	
<i>Log Disk Writes/sec</i>	565 IOPS
<i>Average Log Disk Write Latency (ms)</i>	2

Table 13. Individual Server Metrics for Exchange Server (SUN160)

Database I/O	
<i>Database Disk Transfers/sec</i>	1504 IOPS
<i>Database Disk Reads/sec</i>	814 IOPS
<i>Database Disk Writes/sec</i>	689 IOPS
<i>Average Database Disk Read Latency (ms)</i>	12
<i>Average Database Disk Write Latency (ms)</i>	4
Transaction Log I/O	
<i>Log Disk Writes/sec</i>	574 IOPS
<i>Average Log Disk Write Latency (ms)</i>	2

Table 14. Individual Server Metrics for Exchange Server (SUN161)

Database I/O	
<i>Database Disk Transfers/sec</i>	1494 IOPS
<i>Database Disk Reads/sec</i>	808 IOPS
<i>Database Disk Writes/sec</i>	686 IOPS
<i>Average Database Disk Read Latency (ms)</i>	12
<i>Average Database Disk Write Latency (ms)</i>	4
Transaction Log I/O	
<i>Log Disk Writes/sec</i>	570 IOPS
<i>Average Log Disk Write Latency (ms)</i>	2

Table 15. Individual Server Metrics for Exchange Server (SUN169)

Database I/O	
<i>Database Disk Transfers/sec</i>	1460 IOPS
<i>Database Disk Reads/sec</i>	790 IOPS
<i>Database Disk Writes/sec</i>	670 IOPS
<i>Average Database Disk Read Latency (ms)</i>	12
<i>Average Database Disk Write Latency (ms)</i>	4
Transaction Log I/O	
<i>Log Disk Writes/sec</i>	558 IOPS
<i>Average Log Disk Write Latency (ms)</i>	2

Table 16. Individual Server Metrics for Exchange Server (SUN170)

Database I/O	
<i>Database Disk Transfers/sec</i>	1477 IOPS
<i>Database Disk Reads/sec</i>	798 IOPS
<i>Database Disk Writes/sec</i>	679 IOPS
<i>Average Database Disk Read Latency (ms)</i>	12
<i>Average Database Disk Write Latency (ms)</i>	4
Transaction Log I/O	
<i>Log Disk Writes/sec</i>	564 IOPS
<i>Average Log Disk Write Latency (ms)</i>	2

Table 17. Individual Server Metrics for Exchange Server (SUN163)

Database I/O	
<i>Database Disk Transfers/sec</i>	1489 IOPS
<i>Database Disk Reads/sec</i>	807 IOPS
<i>Database Disk Writes/sec</i>	682 IOPS
<i>Average Database Disk Read Latency (ms)</i>	12
<i>Average Database Disk Write Latency (ms)</i>	4
Transaction Log I/O	
<i>Log Disk Writes/sec</i>	567 IOPS
<i>Average Log Disk Write Latency (ms)</i>	2

Table 18. Individual Server Metrics for Exchange Server (SUN164)

Database I/O	
<i>Database Disk Transfers/sec</i>	1490 IOPS
<i>Database Disk Reads/sec</i>	806 IOPS
<i>Database Disk Writes/sec</i>	683 IOPS
<i>Average Database Disk Read Latency (ms)</i>	12
<i>Average Database Disk Write Latency (ms)</i>	4
Transaction Log I/O	
<i>Log Disk Writes/sec</i>	567 IOPS
<i>Average Log Disk Write Latency (ms)</i>	2

Aggregate Performance Across All Servers Metrics

The aggregate performance across all server metrics shows the sum of I/Os across all servers in the solution and the average latency across all servers in the solution.

Table 19. Aggregate Performance for Exchange Server 2007

Database I/O	
<i>Database Disk Transfers/sec</i>	11,880 IOPS
<i>Database Disk Reads/sec</i>	6,428 IOPS
<i>Database Disk Writes/sec</i>	5,452 IOPS
<i>Average Database Disk Read Latency (ms)</i>	12
<i>Average Database Disk Write Latency (ms)</i>	4
Transaction Log I/O	
<i>Average Log Disk Writes/sec</i>	4,529 IOPS
<i>Average Log Disk Write Latency (ms)</i>	2

Streaming Backup Performance

For the ESRP Version 2.1 release, only the streaming backup type is supported for testing in the framework. This section has two tests: The first measures the read I/O performance metrics by running checksums on all of the database and log files and the second measures the end-to-end performance when the databases are backed up to disks.

Database Read-only Performance

This test measures the maximum rate at which databases can be recovered. The following tables show the average rate for a single database file.

Table 20. Database Read-only Performance for Exchange Server (SUN158)

<i>MB read/sec per storage group</i>	2.1
<i>MB read/sec total</i>	104.8

Table 21. Database Read-only Performance for Exchange Server (SUN159)

<i>MB read/sec per storage group</i>	2.10
<i>MB read/sec total</i>	105.0

Table 22. Database Read-only Performance for Exchange Server (SUN160)

<i>MB read/sec per storage group</i>	2.1
<i>MB read/sec total</i>	105.2

Table 23. Database Read-only Performance for Exchange Server (SUN161)

<i>MB read/sec per storage group</i>	2.1
<i>MB read/sec total</i>	105.8

Table 24. Database Read-only Performance for Exchange Server (SUN169)

<i>MB read/sec per storage group</i>	2.1
<i>MB read/sec total</i>	104.8

Table 25. Database Read-only Performance for Exchange Server (SUN170)

<i>MB read/sec per storage group</i>	2.1
<i>MB read/sec total</i>	105.0

Table 26. Database Read-only Performance for Exchange Server (SUN163)

<i>MB read/sec per storage group</i>	2.1
<i>MB read/sec total</i>	105.4

Table 27. Database Read-only Performance for Exchange Server (SUN164)

<i>MB read/sec per storage group</i>	2.12
<i>MB read/sec total</i>	105.88

Log Read-only Performance

This test measures the maximum rate at which the log files can be played against the databases. The following tables show the average rate for 500 log files played in a single storage group. Each log file is 1MB in size.

Table 28. Log Read-only Performance for Exchange Server (SUN158)

<i>Average time to play one log file (sec)</i>	8.28
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Table 29. Log Read-only Performance for Exchange Server (SUN159)

<i>Average time to play one log file (sec)</i>	8.34
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Table 30. Log Read-only Performance for Exchange Server (SUN160)

<i>Average time to play one log file (sec)</i>	8.31
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Table 31. Log Read-only Performance for Exchange Server (SUN161)

<i>Average time to play one log file (sec)</i>	8.33
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Table 32. Log Read-only Performance for Exchange Server (SUN169)

<i>Average time to play one log file (sec)</i>	8.25
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Table 33. Log Read-only Performance for Exchange Server (SUN170)

<i>Average time to play one log file (sec)</i>	8.33
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Table 34. Log Read-only Performance for Exchange Server (SUN163)

<i>Average time to play one log file (sec)</i>	8.28
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Table 35. Log Read-only Performance for Exchange Server (SUN164)

<i>Average time to play one log file (sec)</i>	8.40
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Conclusion

This document details a tested configuration capable of supporting 13,600 users with a 0.576 IOPS per user profile and user mailbox size of 2GB. A Hitachi Adaptable Modular Storage 2300, configured with 16GB of cache, eight 4Gbit/s Fibre Channel host paths, using Hitachi Dynamic Provisioning software (with two pools) and 240 450GB 15K RPM SAS disks in a RAID-1+0 configuration was used for these tests. Testing confirmed that the 2300 is capable of delivering the IOPS and capacity requirements needed to support 13,600 Exchange mailboxes configured with the specified user profile, while maintaining additional headroom to support peak throughput.

The solution outlined in this document does not include data protection components such as local or remote replication. Adding these technologies can affect performance and capacity requirements and each needs to be factored into the storage design accordingly.

For additional information about planning Exchange Server 2007 storage architectures for the Hitachi Adaptable Modular Storage 2000 family, see <http://www.hds.com/assets/pdf/hitachi-ams-2000-family.pdf>.

This document is developed by Hitachi Data Systems and reviewed by Microsoft Exchange Product team. The test results and data presented in this document are based on the tests introduced in the ESRP test framework. Do not quote the data directly for pre-deployment verification. It is still necessary to validate the storage design for a specific customer environment.

The ESRP program is not designed to be a benchmarking program; tests do not generate the maximum throughput for a given solution. Rather, it is focused on producing recommendations from vendors for Exchange application. Thus, do not use the data presented in this document for direct comparisons among the solutions.

Appendix A – Test Reports

This appendix contains Jetstress test results for one of the servers used in testing this storage solution. These test results are representative of the results obtained for all of the servers tested.

Performance Test Result: SUN158

Test Summary

Overall Test Result	Pass
Machine Name	SUN158
Test Description	
Test Start Time	11/18/2009 4:10:39 PM
Test End Time	11/18/2009 7:20:58 PM
Jetstress Version	08.02.0060.000
Ese Version	08.01.0240.005
Operating System	Windows Server (R) 2008 Enterprise Service Pack 1 (6.0.6001.65536)
Performance Log	C:\ESRP HDP 2GB\SUN158\1700 users\Performance\Performance_2009_11_18_16_12_27.blg C:\ESRP HDP 2GB\SUN158\1700 users\Performance\DBChecksum_2009_11_18_19_20_58.blg

Database Sizing and Throughput

Achieved I/O per Second	1480.31
Target I/O per Second	979.2
Initial database size	3735870799872
Final database size	3743456198656
Database files (count)	50

Jetstress System Parameters

Thread count	2 (per storage group)
Log buffers	9000
Minimum database cache	1600.0 MB
Maximum database cache	12800.0 MB
Insert operations	40%
Delete operations	30%
Replace operations	5%
Read operations	25%
Lazy commits	55%

Disk Subsystem Performance

Logical Disk	Avg. Disk sec/Read	Avg. Disk sec/Write	Disk Reads/sec	Disk Writes/sec	Avg. Disk Bytes/Write
Database	0.012	0.004	16.560	14.227	(n/a)

(C:\asgluns\sg1)					
Database (C:\asgluns\sg2)	0.012	0.004	16.237	14.015	(n/a)
Database (C:\asgluns\sg3)	0.012	0.004	15.907	13.466	(n/a)
Database (C:\asgluns\sg4)	0.012	0.004	16.046	13.462	(n/a)
Database (C:\asgluns\sg5)	0.012	0.004	16.365	13.816	(n/a)
Database (C:\asgluns\sg6)	0.012	0.004	16.536	14.013	(n/a)
Database (C:\asgluns\sg7)	0.012	0.004	16.088	13.764	(n/a)
Database (C:\asgluns\sg8)	0.012	0.004	15.963	13.733	(n/a)
Database (C:\asgluns\sg9)	0.012	0.004	16.198	13.383	(n/a)
Database (C:\asgluns\sg10)	0.012	0.004	15.667	13.334	(n/a)
Database (C:\asgluns\sg11)	0.012	0.004	16.422	14.103	(n/a)
Database (C:\asgluns\sg12)	0.012	0.004	16.132	13.549	(n/a)
Database (C:\asgluns\sg13)	0.012	0.004	16.156	13.363	(n/a)
Database (C:\asgluns\sg14)	0.012	0.004	15.683	13.251	(n/a)
Database (C:\asgluns\sg15)	0.012	0.004	16.352	13.771	(n/a)
Database (C:\asgluns\sg16)	0.012	0.004	15.376	13.046	(n/a)
Database (C:\asgluns\sg17)	0.012	0.004	15.976	13.498	(n/a)
Database (C:\asgluns\sg18)	0.012	0.004	15.942	13.463	(n/a)
Database (C:\asgluns\sg19)	0.012	0.004	16.030	13.576	(n/a)
Database (C:\asgluns\sg20)	0.012	0.004	16.133	13.882	(n/a)
Database (C:\asgluns\sg21)	0.012	0.004	16.060	13.511	(n/a)
Database (C:\asgluns\sg22)	0.012	0.004	15.862	13.218	(n/a)
Database (C:\asgluns\sg23)	0.012	0.004	16.342	13.745	(n/a)
Database (C:\asgluns\sg24)	0.012	0.004	15.919	13.474	(n/a)

Database (C:\asgluns\sg25)	0.012	0.004	15.897	13.359	(n/a)
Database (C:\asgluns\sg26)	0.012	0.004	15.914	13.575	(n/a)
Database (C:\asgluns\sg27)	0.012	0.004	16.327	13.740	(n/a)
Database (C:\asgluns\sg28)	0.012	0.004	15.995	13.523	(n/a)
Database (C:\asgluns\sg29)	0.012	0.004	16.275	13.787	(n/a)
Database (C:\asgluns\sg30)	0.012	0.004	16.061	13.617	(n/a)
Database (C:\asgluns\sg31)	0.012	0.004	15.722	13.187	(n/a)
Database (C:\asgluns\sg32)	0.012	0.004	15.878	13.445	(n/a)
Database (C:\asgluns\sg33)	0.012	0.004	16.017	13.741	(n/a)
Database (C:\asgluns\sg34)	0.012	0.004	15.678	13.604	(n/a)
Database (C:\asgluns\sg35)	0.012	0.004	15.423	13.060	(n/a)
Database (C:\asgluns\sg36)	0.012	0.004	15.925	13.466	(n/a)
Database (C:\asgluns\sg37)	0.012	0.004	15.518	13.138	(n/a)
Database (C:\asgluns\sg38)	0.012	0.004	15.644	13.110	(n/a)
Database (C:\asgluns\sg39)	0.012	0.004	16.140	13.776	(n/a)
Database (C:\asgluns\sg40)	0.012	0.004	16.469	14.008	(n/a)
Database (C:\asgluns\sg41)	0.012	0.004	16.043	13.189	(n/a)
Database (C:\asgluns\sg42)	0.012	0.004	15.927	13.354	(n/a)
Database (C:\asgluns\sg43)	0.012	0.004	16.240	13.768	(n/a)
Database (C:\asgluns\sg44)	0.012	0.004	16.434	13.833	(n/a)
Database (C:\asgluns\sg45)	0.012	0.004	15.901	13.345	(n/a)
Database (C:\asgluns\sg46)	0.012	0.004	16.512	13.979	(n/a)
Database (C:\asgluns\sg47)	0.012	0.004	16.113	13.957	(n/a)
Database	0.012	0.004	16.213	13.712	(n/a)

(C:\asgluns\sg48)					
Database (C:\asgluns\sg49)	0.012	0.004	15.574	13.182	(n/a)
Database (C:\asgluns\sg50)	0.012	0.004	15.847	13.551	(n/a)
Log (C:\alogluns\log1)	0.000	0.002	0.000	11.653	3866.109
Log (C:\alogluns\log2)	0.000	0.002	0.000	11.633	3921.964
Log (C:\alogluns\log3)	0.000	0.002	0.000	11.458	3974.237
Log (C:\alogluns\log4)	0.000	0.002	0.000	11.241	4016.183
Log (C:\alogluns\log5)	0.000	0.002	0.000	11.501	3880.576
Log (C:\alogluns\log6)	0.000	0.002	0.000	11.541	3839.697
Log (C:\alogluns\log7)	0.000	0.002	0.000	11.526	3965.198
Log (C:\alogluns\log8)	0.000	0.002	0.000	11.466	4004.284
Log (C:\alogluns\log9)	0.000	0.002	0.000	11.016	3744.880
Log (C:\alogluns\log10)	0.000	0.002	0.000	11.406	3962.469
Log (C:\alogluns\log11)	0.000	0.002	0.000	11.700	3992.565
Log (C:\alogluns\log12)	0.000	0.002	0.000	11.048	3957.353
Log (C:\alogluns\log13)	0.000	0.002	0.000	11.183	3991.946
Log (C:\alogluns\log14)	0.000	0.002	0.000	11.091	3889.855
Log (C:\alogluns\log15)	0.000	0.002	0.000	11.354	3933.316
Log (C:\alogluns\log16)	0.000	0.002	0.000	10.899	3880.118
Log (C:\alogluns\log17)	0.000	0.002	0.000	11.419	3852.156
Log (C:\alogluns\log18)	0.000	0.002	0.000	11.089	3942.305
Log (C:\alogluns\log19)	0.000	0.002	0.000	11.442	3962.357
Log (C:\alogluns\log20)	0.000	0.002	0.000	11.316	3978.285
Log (C:\alogluns\log21)	0.000	0.002	0.000	11.288	3789.591
Log (C:\alogluns\log22)	0.000	0.002	0.000	11.049	3913.052
Log (C:\alogluns\log23)	0.000	0.002	0.000	11.213	3909.897
Log (C:\alogluns\log24)	0.000	0.002	0.000	11.161	3897.271
Log (C:\alogluns\log25)	0.000	0.002	0.000	11.062	3853.025
Log (C:\alogluns\log26)	0.000	0.002	0.000	11.182	3931.722
Log (C:\alogluns\log27)	0.000	0.002	0.000	11.485	3971.472
Log (C:\alogluns\log28)	0.000	0.002	0.000	11.260	3890.013
Log (C:\alogluns\log29)	0.000	0.002	0.000	11.407	3973.880
Log (C:\alogluns\log30)	0.000	0.002	0.000	11.195	3892.699
Log (C:\alogluns\log31)	0.000	0.002	0.000	11.118	3978.118
Log (C:\alogluns\log32)	0.000	0.002	0.000	11.222	4015.221
Log (C:\alogluns\log33)	0.000	0.002	0.000	11.310	3984.855
Log (C:\alogluns\log34)	0.000	0.002	0.000	11.439	3966.034

Log (C:\alogluns\log35)	0.000	0.002	0.000	10.895	3956.716
Log (C:\alogluns\log36)	0.000	0.002	0.000	11.167	3926.777
Log (C:\alogluns\log37)	0.000	0.002	0.000	11.059	4038.885
Log (C:\alogluns\log38)	0.000	0.002	0.000	11.052	3999.016
Log (C:\alogluns\log39)	0.000	0.002	0.000	11.583	4002.719
Log (C:\alogluns\log40)	0.000	0.002	0.000	11.649	3902.839
Log (C:\alogluns\log41)	0.000	0.002	0.000	10.876	3794.285
Log (C:\alogluns\log42)	0.000	0.002	0.000	11.352	3903.786
Log (C:\alogluns\log43)	0.000	0.002	0.000	11.675	4024.562
Log (C:\alogluns\log44)	0.000	0.002	0.000	11.485	3960.917
Log (C:\alogluns\log45)	0.000	0.002	0.000	11.036	3946.364
Log (C:\alogluns\log46)	0.000	0.002	0.000	11.652	3980.107
Log (C:\alogluns\log47)	0.000	0.002	0.000	11.532	3869.923
Log (C:\alogluns\log48)	0.000	0.002	0.000	11.163	4010.956
Log (C:\alogluns\log49)	0.000	0.002	0.000	10.955	3893.567
Log (C:\alogluns\log50)	0.000	0.002	0.000	11.344	3856.573

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.872	0.503	1.194
Available MBytes	17227.790	17166.000	18453.000
Free System Page Table Entries	33557826.155	33557456.000	33558068.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	120389975.480	119427072.000	121049088.000
Pool Paged Bytes	191522888.990	191459328.000	191623168.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```

11/18/2009 4:10:39 PM -- Jetstress testing begins ...
11/18/2009 4:10:39 PM -- Prepare testing begins ...
11/18/2009 4:11:30 PM -- Attaching databases ...
11/18/2009 4:11:30 PM -- Prepare testing ends.
11/18/2009 4:11:30 PM -- Dispatching transactions begins ...
11/18/2009 4:11:30 PM -- Database cache settings: (minimum: 1.6 GB, maximum: 12.5
GB)
11/18/2009 4:11:30 PM -- Database flush thresholds: (start: 128.0 MB, stop: 256.0
MB)
11/18/2009 4:12:27 PM -- Database read latency thresholds: (average: 0.02
seconds/read, maximum: 0.05 seconds/read).
11/18/2009 4:12:27 PM -- Log write latency thresholds: (average: 0.01
seconds/write, maximum: 0.05 seconds/write).
11/18/2009 4:12:32 PM -- Operation mix: Sessions 2, Inserts 40%, Deletes 30%,
Replaces 5%, Reads 25%, Lazy Commits 55%.
11/18/2009 4:12:32 PM -- Performance logging begins (interval: 15000 ms).
11/18/2009 4:12:32 PM -- Attaining prerequisites:
11/18/2009 5:19:15 PM -- \MSExchange Database(Jetstresswin)\Database Cache Size,

```

Last: 12080370000.0 (lower bound: 12079600000.0, upper bound: none)
11/18/2009 7:19:16 PM -- Performance logging ends.
11/18/2009 7:20:24 PM -- JetInterop batch transaction stats: 6153, 6123, 6080, 6065, 6037, 6087, 6003, 6108, 5934, 6010, 6174, 5973, 5950, 5967, 6021, 5999, 6008, 5972, 6055, 6029, 6005, 5960, 6069, 5939, 5940, 5955, 6064, 6037, 6090, 5959, 5855, 5988, 6005, 6022, 5974, 5983, 5902, 6013, 6064, 6041, 5935, 5927, 6073, 6054, 6000, 6120, 6002, 5983, 5999, and 5963.
11/18/2009 7:20:24 PM -- Dispatching transactions ends.
11/18/2009 7:20:24 PM -- Shutting down databases ...
11/18/2009 7:20:58 PM -- Instance3564.1 (complete), Instance3564.2 (complete), Instance3564.3 (complete), Instance3564.4 (complete), Instance3564.5 (complete), Instance3564.6 (complete), Instance3564.7 (complete), Instance3564.8 (complete), Instance3564.9 (complete), Instance3564.10 (complete), Instance3564.11 (complete), Instance3564.12 (complete), Instance3564.13 (complete), Instance3564.14 (complete), Instance3564.15 (complete), Instance3564.16 (complete), Instance3564.17 (complete), Instance3564.18 (complete), Instance3564.19 (complete), Instance3564.20 (complete), Instance3564.21 (complete), Instance3564.22 (complete), Instance3564.23 (complete), Instance3564.24 (complete), Instance3564.25 (complete), Instance3564.26 (complete), Instance3564.27 (complete), Instance3564.28 (complete), Instance3564.29 (complete), Instance3564.30 (complete), Instance3564.31 (complete), Instance3564.32 (complete), Instance3564.33 (complete), Instance3564.34 (complete), Instance3564.35 (complete), Instance3564.36 (complete), Instance3564.37 (complete), Instance3564.38 (complete), Instance3564.39 (complete), Instance3564.40 (complete), Instance3564.41 (complete), Instance3564.42 (complete), Instance3564.43 (complete), Instance3564.44 (complete), Instance3564.45 (complete), Instance3564.46 (complete), Instance3564.47 (complete), Instance3564.48 (complete), Instance3564.49 (complete), and Instance3564.50 (complete)
11/18/2009 7:20:59 PM -- Performance logging begins (interval: 30000 ms).
11/18/2009 7:20:59 PM -- Verifying database checksums ...
11/19/2009 6:16:43 AM -- C:\asgluns\sg1 (100% processed), C:\asgluns\sg2 (100% processed), C:\asgluns\sg3 (100% processed), C:\asgluns\sg4 (100% processed), C:\asgluns\sg5 (100% processed), C:\asgluns\sg6 (100% processed), C:\asgluns\sg7 (100% processed), C:\asgluns\sg8 (100% processed), C:\asgluns\sg9 (100% processed), C:\asgluns\sg10 (100% processed), C:\asgluns\sg11 (100% processed), C:\asgluns\sg12 (100% processed), C:\asgluns\sg13 (100% processed), C:\asgluns\sg14 (100% processed), C:\asgluns\sg15 (100% processed), C:\asgluns\sg16 (100% processed), C:\asgluns\sg17 (100% processed), C:\asgluns\sg18 (100% processed), C:\asgluns\sg19 (100% processed), C:\asgluns\sg20 (100% processed), C:\asgluns\sg21 (100% processed), C:\asgluns\sg22 (100% processed), C:\asgluns\sg23 (100% processed), C:\asgluns\sg24 (100% processed), C:\asgluns\sg25 (100% processed), C:\asgluns\sg26 (100% processed), C:\asgluns\sg27 (100% processed), C:\asgluns\sg28 (100% processed), C:\asgluns\sg29 (100% processed), C:\asgluns\sg30 (100% processed), C:\asgluns\sg31 (100% processed), C:\asgluns\sg32 (100% processed), C:\asgluns\sg33 (100% processed), C:\asgluns\sg34 (100% processed), C:\asgluns\sg35 (100% processed), C:\asgluns\sg36 (100% processed), C:\asgluns\sg37 (100% processed), C:\asgluns\sg38 (100% processed), C:\asgluns\sg39 (100% processed), C:\asgluns\sg40 (100% processed), C:\asgluns\sg41 (100% processed), C:\asgluns\sg42 (100% processed), C:\asgluns\sg43 (100% processed), C:\asgluns\sg44 (100% processed), C:\asgluns\sg45 (100% processed), C:\asgluns\sg46 (100% processed), C:\asgluns\sg47 (100% processed), C:\asgluns\sg48 (100% processed), C:\asgluns\sg49 (100% processed), and C:\asgluns\sg50 (100% processed)
11/19/2009 6:16:43 AM -- Performance logging ends.
11/19/2009 6:16:43 AM -- C:\ESRP HDP 2GB\SUN158\1700 users\Performance\DBChecksum_2009_11_18_19_20_58.blg has 1308 samples.
11/19/2009 6:26:28 AM -- C:\ESRP HDP 2GB\SUN158\1700 users\Performance\DBChecksum_2009_11_18_19_20_58.html is saved.
11/19/2009 6:26:28 AM -- Verifying log checksums ...
11/19/2009 6:26:41 AM -- C:\alogluns\log1 (2 logs passed), C:\alogluns\log2 (2 logs passed), C:\alogluns\log3 (3 logs passed), C:\alogluns\log4 (2 logs passed), C:\alogluns\log5 (2 logs passed), C:\alogluns\log6 (2 logs passed), C:\alogluns\log7 (3 logs passed), C:\alogluns\log8 (2 logs passed), C:\alogluns\log9 (2 logs passed), C:\alogluns\log10 (2 logs passed), C:\alogluns\log11 (2 logs passed), C:\alogluns\log12 (2 logs passed),

C:\alogluns\log13 (2 logs passed), C:\alogluns\log14 (2 logs passed),
C:\alogluns\log15 (2 logs passed), C:\alogluns\log16 (2 logs passed),
C:\alogluns\log17 (2 logs passed), C:\alogluns\log18 (3 logs passed),
C:\alogluns\log19 (2 logs passed), C:\alogluns\log20 (2 logs passed),
C:\alogluns\log21 (2 logs passed), C:\alogluns\log22 (3 logs passed),
C:\alogluns\log23 (2 logs passed), C:\alogluns\log24 (3 logs passed),
C:\alogluns\log25 (2 logs passed), C:\alogluns\log26 (2 logs passed),
C:\alogluns\log27 (2 logs passed), C:\alogluns\log28 (2 logs passed),
C:\alogluns\log29 (2 logs passed), C:\alogluns\log30 (2 logs passed),
C:\alogluns\log31 (2 logs passed), C:\alogluns\log32 (2 logs passed),
C:\alogluns\log33 (2 logs passed), C:\alogluns\log34 (3 logs passed),
C:\alogluns\log35 (2 logs passed), C:\alogluns\log36 (2 logs passed),
C:\alogluns\log37 (3 logs passed), C:\alogluns\log38 (2 logs passed),
C:\alogluns\log39 (2 logs passed), C:\alogluns\log40 (2 logs passed),
C:\alogluns\log41 (2 logs passed), C:\alogluns\log42 (2 logs passed),
C:\alogluns\log43 (2 logs passed), C:\alogluns\log44 (2 logs passed),
C:\alogluns\log45 (2 logs passed), C:\alogluns\log46 (2 logs passed),
C:\alogluns\log47 (2 logs passed), C:\alogluns\log48 (2 logs passed),
C:\alogluns\log49 (2 logs passed), and C:\alogluns\log50 (2 logs passed)
11/19/2009 6:26:41 AM -- C:\ESRP HDP 2GB\SUN158\1700
users\Performance\Performance_2009_11_18_16_12_27.blg has 741 samples.
11/19/2009 6:26:41 AM -- Creating test report ...
11/19/2009 6:27:29 AM -- Volume C:\asgluns\sg1 has 0.0117 for Avg. Disk sec/Read.
11/19/2009 6:27:29 AM -- volume C:\asgluns\sg2 has 0.0118 for Avg. Disk sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg3 has 0.0118 for Avg. Disk sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg4 has 0.0120 for Avg. Disk sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg5 has 0.0118 for Avg. Disk sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg6 has 0.0119 for Avg. Disk sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg7 has 0.0119 for Avg. Disk sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg8 has 0.0118 for Avg. Disk sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg9 has 0.0120 for Avg. Disk sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg10 has 0.0117 for Avg. Disk
sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg11 has 0.0119 for Avg. Disk
sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg12 has 0.0119 for Avg. Disk
sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg13 has 0.0119 for Avg. Disk
sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg14 has 0.0118 for Avg. Disk
sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg15 has 0.0120 for Avg. Disk
sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg16 has 0.0118 for Avg. Disk
sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg17 has 0.0116 for Avg. Disk
sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg18 has 0.0117 for Avg. Disk
sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg19 has 0.0119 for Avg. Disk
sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg20 has 0.0121 for Avg. Disk
sec/Read.
11/19/2009 6:27:30 AM -- volume C:\asgluns\sg21 has 0.0119 for Avg. Disk
sec/Read.
11/19/2009 6:27:31 AM -- volume C:\asgluns\sg22 has 0.0118 for Avg. Disk
sec/Read.
11/19/2009 6:27:31 AM -- volume C:\asgluns\sg23 has 0.0120 for Avg. Disk
sec/Read.
11/19/2009 6:27:31 AM -- volume C:\asgluns\sg24 has 0.0119 for Avg. Disk
sec/Read.
11/19/2009 6:27:31 AM -- volume C:\asgluns\sg25 has 0.0118 for Avg. Disk
sec/Read.
11/19/2009 6:27:31 AM -- volume C:\asgluns\sg26 has 0.0117 for Avg. Disk
sec/Read.
11/19/2009 6:27:31 AM -- volume C:\asgluns\sg27 has 0.0121 for Avg. Disk
sec/Read.
11/19/2009 6:27:31 AM -- volume C:\asgluns\sg28 has 0.0118 for Avg. Disk

sec/Read.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log41 has 0.0019 for Avg. Disk
 sec/write.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log41 has 0.0000 for Avg. Disk
 sec/Read.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log42 has 0.0018 for Avg. Disk
 sec/write.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log42 has 0.0000 for Avg. Disk
 sec/Read.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log43 has 0.0020 for Avg. Disk
 sec/write.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log43 has 0.0000 for Avg. Disk
 sec/Read.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log44 has 0.0020 for Avg. Disk
 sec/write.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log44 has 0.0000 for Avg. Disk
 sec/Read.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log45 has 0.0019 for Avg. Disk
 sec/write.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log45 has 0.0000 for Avg. Disk
 sec/Read.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log46 has 0.0019 for Avg. Disk
 sec/write.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log46 has 0.0000 for Avg. Disk
 sec/Read.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log47 has 0.0020 for Avg. Disk
 sec/write.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log47 has 0.0000 for Avg. Disk
 sec/Read.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log48 has 0.0020 for Avg. Disk
 sec/write.
 11/19/2009 6:27:33 AM -- volume C:\alogluns\log48 has 0.0000 for Avg. Disk
 sec/Read.
 11/19/2009 6:27:34 AM -- volume C:\alogluns\log49 has 0.0019 for Avg. Disk
 sec/write.
 11/19/2009 6:27:34 AM -- volume C:\alogluns\log49 has 0.0000 for Avg. Disk
 sec/Read.
 11/19/2009 6:27:34 AM -- volume C:\alogluns\log50 has 0.0019 for Avg. Disk
 sec/write.
 11/19/2009 6:27:34 AM -- volume C:\alogluns\log50 has 0.0000 for Avg. Disk
 sec/Read.
 11/19/2009 6:27:34 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
 11/19/2009 6:27:34 AM -- Test has 0 Database Page Fault Stalls/sec samples higher
 than 0.
 11/19/2009 6:27:34 AM -- C:\ESRP HDP 2GB\SUN158\1700
 users\Performance\Performance_2009_11_18_16_12_27.xml has 476 samples queried.

Performance Test Database Checksums Result: SUN158

Checksum Statistics - All

Database	Seen pages	Bad pages	Correctable pages	Wrong page no pages	File length / seconds taken
C:\asgluns\sg1\Jetstress1.edb	9139026	0	0	0	71398 MBytes / 39343 seconds
C:\asgluns\sg2\Jetstress1.edb	9145426	0	0	0	71448 MBytes / 39319 seconds
C:\asgluns\sg3\Jetstress1.edb	9136978	0	0	0	71382 MBytes / 36207 seconds
C:\asgluns\sg4\Jetstress1.edb	9139282	0	0	0	71400 MBytes / 36194 seconds
C:\asgluns\sg5\Jetstress1.edb	9141074	0	0	0	71414 MBytes / 39265 seconds

					seconds
C:\asgluns\sg6\Jetstress1.edb	9139794	0	0	0	71404 MBytes / 39207 seconds
C:\asgluns\sg7\Jetstress1.edb	9137746	0	0	0	71388 MBytes / 36221 seconds
C:\asgluns\sg8\Jetstress1.edb	9139538	0	0	0	71402 MBytes / 36149 seconds
C:\asgluns\sg9\Jetstress1.edb	9137746	0	0	0	71388 MBytes / 39265 seconds
C:\asgluns\sg10\Jetstress1.edb	9138002	0	0	0	71390 MBytes / 39253 seconds
C:\asgluns\sg11\Jetstress1.edb	9138514	0	0	0	71394 MBytes / 36143 seconds
C:\asgluns\sg12\Jetstress1.edb	9139538	0	0	0	71402 MBytes / 35953 seconds
C:\asgluns\sg13\Jetstress1.edb	9141586	0	0	0	71418 MBytes / 39264 seconds
C:\asgluns\sg14\Jetstress1.edb	9139026	0	0	0	71398 MBytes / 39237 seconds
C:\asgluns\sg15\Jetstress1.edb	9139794	0	0	0	71404 MBytes / 36211 seconds
C:\asgluns\sg16\Jetstress1.edb	9138258	0	0	0	71392 MBytes / 36199 seconds
C:\asgluns\sg17\Jetstress1.edb	9138514	0	0	0	71394 MBytes / 39249 seconds
C:\asgluns\sg18\Jetstress1.edb	9139026	0	0	0	71398 MBytes / 39267 seconds
C:\asgluns\sg19\Jetstress1.edb	9141586	0	0	0	71418 MBytes / 36115 seconds
C:\asgluns\sg20\Jetstress1.edb	9140050	0	0	0	71406 MBytes / 36221 seconds
C:\asgluns\sg21\Jetstress1.edb	9136722	0	0	0	71380 MBytes / 39273 seconds
C:\asgluns\sg22\Jetstress1.edb	9140562	0	0	0	71410 MBytes / 39229 seconds
C:\asgluns\sg23\Jetstress1.edb	9139026	0	0	0	71398 MBytes / 36114 seconds
C:\asgluns\sg24\Jetstress1.edb	9136210	0	0	0	71376 MBytes / 36197 seconds
C:\asgluns\sg25\Jetstress1.edb	9135698	0	0	0	71372 MBytes / 39252 seconds
C:\asgluns\sg26\Jetstress1.edb	9137746	0	0	0	71388 MBytes / 39245 seconds
C:\asgluns\sg27\Jetstress1.edb	9140050	0	0	0	71406 MBytes / 36181 seconds
C:\asgluns\sg28\Jetstress1.edb	9139794	0	0	0	71404 MBytes / 36106 seconds

C:\asgluns\sg29\Jetstress1.edb	9141842	0	0	0	71420 MBytes / 39262 seconds
C:\asgluns\sg30\Jetstress1.edb	9138770	0	0	0	71396 MBytes / 39237 seconds
C:\asgluns\sg31\Jetstress1.edb	9141074	0	0	0	71414 MBytes / 36193 seconds
C:\asgluns\sg32\Jetstress1.edb	9141586	0	0	0	71418 MBytes / 36156 seconds
C:\asgluns\sg33\Jetstress1.edb	9141074	0	0	0	71414 MBytes / 39257 seconds
C:\asgluns\sg34\Jetstress1.edb	9140818	0	0	0	71412 MBytes / 39252 seconds
C:\asgluns\sg35\Jetstress1.edb	9135698	0	0	0	71372 MBytes / 36069 seconds
C:\asgluns\sg36\Jetstress1.edb	9141586	0	0	0	71418 MBytes / 36154 seconds
C:\asgluns\sg37\Jetstress1.edb	9136978	0	0	0	71382 MBytes / 39255 seconds
C:\asgluns\sg38\Jetstress1.edb	9140306	0	0	0	71408 MBytes / 39228 seconds
C:\asgluns\sg39\Jetstress1.edb	9137746	0	0	0	71388 MBytes / 36190 seconds
C:\asgluns\sg40\Jetstress1.edb	9138514	0	0	0	71394 MBytes / 36185 seconds
C:\asgluns\sg41\Jetstress1.edb	9137746	0	0	0	71388 MBytes / 39256 seconds
C:\asgluns\sg42\Jetstress1.edb	9141074	0	0	0	71414 MBytes / 39244 seconds
C:\asgluns\sg43\Jetstress1.edb	9139794	0	0	0	71404 MBytes / 36151 seconds
C:\asgluns\sg44\Jetstress1.edb	9139282	0	0	0	71400 MBytes / 36120 seconds
C:\asgluns\sg45\Jetstress1.edb	9141074	0	0	0	71414 MBytes / 39218 seconds
C:\asgluns\sg46\Jetstress1.edb	9137746	0	0	0	71388 MBytes / 39192 seconds
C:\asgluns\sg47\Jetstress1.edb	9138258	0	0	0	71392 MBytes / 36132 seconds
C:\asgluns\sg48\Jetstress1.edb	9138002	0	0	0	71390 MBytes / 36193 seconds
C:\asgluns\sg49\Jetstress1.edb	9139026	0	0	0	71398 MBytes / 39254 seconds
C:\asgluns\sg50\Jetstress1.edb	9140562	0	0	0	71410 MBytes / 39243 seconds
(Sum)	456964868	0	0	0	3570038 MBytes / 39343 seconds

Disk Subsystem Performance of Checksum

Logical Disk	Avg. Disk sec/Read	Avg. Disk sec/Write	Disk Reads/sec	Disk Writes/sec
C:\asgluns\sg1	0.630	0.000	28.748	0.000
C:\asgluns\sg2	0.589	0.000	29.029	0.000
C:\asgluns\sg3	0.506	0.000	31.503	0.000
C:\asgluns\sg4	0.506	0.000	31.551	0.000
C:\asgluns\sg5	0.591	0.000	29.060	0.000
C:\asgluns\sg6	0.588	0.001	29.121	0.000
C:\asgluns\sg7	0.507	0.001	31.498	0.000
C:\asgluns\sg8	0.506	0.001	31.612	0.000
C:\asgluns\sg9	0.588	0.000	29.024	0.000
C:\asgluns\sg10	0.591	0.001	29.081	0.000
C:\asgluns\sg11	0.505	0.000	31.618	0.000
C:\asgluns\sg12	0.503	0.000	31.788	0.000
C:\asgluns\sg13	0.587	0.000	29.062	0.000
C:\asgluns\sg14	0.589	0.000	29.101	0.000
C:\asgluns\sg15	0.506	0.001	31.554	0.000
C:\asgluns\sg16	0.506	0.001	31.533	0.000
C:\asgluns\sg17	0.593	0.000	29.103	0.000
C:\asgluns\sg18	0.592	0.001	29.032	0.000
C:\asgluns\sg19	0.504	0.001	31.649	0.000
C:\asgluns\sg20	0.507	0.001	31.488	0.000
C:\asgluns\sg21	0.591	0.001	28.923	0.000
C:\asgluns\sg22	0.590	0.000	29.111	0.000
C:\asgluns\sg23	0.504	0.000	31.642	0.000
C:\asgluns\sg24	0.506	0.000	31.540	0.000
C:\asgluns\sg25	0.593	0.000	29.072	0.000
C:\asgluns\sg26	0.590	0.001	29.099	0.000
C:\asgluns\sg27	0.505	0.001	31.582	0.000
C:\asgluns\sg28	0.505	0.001	31.651	0.000
C:\asgluns\sg29	0.591	0.000	29.042	0.000
C:\asgluns\sg30	0.593	0.000	29.084	0.000
C:\asgluns\sg31	0.505	0.001	31.560	0.000
C:\asgluns\sg32	0.506	0.001	31.605	0.000
C:\asgluns\sg33	0.585	0.000	29.030	0.000
C:\asgluns\sg34	0.594	0.000	29.053	0.000
C:\asgluns\sg35	0.504	0.001	31.669	0.000
C:\asgluns\sg36	0.505	0.001	31.612	0.000

C:\asgluns\sg37	0.591	0.000	29.051	0.000
C:\asgluns\sg38	0.587	0.001	29.105	0.000
C:\asgluns\sg39	0.505	0.000	31.534	0.000
C:\asgluns\sg40	0.507	0.000	31.550	0.000
C:\asgluns\sg41	0.589	0.000	29.015	0.000
C:\asgluns\sg42	0.595	0.001	29.075	0.000
C:\asgluns\sg43	0.505	0.000	31.606	0.000
C:\asgluns\sg44	0.505	0.001	31.632	0.000
C:\asgluns\sg45	0.584	0.000	29.123	0.000
C:\asgluns\sg46	0.589	0.000	29.119	0.000
C:\asgluns\sg47	0.504	0.001	31.611	0.000
C:\asgluns\sg48	0.507	0.001	31.565	0.000
C:\asgluns\sg49	0.594	0.000	28.985	0.000
C:\asgluns\sg50	0.595	0.000	29.053	0.000

Memory System Performance of Checksum

Counter	Average	Minimum	Maximum
% Processor Time	0.807	0.065	1.520
Available MBytes	30352.557	30325.000	30390.000
Free System Page Table Entries	33558285.411	33557319.000	33561517.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	122127820.330	121638912.000	122265600.000
Pool Paged Bytes	211286134.997	190758912.000	233799680.000

Test Log

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11/18/2009 4:10:39 PM -- Jetstress testing begins ...
11/18/2009 4:10:39 PM -- Prepare testing begins ...
11/18/2009 4:11:30 PM -- Attaching databases ...
11/18/2009 4:11:30 PM -- Prepare testing ends.
11/18/2009 4:11:30 PM -- Dispatching transactions begins ...
11/18/2009 4:11:30 PM -- Database cache settings: (minimum: 1.6 GB, maximum: 12.5
GB)
11/18/2009 4:11:30 PM -- Database flush thresholds: (start: 128.0 MB, stop: 256.0
MB)
11/18/2009 4:12:27 PM -- Database read latency thresholds: (average: 0.02
seconds/read, maximum: 0.05 seconds/read).
11/18/2009 4:12:27 PM -- Log write latency thresholds: (average: 0.01
seconds/write, maximum: 0.05 seconds/write).
11/18/2009 4:12:32 PM -- Operation mix: Sessions 2, Inserts 40%, Deletes 30%,
Replaces 5%, Reads 25%, Lazy Commits 55%.
11/18/2009 4:12:32 PM -- Performance logging begins (interval: 15000 ms).
11/18/2009 4:12:32 PM -- Attaining prerequisites:
11/18/2009 5:19:15 PM -- \MSExchange Database(Jetstresswin)\Database Cache Size,
Last: 12080370000.0 (lower bound: 12079600000.0, upper bound: none)
11/18/2009 7:19:16 PM -- Performance logging ends.
11/18/2009 7:20:24 PM -- JetInterop batch transaction stats: 6153, 6123, 6080,
6065, 6037, 6087, 6003, 6108, 5934, 6010, 6174, 5973, 5950, 5967, 6021, 5999,
6008, 5972, 6055, 6029, 6005, 5960, 6069, 5939, 5940, 5955, 6064, 6037, 6090,

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5959, 5855, 5988, 6005, 6022, 5974, 5983, 5902, 6013, 6064, 6041, 5935, 5927, 6073, 6054, 6000, 6120, 6002, 5983, 5999, and 5963.
 11/18/2009 7:20:24 PM -- Dispatching transactions ends.
 11/18/2009 7:20:24 PM -- Shutting down databases ...
 11/18/2009 7:20:58 PM -- Instance3564.1 (complete), Instance3564.2 (complete), Instance3564.3 (complete), Instance3564.4 (complete), Instance3564.5 (complete), Instance3564.6 (complete), Instance3564.7 (complete), Instance3564.8 (complete), Instance3564.9 (complete), Instance3564.10 (complete), Instance3564.11 (complete), Instance3564.12 (complete), Instance3564.13 (complete), Instance3564.14 (complete), Instance3564.15 (complete), Instance3564.16 (complete), Instance3564.17 (complete), Instance3564.18 (complete), Instance3564.19 (complete), Instance3564.20 (complete), Instance3564.21 (complete), Instance3564.22 (complete), Instance3564.23 (complete), Instance3564.24 (complete), Instance3564.25 (complete), Instance3564.26 (complete), Instance3564.27 (complete), Instance3564.28 (complete), Instance3564.29 (complete), Instance3564.30 (complete), Instance3564.31 (complete), Instance3564.32 (complete), Instance3564.33 (complete), Instance3564.34 (complete), Instance3564.35 (complete), Instance3564.36 (complete), Instance3564.37 (complete), Instance3564.38 (complete), Instance3564.39 (complete), Instance3564.40 (complete), Instance3564.41 (complete), Instance3564.42 (complete), Instance3564.43 (complete), Instance3564.44 (complete), Instance3564.45 (complete), Instance3564.46 (complete), Instance3564.47 (complete), Instance3564.48 (complete), Instance3564.49 (complete), and Instance3564.50 (complete)
 11/18/2009 7:20:59 PM -- Performance logging begins (interval: 30000 ms).
 11/18/2009 7:20:59 PM -- Verifying database checksums ...
 11/19/2009 6:16:43 AM -- C:\asgluns\sg1 (100% processed), C:\asgluns\sg2 (100% processed), C:\asgluns\sg3 (100% processed), C:\asgluns\sg4 (100% processed), C:\asgluns\sg5 (100% processed), C:\asgluns\sg6 (100% processed), C:\asgluns\sg7 (100% processed), C:\asgluns\sg8 (100% processed), C:\asgluns\sg9 (100% processed), C:\asgluns\sg10 (100% processed), C:\asgluns\sg11 (100% processed), C:\asgluns\sg12 (100% processed), C:\asgluns\sg13 (100% processed), C:\asgluns\sg14 (100% processed), C:\asgluns\sg15 (100% processed), C:\asgluns\sg16 (100% processed), C:\asgluns\sg17 (100% processed), C:\asgluns\sg18 (100% processed), C:\asgluns\sg19 (100% processed), C:\asgluns\sg20 (100% processed), C:\asgluns\sg21 (100% processed), C:\asgluns\sg22 (100% processed), C:\asgluns\sg23 (100% processed), C:\asgluns\sg24 (100% processed), C:\asgluns\sg25 (100% processed), C:\asgluns\sg26 (100% processed), C:\asgluns\sg27 (100% processed), C:\asgluns\sg28 (100% processed), C:\asgluns\sg29 (100% processed), C:\asgluns\sg30 (100% processed), C:\asgluns\sg31 (100% processed), C:\asgluns\sg32 (100% processed), C:\asgluns\sg33 (100% processed), C:\asgluns\sg34 (100% processed), C:\asgluns\sg35 (100% processed), C:\asgluns\sg36 (100% processed), C:\asgluns\sg37 (100% processed), C:\asgluns\sg38 (100% processed), C:\asgluns\sg39 (100% processed), C:\asgluns\sg40 (100% processed), C:\asgluns\sg41 (100% processed), C:\asgluns\sg42 (100% processed), C:\asgluns\sg43 (100% processed), C:\asgluns\sg44 (100% processed), C:\asgluns\sg45 (100% processed), C:\asgluns\sg46 (100% processed), C:\asgluns\sg47 (100% processed), C:\asgluns\sg48 (100% processed), C:\asgluns\sg49 (100% processed), and C:\asgluns\sg50 (100% processed)
 11/19/2009 6:16:43 AM -- Performance logging ends.
 11/19/2009 6:16:43 AM -- C:\ESRP HDP 2GB\SUN158\1700 users\Performance\DBChecksum_2009_11_18_19_20_58.b1g has 1308 samples.

Stress Test Database Performance Result: SUN158

Test Summary

Overall Test Result	Pass
Machine Name	SUN158
Test Description	
Test Start Time	11/16/2009 6:49:36 AM

Test End Time	11/17/2009 8:44:54 AM
Jetstress Version	08.02.0060.000
Ese Version	08.01.0240.005
Operating System	Windows Server (R) 2008 Enterprise Service Pack 1 (6.0.6001.65536)
Performance Log	C:\ESRP HDP 2GB\SUN158\1700 users\Stress\Stress_2009_11_16_6_51_21.blg C:\ESRP HDP 2GB\SUN158\1700 users\Stress\DBChecksum_2009_11_17_8_44_54.blg

Database Sizing and Throughput

Achieved I/O per Second	1486.202
Target I/O per Second	979.2
Initial database size	3660215779328
Final database size	3728182640640
Database files (count)	50

Jetstress System Parameters

Thread count	2 (per storage group)
Log buffers	9000
Minimum database cache	1600.0 MB
Maximum database cache	12800.0 MB
Insert operations	40%
Delete operations	30%
Replace operations	5%
Read operations	25%
Lazy commits	55%

Disk Subsystem Performance

Logical Disk	Avg. Disk sec/Read	Avg. Disk sec/Write	Disk Reads/sec	Disk Writes/sec	Avg. Disk Bytes/Write
Database (C:\asgluns\sg1)	0.012	0.004	15.898	13.997	(n/a)
Database (C:\asgluns\sg2)	0.012	0.004	16.082	14.214	(n/a)
Database (C:\asgluns\sg3)	0.012	0.004	15.748	13.753	(n/a)
Database (C:\asgluns\sg4)	0.012	0.004	15.826	13.952	(n/a)
Database (C:\asgluns\sg5)	0.012	0.004	15.756	13.956	(n/a)
Database (C:\asgluns\sg6)	0.012	0.004	15.942	14.013	(n/a)

Database (C:\asgluns\sg7)	0.012	0.004	15.730	13.777	(n/a)
Database (C:\asgluns\sg8)	0.012	0.004	15.753	13.917	(n/a)
Database (C:\asgluns\sg9)	0.012	0.004	15.831	13.902	(n/a)
Database (C:\asgluns\sg10)	0.012	0.004	15.879	13.903	(n/a)
Database (C:\asgluns\sg11)	0.012	0.004	15.865	14.004	(n/a)
Database (C:\asgluns\sg12)	0.012	0.004	15.859	13.969	(n/a)
Database (C:\asgluns\sg13)	0.012	0.004	15.853	14.017	(n/a)
Database (C:\asgluns\sg14)	0.012	0.004	15.906	13.953	(n/a)
Database (C:\asgluns\sg15)	0.012	0.004	15.828	13.886	(n/a)
Database (C:\asgluns\sg16)	0.012	0.004	15.870	13.908	(n/a)
Database (C:\asgluns\sg17)	0.012	0.004	15.720	13.757	(n/a)
Database (C:\asgluns\sg18)	0.012	0.004	15.899	13.974	(n/a)
Database (C:\asgluns\sg19)	0.012	0.004	15.748	13.892	(n/a)
Database (C:\asgluns\sg20)	0.012	0.004	15.775	13.806	(n/a)
Database (C:\asgluns\sg21)	0.012	0.004	15.837	13.958	(n/a)
Database (C:\asgluns\sg22)	0.012	0.004	15.794	13.828	(n/a)
Database (C:\asgluns\sg23)	0.012	0.004	15.929	14.042	(n/a)
Database (C:\asgluns\sg24)	0.012	0.004	15.844	13.840	(n/a)
Database (C:\asgluns\sg25)	0.012	0.004	15.819	13.916	(n/a)
Database (C:\asgluns\sg26)	0.012	0.004	15.627	13.777	(n/a)
Database (C:\asgluns\sg27)	0.012	0.004	15.807	13.855	(n/a)
Database (C:\asgluns\sg28)	0.012	0.004	15.965	13.981	(n/a)
Database (C:\asgluns\sg29)	0.012	0.004	15.871	14.016	(n/a)
Database	0.012	0.004	15.859	13.939	(n/a)

(C:\asgluns\sg30)					
Database (C:\asgluns\sg31)	0.012	0.004	15.860	13.900	(n/a)
Database (C:\asgluns\sg32)	0.012	0.004	15.783	13.801	(n/a)
Database (C:\asgluns\sg33)	0.012	0.004	15.731	13.821	(n/a)
Database (C:\asgluns\sg34)	0.012	0.004	15.956	14.183	(n/a)
Database (C:\asgluns\sg35)	0.012	0.004	15.664	13.825	(n/a)
Database (C:\asgluns\sg36)	0.012	0.004	15.621	13.844	(n/a)
Database (C:\asgluns\sg37)	0.012	0.004	15.742	13.939	(n/a)
Database (C:\asgluns\sg38)	0.012	0.004	15.798	13.938	(n/a)
Database (C:\asgluns\sg39)	0.012	0.004	15.717	13.835	(n/a)
Database (C:\asgluns\sg40)	0.012	0.004	15.895	13.960	(n/a)
Database (C:\asgluns\sg41)	0.012	0.004	15.813	13.918	(n/a)
Database (C:\asgluns\sg42)	0.012	0.004	15.834	13.972	(n/a)
Database (C:\asgluns\sg43)	0.012	0.004	15.842	13.939	(n/a)
Database (C:\asgluns\sg44)	0.012	0.004	15.715	13.847	(n/a)
Database (C:\asgluns\sg45)	0.012	0.004	15.765	13.862	(n/a)
Database (C:\asgluns\sg46)	0.012	0.004	15.722	13.868	(n/a)
Database (C:\asgluns\sg47)	0.012	0.004	15.680	13.810	(n/a)
Database (C:\asgluns\sg48)	0.012	0.004	15.720	13.789	(n/a)
Database (C:\asgluns\sg49)	0.012	0.004	15.782	14.031	(n/a)
Database (C:\asgluns\sg50)	0.012	0.004	15.756	13.899	(n/a)
Log (C:\alogluns\log1)	0.000	0.002	0.000	11.690	3850.991
Log (C:\alogluns\log2)	0.000	0.002	0.000	11.987	3873.298
Log (C:\alogluns\log3)	0.000	0.002	0.000	11.584	3863.888
Log (C:\alogluns\log4)	0.000	0.002	0.000	11.778	3884.534
Log (C:\alogluns\log5)	0.000	0.002	0.000	11.738	3909.345

Log (C:\alogluns\log6)	0.000	0.002	0.000	11.761	3915.742
Log (C:\alogluns\log7)	0.000	0.002	0.000	11.590	3883.460
Log (C:\alogluns\log8)	0.000	0.002	0.000	11.708	3884.176
Log (C:\alogluns\log9)	0.000	0.002	0.000	11.702	3875.740
Log (C:\alogluns\log10)	0.000	0.002	0.000	11.675	3872.090
Log (C:\alogluns\log11)	0.000	0.002	0.000	11.745	3891.293
Log (C:\alogluns\log12)	0.000	0.002	0.000	11.718	3924.694
Log (C:\alogluns\log13)	0.000	0.002	0.000	11.848	3880.422
Log (C:\alogluns\log14)	0.000	0.002	0.000	11.700	3874.242
Log (C:\alogluns\log15)	0.000	0.002	0.000	11.682	3900.357
Log (C:\alogluns\log16)	0.000	0.002	0.000	11.664	3883.409
Log (C:\alogluns\log17)	0.000	0.002	0.000	11.619	3875.098
Log (C:\alogluns\log18)	0.000	0.002	0.000	11.712	3894.613
Log (C:\alogluns\log19)	0.000	0.002	0.000	11.714	3919.938
Log (C:\alogluns\log20)	0.000	0.002	0.000	11.640	3891.148
Log (C:\alogluns\log21)	0.000	0.002	0.000	11.687	3867.214
Log (C:\alogluns\log22)	0.000	0.002	0.000	11.664	3907.371
Log (C:\alogluns\log23)	0.000	0.002	0.000	11.717	3876.773
Log (C:\alogluns\log24)	0.000	0.002	0.000	11.588	3854.106
Log (C:\alogluns\log25)	0.000	0.002	0.000	11.679	3855.434
Log (C:\alogluns\log26)	0.000	0.002	0.000	11.608	3906.503
Log (C:\alogluns\log27)	0.000	0.002	0.000	11.647	3884.793
Log (C:\alogluns\log28)	0.000	0.002	0.000	11.737	3905.522
Log (C:\alogluns\log29)	0.000	0.002	0.000	11.790	3911.946
Log (C:\alogluns\log30)	0.000	0.002	0.000	11.744	3889.798
Log (C:\alogluns\log31)	0.000	0.002	0.000	11.696	3891.088
Log (C:\alogluns\log32)	0.000	0.002	0.000	11.630	3924.838
Log (C:\alogluns\log33)	0.000	0.002	0.000	11.660	3897.125
Log (C:\alogluns\log34)	0.000	0.002	0.000	11.851	3911.856
Log (C:\alogluns\log35)	0.000	0.002	0.000	11.609	3910.801
Log (C:\alogluns\log36)	0.000	0.002	0.000	11.699	3911.609
Log (C:\alogluns\log37)	0.000	0.002	0.000	11.672	3884.759
Log (C:\alogluns\log38)	0.000	0.002	0.000	11.715	3903.326
Log (C:\alogluns\log39)	0.000	0.002	0.000	11.637	3884.390
Log (C:\alogluns\log40)	0.000	0.002	0.000	11.699	3891.998
Log (C:\alogluns\log41)	0.000	0.002	0.000	11.691	3879.975
Log (C:\alogluns\log42)	0.000	0.002	0.000	11.751	3895.022
Log (C:\alogluns\log43)	0.000	0.002	0.000	11.679	3894.692

Log (C:\alogluns\log44)	0.000	0.002	0.000	11.681	3934.926
Log (C:\alogluns\log45)	0.000	0.002	0.000	11.666	3910.310
Log (C:\alogluns\log46)	0.000	0.002	0.000	11.668	3869.196
Log (C:\alogluns\log47)	0.000	0.002	0.000	11.578	3904.423
Log (C:\alogluns\log48)	0.000	0.002	0.000	11.627	3900.960
Log (C:\alogluns\log49)	0.000	0.002	0.000	11.768	3909.403
Log (C:\alogluns\log50)	0.000	0.002	0.000	11.688	3919.366

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.917	0.432	1.909
Available MBytes	16901.076	16830.000	18184.000
Free System Page Table Entries	33563195.582	33560246.000	33566852.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	129083654.987	128524288.000	130392064.000
Pool Paged Bytes	202754196.333	199852032.000	203649024.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

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11/16/2009 6:49:36 AM -- Jetstress testing begins ...
11/16/2009 6:49:36 AM -- Prepare testing begins ...
11/16/2009 6:50:27 AM -- Attaching databases ...
11/16/2009 6:50:27 AM -- Prepare testing ends.
11/16/2009 6:50:27 AM -- Dispatching transactions begins ...
11/16/2009 6:50:27 AM -- Database cache settings: (minimum: 1.6 GB, maximum: 12.5
GB)
11/16/2009 6:50:27 AM -- Database flush thresholds: (start: 128.0 MB, stop: 256.0
MB)
11/16/2009 6:51:21 AM -- Database read latency thresholds: (average: 0.02
seconds/read, maximum: 0.1 seconds/read).
11/16/2009 6:51:21 AM -- Log write latency thresholds: (average: 0.01
seconds/write, maximum: 0.1 seconds/write).
11/16/2009 6:51:26 AM -- Operation mix: Sessions 2, Inserts 40%, Deletes 30%,
Replaces 5%, Reads 25%, Lazy Commits 55%.
11/16/2009 6:51:26 AM -- Performance logging begins (interval: 15000 ms).
11/16/2009 6:51:26 AM -- Attaining prerequisites:
11/16/2009 7:59:48 AM -- \MSExchange Database(Jetstresswin)\Database Cache Size,
Last: 12081720000.0 (lower bound: 12079600000.0, upper bound: none)
11/17/2009 7:59:49 AM -- Performance logging ends.
11/17/2009 8:44:44 AM -- JetInterop batch transaction stats: 52957, 53719, 52532,
53036, 53048, 53467, 52368, 52776, 52977, 53016, 52898, 53031, 53225, 52938,
52870, 52724, 52580, 52844, 53033, 52533, 53052, 52835, 52992, 52748, 52779,
52772, 52885, 52953, 53297, 52967, 53014, 52697, 52620, 53486, 52755, 52699,
52613, 52910, 52639, 53166, 53057, 52996, 53120, 52647, 52835, 52817, 52595,
52691, 52935, and 52914.
11/17/2009 8:44:45 AM -- Dispatching transactions ends.
11/17/2009 8:44:45 AM -- Shutting down databases ...
11/17/2009 8:44:54 AM -- Instance3044.1 (complete), Instance3044.2 (complete),
Instance3044.3 (complete), Instance3044.4 (complete), Instance3044.5 (complete),
Instance3044.6 (complete), Instance3044.7 (complete), Instance3044.8 (complete),
Instance3044.9 (complete), Instance3044.10 (complete), Instance3044.11
(complete), Instance3044.12 (complete), Instance3044.13 (complete),

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Instance3044.14 (complete), Instance3044.15 (complete), Instance3044.16 (complete), Instance3044.17 (complete), Instance3044.18 (complete), Instance3044.19 (complete), Instance3044.20 (complete), Instance3044.21 (complete), Instance3044.22 (complete), Instance3044.23 (complete), Instance3044.24 (complete), Instance3044.25 (complete), Instance3044.26 (complete), Instance3044.27 (complete), Instance3044.28 (complete), Instance3044.29 (complete), Instance3044.30 (complete), Instance3044.31 (complete), Instance3044.32 (complete), Instance3044.33 (complete), Instance3044.34 (complete), Instance3044.35 (complete), Instance3044.36 (complete), Instance3044.37 (complete), Instance3044.38 (complete), Instance3044.39 (complete), Instance3044.40 (complete), Instance3044.41 (complete), Instance3044.42 (complete), Instance3044.43 (complete), Instance3044.44 (complete), Instance3044.45 (complete), Instance3044.46 (complete), Instance3044.47 (complete), Instance3044.48 (complete), Instance3044.49 (complete), and Instance3044.50 (complete)
11/17/2009 8:44:55 AM -- Performance logging begins (interval: 30000 ms).
11/17/2009 8:44:55 AM -- Verifying database checksums ...
11/17/2009 7:35:15 PM -- C:\asgluns\sg1 (100% processed), C:\asgluns\sg2 (100% processed), C:\asgluns\sg3 (100% processed), C:\asgluns\sg4 (100% processed), C:\asgluns\sg5 (100% processed), C:\asgluns\sg6 (100% processed), C:\asgluns\sg7 (100% processed), C:\asgluns\sg8 (100% processed), C:\asgluns\sg9 (100% processed), C:\asgluns\sg10 (100% processed), C:\asgluns\sg11 (100% processed), C:\asgluns\sg12 (100% processed), C:\asgluns\sg13 (100% processed), C:\asgluns\sg14 (100% processed), C:\asgluns\sg15 (100% processed), C:\asgluns\sg16 (100% processed), C:\asgluns\sg17 (100% processed), C:\asgluns\sg18 (100% processed), C:\asgluns\sg19 (100% processed), C:\asgluns\sg20 (100% processed), C:\asgluns\sg21 (100% processed), C:\asgluns\sg22 (100% processed), C:\asgluns\sg23 (100% processed), C:\asgluns\sg24 (100% processed), C:\asgluns\sg25 (100% processed), C:\asgluns\sg26 (100% processed), C:\asgluns\sg27 (100% processed), C:\asgluns\sg28 (100% processed), C:\asgluns\sg29 (100% processed), C:\asgluns\sg30 (100% processed), C:\asgluns\sg31 (100% processed), C:\asgluns\sg32 (100% processed), C:\asgluns\sg33 (100% processed), C:\asgluns\sg34 (100% processed), C:\asgluns\sg35 (100% processed), C:\asgluns\sg36 (100% processed), C:\asgluns\sg37 (100% processed), C:\asgluns\sg38 (100% processed), C:\asgluns\sg39 (100% processed), C:\asgluns\sg40 (100% processed), C:\asgluns\sg41 (100% processed), C:\asgluns\sg42 (100% processed), C:\asgluns\sg43 (100% processed), C:\asgluns\sg44 (100% processed), C:\asgluns\sg45 (100% processed), C:\asgluns\sg46 (100% processed), C:\asgluns\sg47 (100% processed), C:\asgluns\sg48 (100% processed), C:\asgluns\sg49 (100% processed), and C:\asgluns\sg50 (100% processed)
11/17/2009 7:35:15 PM -- Performance logging ends.
11/17/2009 7:35:15 PM -- C:\ESRP HDP 2GB\SUN158\1700 users\Stress\DBChecksum_2009_11_17_8_44_54.blg has 1297 samples.
11/17/2009 7:45:10 PM -- C:\ESRP HDP 2GB\SUN158\1700 users\Stress\DBChecksum_2009_11_17_8_44_54.html is saved.
11/17/2009 7:45:10 PM -- Verifying log checksums ...
11/17/2009 7:45:25 PM -- C:\alogluns\log1 (2 logs passed), C:\alogluns\log2 (2 logs passed), C:\alogluns\log3 (2 logs passed), C:\alogluns\log4 (2 logs passed), C:\alogluns\log5 (2 logs passed), C:\alogluns\log6 (2 logs passed), C:\alogluns\log7 (3 logs passed), C:\alogluns\log8 (2 logs passed), C:\alogluns\log9 (3 logs passed), C:\alogluns\log10 (2 logs passed), C:\alogluns\log11 (2 logs passed), C:\alogluns\log12 (3 logs passed), C:\alogluns\log13 (2 logs passed), C:\alogluns\log14 (2 logs passed), C:\alogluns\log15 (2 logs passed), C:\alogluns\log16 (2 logs passed), C:\alogluns\log17 (2 logs passed), C:\alogluns\log18 (3 logs passed), C:\alogluns\log19 (2 logs passed), C:\alogluns\log20 (2 logs passed), C:\alogluns\log21 (2 logs passed), C:\alogluns\log22 (2 logs passed), C:\alogluns\log23 (2 logs passed), C:\alogluns\log24 (2 logs passed), C:\alogluns\log25 (2 logs passed), C:\alogluns\log26 (2 logs passed), C:\alogluns\log27 (2 logs passed), C:\alogluns\log28 (2 logs passed), C:\alogluns\log29 (2 logs passed), C:\alogluns\log30 (2 logs passed), C:\alogluns\log31 (2 logs passed), C:\alogluns\log32 (2 logs passed), C:\alogluns\log33 (2 logs passed), C:\alogluns\log34 (2 logs passed), C:\alogluns\log35 (2 logs passed), C:\alogluns\log36 (2 logs passed), C:\alogluns\log37 (2 logs passed), C:\alogluns\log38 (2 logs passed), C:\alogluns\log39 (2 logs passed), C:\alogluns\log40 (2 logs passed),

C:\alogluns\log41 (3 logs passed), C:\alogluns\log42 (2 logs passed),
 C:\alogluns\log43 (3 logs passed), C:\alogluns\log44 (2 logs passed),
 C:\alogluns\log45 (2 logs passed), C:\alogluns\log46 (2 logs passed),
 C:\alogluns\log47 (2 logs passed), C:\alogluns\log48 (2 logs passed),
 C:\alogluns\log49 (3 logs passed), and C:\alogluns\log50 (2 logs passed)
 11/17/2009 7:45:25 PM -- C:\ESRP HDP 2GB\SUN158\1700
 users\Stress\Stress_2009_11_16_6_51_21.blg has 5987 samples.
 11/17/2009 7:45:25 PM -- Creating test report ...
 11/17/2009 7:50:17 PM -- Volume C:\asgluns\sg1 has 0.0117 for Avg. Disk sec/Read.
 11/17/2009 7:50:17 PM -- Volume C:\asgluns\sg2 has 0.0120 for Avg. Disk sec/Read.
 11/17/2009 7:50:17 PM -- Volume C:\asgluns\sg3 has 0.0119 for Avg. Disk sec/Read.
 11/17/2009 7:50:17 PM -- Volume C:\asgluns\sg4 has 0.0118 for Avg. Disk sec/Read.
 11/17/2009 7:50:17 PM -- Volume C:\asgluns\sg5 has 0.0118 for Avg. Disk sec/Read.
 11/17/2009 7:50:17 PM -- Volume C:\asgluns\sg6 has 0.0118 for Avg. Disk sec/Read.
 11/17/2009 7:50:17 PM -- Volume C:\asgluns\sg7 has 0.0119 for Avg. Disk sec/Read.
 11/17/2009 7:50:17 PM -- Volume C:\asgluns\sg8 has 0.0119 for Avg. Disk sec/Read.
 11/17/2009 7:50:17 PM -- Volume C:\asgluns\sg9 has 0.0117 for Avg. Disk sec/Read.
 11/17/2009 7:50:17 PM -- Volume C:\asgluns\sg10 has 0.0118 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg11 has 0.0118 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg12 has 0.0118 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg13 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg14 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg15 has 0.0120 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg16 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg17 has 0.0118 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg18 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg19 has 0.0120 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg20 has 0.0120 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg21 has 0.0118 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg22 has 0.0118 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg23 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg24 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg25 has 0.0118 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg26 has 0.0118 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg27 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg28 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:18 PM -- Volume C:\asgluns\sg29 has 0.0118 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:19 PM -- Volume C:\asgluns\sg30 has 0.0118 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:19 PM -- Volume C:\asgluns\sg31 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:19 PM -- Volume C:\asgluns\sg32 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:19 PM -- Volume C:\asgluns\sg33 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:19 PM -- Volume C:\asgluns\sg34 has 0.0119 for Avg. Disk
 sec/Read.
 11/17/2009 7:50:19 PM -- Volume C:\asgluns\sg35 has 0.0118 for Avg. Disk


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sec/Write.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log44 has 0.0000 for Avg. Disk
sec/Read.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log45 has 0.0019 for Avg. Disk
sec/Write.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log45 has 0.0000 for Avg. Disk
sec/Read.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log46 has 0.0019 for Avg. Disk
sec/Write.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log46 has 0.0000 for Avg. Disk
sec/Read.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log47 has 0.0020 for Avg. Disk
sec/Write.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log47 has 0.0000 for Avg. Disk
sec/Read.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log48 has 0.0020 for Avg. Disk
sec/Write.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log48 has 0.0000 for Avg. Disk
sec/Read.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log49 has 0.0019 for Avg. Disk
sec/Write.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log49 has 0.0000 for Avg. Disk
sec/Read.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log50 has 0.0019 for Avg. Disk
sec/Write.
11/17/2009 7:50:21 PM -- volume C:\alogluns\log50 has 0.0000 for Avg. Disk
sec/Read.
11/17/2009 7:50:21 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
11/17/2009 7:50:21 PM -- Test has 0 Database Page Fault Stalls/sec samples higher
than 0.
11/17/2009 7:50:21 PM -- C:\ESRP HDP 2GB\SUN158\1700
users\Stress\Stress_2009_11_16_6_51_21.xml has 5715 samples queried.

```

Stress Test Database Checksums Result: SUN158

Checksum Statistics - All

Database	Seen pages	Bad pages	Correctable pages	Wrong page no pages	File length / seconds taken
C:\asgluns\sg1\Jetstress1.edb	9099858	0	0	0	71092 MBytes / 39019 seconds
C:\asgluns\sg2\Jetstress1.edb	9106770	0	0	0	71146 MBytes / 38930 seconds
C:\asgluns\sg3\Jetstress1.edb	9099602	0	0	0	71090 MBytes / 36171 seconds
C:\asgluns\sg4\Jetstress1.edb	9102674	0	0	0	71114 MBytes / 36211 seconds
C:\asgluns\sg5\Jetstress1.edb	9103698	0	0	0	71122 MBytes / 38918 seconds
C:\asgluns\sg6\Jetstress1.edb	9102162	0	0	0	71110 MBytes / 38905 seconds
C:\asgluns\sg7\Jetstress1.edb	9099858	0	0	0	71092 MBytes / 36139 seconds
C:\asgluns\sg8\Jetstress1.edb	9101906	0	0	0	71108 MBytes / 36205 seconds
C:\asgluns\sg9\Jetstress1.edb	9101906	0	0	0	71108 MBytes / 38911 seconds

C:\asgluns\sg10\Jetstress1.edb	9100626	0	0	0	71098 MBytes / 38878 seconds
C:\asgluns\sg11\Jetstress1.edb	9100626	0	0	0	71098 MBytes / 36156 seconds
C:\asgluns\sg12\Jetstress1.edb	9103442	0	0	0	71120 MBytes / 36126 seconds
C:\asgluns\sg13\Jetstress1.edb	9104978	0	0	0	71132 MBytes / 38930 seconds
C:\asgluns\sg14\Jetstress1.edb	9101650	0	0	0	71106 MBytes / 38893 seconds
C:\asgluns\sg15\Jetstress1.edb	9102930	0	0	0	71116 MBytes / 36201 seconds
C:\asgluns\sg16\Jetstress1.edb	9101138	0	0	0	71102 MBytes / 36178 seconds
C:\asgluns\sg17\Jetstress1.edb	9101394	0	0	0	71104 MBytes / 38901 seconds
C:\asgluns\sg18\Jetstress1.edb	9101138	0	0	0	71102 MBytes / 38811 seconds
C:\asgluns\sg19\Jetstress1.edb	9103442	0	0	0	71120 MBytes / 36203 seconds
C:\asgluns\sg20\Jetstress1.edb	9102418	0	0	0	71112 MBytes / 36016 seconds
C:\asgluns\sg21\Jetstress1.edb	9100370	0	0	0	71096 MBytes / 38871 seconds
C:\asgluns\sg22\Jetstress1.edb	9103186	0	0	0	71118 MBytes / 38897 seconds
C:\asgluns\sg23\Jetstress1.edb	9102162	0	0	0	71110 MBytes / 36178 seconds
C:\asgluns\sg24\Jetstress1.edb	9099090	0	0	0	71086 MBytes / 36122 seconds
C:\asgluns\sg25\Jetstress1.edb	9099346	0	0	0	71088 MBytes / 38880 seconds
C:\asgluns\sg26\Jetstress1.edb	9101138	0	0	0	71102 MBytes / 38861 seconds
C:\asgluns\sg27\Jetstress1.edb	9102162	0	0	0	71110 MBytes / 36212 seconds
C:\asgluns\sg28\Jetstress1.edb	9102418	0	0	0	71112 MBytes / 36093 seconds
C:\asgluns\sg29\Jetstress1.edb	9104978	0	0	0	71132 MBytes / 38315 seconds
C:\asgluns\sg30\Jetstress1.edb	9102162	0	0	0	71110 MBytes / 38314 seconds
C:\asgluns\sg31\Jetstress1.edb	9103698	0	0	0	71122 MBytes / 36146 seconds
C:\asgluns\sg32\Jetstress1.edb	9103698	0	0	0	71122 MBytes / 36175 seconds
C:\asgluns\sg33\Jetstress1.edb	9103442	0	0	0	71120 MBytes / 38920 seconds

					seconds
C:\asgluns\sg34\Jetstress1.edb	9102674	0	0	0	71114 MBytes / 38882 seconds
C:\asgluns\sg35\Jetstress1.edb	9099602	0	0	0	71090 MBytes / 36212 seconds
C:\asgluns\sg36\Jetstress1.edb	9104210	0	0	0	71126 MBytes / 36087 seconds
C:\asgluns\sg37\Jetstress1.edb	9100114	0	0	0	71094 MBytes / 38916 seconds
C:\asgluns\sg38\Jetstress1.edb	9102930	0	0	0	71116 MBytes / 38890 seconds
C:\asgluns\sg39\Jetstress1.edb	9100626	0	0	0	71098 MBytes / 36208 seconds
C:\asgluns\sg40\Jetstress1.edb	9101650	0	0	0	71106 MBytes / 36132 seconds
C:\asgluns\sg41\Jetstress1.edb	9100626	0	0	0	71098 MBytes / 38921 seconds
C:\asgluns\sg42\Jetstress1.edb	9103698	0	0	0	71122 MBytes / 38903 seconds
C:\asgluns\sg43\Jetstress1.edb	9102162	0	0	0	71110 MBytes / 36160 seconds
C:\asgluns\sg44\Jetstress1.edb	9102930	0	0	0	71116 MBytes / 36149 seconds
C:\asgluns\sg45\Jetstress1.edb	9102930	0	0	0	71116 MBytes / 38522 seconds
C:\asgluns\sg46\Jetstress1.edb	9100626	0	0	0	71098 MBytes / 38519 seconds
C:\asgluns\sg47\Jetstress1.edb	9100370	0	0	0	71096 MBytes / 36211 seconds
C:\asgluns\sg48\Jetstress1.edb	9100626	0	0	0	71098 MBytes / 36190 seconds
C:\asgluns\sg49\Jetstress1.edb	9101394	0	0	0	71104 MBytes / 38898 seconds
C:\asgluns\sg50\Jetstress1.edb	9103186	0	0	0	71118 MBytes / 38885 seconds
(Sum)	455100420	0	0	0	3555472 MBytes / 39019 seconds

Disk Subsystem Performance of Checksum

<i>Logical Disk</i>	<i>Avg. Disk sec/Read</i>	<i>Avg. Disk sec/Write</i>	<i>Disk Reads/sec</i>	<i>Disk Writes/sec</i>
C:\asgluns\sg1	0.624	0.001	28.181	0.000
C:\asgluns\sg2	0.573	0.001	29.138	0.000
C:\asgluns\sg3	0.508	0.002	31.424	0.000
C:\asgluns\sg4	0.509	0.001	31.394	0.000
C:\asgluns\sg5	0.571	0.001	29.213	0.000

C:\asgluns\sg6	0.573	0.001	29.191	0.000
C:\asgluns\sg7	0.507	0.000	31.464	0.000
C:\asgluns\sg8	0.509	0.000	31.420	0.000
C:\asgluns\sg9	0.572	0.000	29.233	0.000
C:\asgluns\sg10	0.570	0.000	29.218	0.000
C:\asgluns\sg11	0.507	0.001	31.451	0.000
C:\asgluns\sg12	0.508	0.000	31.492	0.000
C:\asgluns\sg13	0.571	0.002	29.132	0.000
C:\asgluns\sg14	0.574	0.001	29.218	0.000
C:\asgluns\sg15	0.508	0.001	31.405	0.000
C:\asgluns\sg16	0.508	0.001	31.434	0.000
C:\asgluns\sg17	0.571	0.001	29.215	0.000
C:\asgluns\sg18	0.570	0.000	29.299	0.000
C:\asgluns\sg19	0.508	0.001	31.407	0.000
C:\asgluns\sg20	0.506	0.001	31.586	0.000
C:\asgluns\sg21	0.572	0.001	29.230	0.000
C:\asgluns\sg22	0.571	0.000	29.237	0.000
C:\asgluns\sg23	0.507	0.001	31.441	0.000
C:\asgluns\sg24	0.508	0.000	31.477	0.000
C:\asgluns\sg25	0.569	0.001	29.231	0.000
C:\asgluns\sg26	0.571	0.001	29.255	0.000
C:\asgluns\sg27	0.508	0.001	31.391	0.000
C:\asgluns\sg28	0.507	0.001	31.521	0.000
C:\asgluns\sg29	0.572	0.000	29.452	0.000
C:\asgluns\sg30	0.563	0.001	29.521	0.000
C:\asgluns\sg31	0.507	0.002	31.474	0.000
C:\asgluns\sg32	0.508	0.002	31.447	0.000
C:\asgluns\sg33	0.570	0.000	29.202	0.000
C:\asgluns\sg34	0.573	0.000	29.254	0.000
C:\asgluns\sg35	0.508	0.001	31.379	0.000
C:\asgluns\sg36	0.507	0.001	31.530	0.000
C:\asgluns\sg37	0.569	0.001	29.208	0.000
C:\asgluns\sg38	0.571	0.000	29.233	0.000
C:\asgluns\sg39	0.508	0.001	31.402	0.000
C:\asgluns\sg40	0.508	0.000	31.487	0.000
C:\asgluns\sg41	0.572	0.001	29.194	0.000
C:\asgluns\sg42	0.574	0.001	29.189	0.000
C:\asgluns\sg43	0.507	0.002	31.464	0.000

C:\asgluns\sg44	0.508	0.000	31.479	0.000
C:\asgluns\sg45	0.571	0.000	29.301	0.000
C:\asgluns\sg46	0.570	0.001	29.415	0.000
C:\asgluns\sg47	0.508	0.001	31.380	0.000
C:\asgluns\sg48	0.509	0.001	31.419	0.000
C:\asgluns\sg49	0.571	0.001	29.210	0.000
C:\asgluns\sg50	0.573	0.002	29.247	0.000

Memory System Performance of Checksum

Counter	Average	Minimum	Maximum
% Processor Time	0.766	0.055	1.148
Available MBytes	30113.049	30097.000	30168.000
Free System Page Table Entries	33564298.648	33563667.000	33566517.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	130545172.922	130396160.000	130609152.000
Pool Paged Bytes	216940875.596	199630848.000	229523456.000

Test Log

```

11/16/2009 6:49:36 AM -- Jetstress testing begins ...
11/16/2009 6:49:36 AM -- Prepare testing begins ...
11/16/2009 6:50:27 AM -- Attaching databases ...
11/16/2009 6:50:27 AM -- Prepare testing ends.
11/16/2009 6:50:27 AM -- Dispatching transactions begins ...
11/16/2009 6:50:27 AM -- Database cache settings: (minimum: 1.6 GB, maximum: 12.5
GB)
11/16/2009 6:50:27 AM -- Database flush thresholds: (start: 128.0 MB, stop: 256.0
MB)
11/16/2009 6:51:21 AM -- Database read latency thresholds: (average: 0.02
seconds/read, maximum: 0.1 seconds/read).
11/16/2009 6:51:21 AM -- Log write latency thresholds: (average: 0.01
seconds/write, maximum: 0.1 seconds/write).
11/16/2009 6:51:26 AM -- Operation mix: Sessions 2, Inserts 40%, Deletes 30%,
Replaces 5%, Reads 25%, Lazy Commits 55%.
11/16/2009 6:51:26 AM -- Performance logging begins (interval: 15000 ms).
11/16/2009 6:51:26 AM -- Attaining prerequisites:
11/16/2009 7:59:48 AM -- \MSExchange Database(Jetstresswin)\Database Cache Size,
Last: 12081720000.0 (lower bound: 12079600000.0, upper bound: none)
11/17/2009 7:59:49 AM -- Performance logging ends.
11/17/2009 8:44:44 AM -- JetInterop batch transaction stats: 52957, 53719, 52532,
53036, 53048, 53467, 52368, 52776, 52977, 53016, 52898, 53031, 53225, 52938,
52870, 52724, 52580, 52844, 53033, 52533, 53052, 52835, 52992, 52748, 52779,
52772, 52885, 52953, 53297, 52967, 53014, 52697, 52620, 53486, 52755, 52699,
52613, 52910, 52639, 53166, 53057, 52996, 53120, 52647, 52835, 52817, 52595,
52691, 52935, and 52914.
11/17/2009 8:44:45 AM -- Dispatching transactions ends.
11/17/2009 8:44:45 AM -- Shutting down databases ...
11/17/2009 8:44:54 AM -- Instance3044.1 (complete), Instance3044.2 (complete),
Instance3044.3 (complete), Instance3044.4 (complete), Instance3044.5 (complete),
Instance3044.6 (complete), Instance3044.7 (complete), Instance3044.8 (complete),
Instance3044.9 (complete), Instance3044.10 (complete), Instance3044.11
(complete), Instance3044.12 (complete), Instance3044.13 (complete),
Instance3044.14 (complete), Instance3044.15 (complete), Instance3044.16
(complete), Instance3044.17 (complete), Instance3044.18 (complete),

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Instance3044.19 (complete), Instance3044.20 (complete), Instance3044.21 (complete), Instance3044.22 (complete), Instance3044.23 (complete), Instance3044.24 (complete), Instance3044.25 (complete), Instance3044.26 (complete), Instance3044.27 (complete), Instance3044.28 (complete), Instance3044.29 (complete), Instance3044.30 (complete), Instance3044.31 (complete), Instance3044.32 (complete), Instance3044.33 (complete), Instance3044.34 (complete), Instance3044.35 (complete), Instance3044.36 (complete), Instance3044.37 (complete), Instance3044.38 (complete), Instance3044.39 (complete), Instance3044.40 (complete), Instance3044.41 (complete), Instance3044.42 (complete), Instance3044.43 (complete), Instance3044.44 (complete), Instance3044.45 (complete), Instance3044.46 (complete), Instance3044.47 (complete), Instance3044.48 (complete), Instance3044.49 (complete), and Instance3044.50 (complete)
 11/17/2009 8:44:55 AM -- Performance logging begins (interval: 30000 ms).
 11/17/2009 8:44:55 AM -- verifying database checksums ...
 11/17/2009 7:35:15 PM -- C:\asgluns\sg1 (100% processed), C:\asgluns\sg2 (100% processed), C:\asgluns\sg3 (100% processed), C:\asgluns\sg4 (100% processed), C:\asgluns\sg5 (100% processed), C:\asgluns\sg6 (100% processed), C:\asgluns\sg7 (100% processed), C:\asgluns\sg8 (100% processed), C:\asgluns\sg9 (100% processed), C:\asgluns\sg10 (100% processed), C:\asgluns\sg11 (100% processed), C:\asgluns\sg12 (100% processed), C:\asgluns\sg13 (100% processed), C:\asgluns\sg14 (100% processed), C:\asgluns\sg15 (100% processed), C:\asgluns\sg16 (100% processed), C:\asgluns\sg17 (100% processed), C:\asgluns\sg18 (100% processed), C:\asgluns\sg19 (100% processed), C:\asgluns\sg20 (100% processed), C:\asgluns\sg21 (100% processed), C:\asgluns\sg22 (100% processed), C:\asgluns\sg23 (100% processed), C:\asgluns\sg24 (100% processed), C:\asgluns\sg25 (100% processed), C:\asgluns\sg26 (100% processed), C:\asgluns\sg27 (100% processed), C:\asgluns\sg28 (100% processed), C:\asgluns\sg29 (100% processed), C:\asgluns\sg30 (100% processed), C:\asgluns\sg31 (100% processed), C:\asgluns\sg32 (100% processed), C:\asgluns\sg33 (100% processed), C:\asgluns\sg34 (100% processed), C:\asgluns\sg35 (100% processed), C:\asgluns\sg36 (100% processed), C:\asgluns\sg37 (100% processed), C:\asgluns\sg38 (100% processed), C:\asgluns\sg39 (100% processed), C:\asgluns\sg40 (100% processed), C:\asgluns\sg41 (100% processed), C:\asgluns\sg42 (100% processed), C:\asgluns\sg43 (100% processed), C:\asgluns\sg44 (100% processed), C:\asgluns\sg45 (100% processed), C:\asgluns\sg46 (100% processed), C:\asgluns\sg47 (100% processed), C:\asgluns\sg48 (100% processed), C:\asgluns\sg49 (100% processed), and C:\asgluns\sg50 (100% processed)
 11/17/2009 7:35:15 PM -- Performance logging ends.
 11/17/2009 7:35:15 PM -- C:\ESRP HDP 2GB\SUN158\1700 users\Stress\DBChecksum_2009_11_17_8_44_54.blg has 1297 samples.

Streaming Backup Test Result: SUN158

Streaming Backup Statistics - All

<i>Database Instance</i>	<i>Database Size (MBytes)</i>	<i>Elapsed Backup Time</i>	<i>MBytes Transferred/sec</i>
Instance5872.1	71396.65	09:33:56	2.07
Instance5872.2	71446.65	09:32:55	2.08
Instance5872.3	71380.65	09:24:21	2.11
Instance5872.4	71398.65	09:25:06	2.11
Instance5872.5	71412.65	09:32:13	2.08
Instance5872.6	71402.65	09:31:03	2.08
Instance5872.7	71386.65	09:24:41	2.11
Instance5872.8	71400.65	09:24:15	2.11
Instance5872.9	71386.65	09:32:26	2.08
Instance5872.10	71388.65	09:30:43	2.08

Instance5872.11	71392.65	09:24:07	2.11
Instance5872.12	71400.65	09:24:41	2.11
Instance5872.13	71416.65	09:32:27	2.08
Instance5872.14	71396.65	09:32:07	2.08
Instance5872.15	71402.65	09:24:51	2.11
Instance5872.16	71390.65	09:24:32	2.11
Instance5872.17	71392.65	09:30:04	2.09
Instance5872.18	71396.65	09:31:44	2.08
Instance5872.19	71416.65	09:24:53	2.11
Instance5872.20	71404.65	09:24:57	2.11
Instance5872.21	71378.65	09:31:31	2.08
Instance5872.22	71408.65	09:29:57	2.09
Instance5872.23	71396.65	09:23:26	2.11
Instance5872.24	71374.65	09:23:05	2.11
Instance5872.25	71370.65	09:27:17	2.10
Instance5872.26	71386.65	09:31:52	2.08
Instance5872.27	71404.65	09:24:39	2.11
Instance5872.28	71402.65	09:24:46	2.11
Instance5872.29	71418.65	09:30:56	2.08
Instance5872.30	71394.65	09:29:42	2.09
Instance5872.31	71412.65	09:24:32	2.11
Instance5872.32	71416.65	09:24:13	2.11
Instance5872.33	71412.65	09:32:14	2.08
Instance5872.34	71410.65	09:31:45	2.08
Instance5872.35	71370.65	09:23:20	2.11
Instance5872.36	71416.65	09:24:24	2.11
Instance5872.37	71380.65	09:31:04	2.08
Instance5872.38	71406.65	09:29:26	2.09
Instance5872.39	71386.65	09:24:36	2.11
Instance5872.40	71392.65	09:24:29	2.11
Instance5872.41	71386.65	09:30:35	2.09
Instance5872.42	71412.65	09:32:13	2.08
Instance5872.43	71402.65	09:24:17	2.11
Instance5872.44	71398.65	09:23:52	2.11
Instance5872.45	71412.65	09:29:00	2.09
Instance5872.46	71386.65	09:30:29	2.09
Instance5872.47	71390.65	09:22:35	2.11
Instance5872.48	71388.65	09:23:40	2.11

Instance5872.49	71396.65	09:31:59	2.08
Instance5872.50	71408.65	09:31:55	2.08

Jetstress System Parameters

Thread count	2 (per storage group)
Log buffers	9000
Minimum database cache	1600.0 MB
Maximum database cache	12800.0 MB
Insert operations	40%
Delete operations	30%
Replace operations	5%
Read operations	25%
Lazy commits	55%

Disk Subsystem Performance

Logical Disk	Avg. Disk sec/Read	Avg. Disk sec/Write	Disk Reads/sec	Disk Writes/sec	Avg. Disk Bytes/Write
Database (C:\asgluns\sg1)	0.070	0.000	15.961	0.000	(n/a)
Database (C:\asgluns\sg2)	0.063	0.000	16.603	0.001	(n/a)
Database (C:\asgluns\sg3)	0.059	0.000	16.591	0.001	(n/a)
Database (C:\asgluns\sg4)	0.061	0.000	16.595	0.001	(n/a)
Database (C:\asgluns\sg5)	0.061	0.000	16.599	0.001	(n/a)
Database (C:\asgluns\sg6)	0.060	0.000	16.596	0.001	(n/a)
Database (C:\asgluns\sg7)	0.059	0.000	16.592	0.001	(n/a)
Database (C:\asgluns\sg8)	0.059	0.000	16.595	0.001	(n/a)
Database (C:\asgluns\sg9)	0.063	0.000	16.593	0.001	(n/a)
Database (C:\asgluns\sg10)	0.060	0.000	16.593	0.001	(n/a)
Database (C:\asgluns\sg11)	0.059	0.000	16.594	0.001	(n/a)
Database (C:\asgluns\sg12)	0.060	0.000	16.595	0.001	(n/a)
Database (C:\asgluns\sg13)	0.061	0.000	16.600	0.001	(n/a)

Database (C:\asgluns\sg14)	0.061	0.000	16.595	0.001	(n/a)
Database (C:\asgluns\sg15)	0.059	0.000	16.596	0.001	(n/a)
Database (C:\asgluns\sg16)	0.059	0.000	16.593	0.001	(n/a)
Database (C:\asgluns\sg17)	0.060	0.000	16.594	0.001	(n/a)
Database (C:\asgluns\sg18)	0.061	0.000	16.595	0.001	(n/a)
Database (C:\asgluns\sg19)	0.059	0.000	16.599	0.001	(n/a)
Database (C:\asgluns\sg20)	0.059	0.000	16.596	0.001	(n/a)
Database (C:\asgluns\sg21)	0.061	0.000	16.591	0.001	(n/a)
Database (C:\asgluns\sg22)	0.060	0.000	16.585	0.001	(n/a)
Database (C:\asgluns\sg23)	0.059	0.000	16.595	0.001	(n/a)
Database (C:\asgluns\sg24)	0.059	0.000	16.589	0.001	(n/a)
Database (C:\asgluns\sg25)	0.060	0.000	16.589	0.001	(n/a)
Database (C:\asgluns\sg26)	0.062	0.000	16.592	0.001	(n/a)
Database (C:\asgluns\sg27)	0.059	0.000	16.597	0.001	(n/a)
Database (C:\asgluns\sg28)	0.059	0.000	16.596	0.001	(n/a)
Database (C:\asgluns\sg29)	0.061	0.000	16.600	0.001	(n/a)
Database (C:\asgluns\sg30)	0.060	0.000	16.595	0.001	(n/a)
Database (C:\asgluns\sg31)	0.059	0.000	16.598	0.001	(n/a)
Database (C:\asgluns\sg32)	0.059	0.000	16.599	0.001	(n/a)
Database (C:\asgluns\sg33)	0.061	0.000	16.598	0.001	(n/a)
Database (C:\asgluns\sg34)	0.061	0.000	16.598	0.001	(n/a)
Database (C:\asgluns\sg35)	0.059	0.000	16.589	0.001	(n/a)
Database (C:\asgluns\sg36)	0.059	0.000	16.599	0.001	(n/a)
Database	0.061	0.000	16.591	0.001	(n/a)

(C:\asgluns\sg37)					
Database (C:\asgluns\sg38)	0.060	0.000	16.597	0.001	(n/a)
Database (C:\asgluns\sg39)	0.059	0.000	16.592	0.001	(n/a)
Database (C:\asgluns\sg40)	0.059	0.000	16.594	0.001	(n/a)
Database (C:\asgluns\sg41)	0.060	0.000	16.593	0.001	(n/a)
Database (C:\asgluns\sg42)	0.062	0.000	16.598	0.001	(n/a)
Database (C:\asgluns\sg43)	0.059	0.000	16.596	0.001	(n/a)
Database (C:\asgluns\sg44)	0.059	0.000	16.595	0.001	(n/a)
Database (C:\asgluns\sg45)	0.060	0.000	16.599	0.001	(n/a)
Database (C:\asgluns\sg46)	0.061	0.000	16.593	0.001	(n/a)
Database (C:\asgluns\sg47)	0.059	0.000	16.591	0.001	(n/a)
Database (C:\asgluns\sg48)	0.059	0.000	16.593	0.001	(n/a)
Database (C:\asgluns\sg49)	0.061	0.000	16.595	0.001	(n/a)
Database (C:\asgluns\sg50)	0.061	0.000	16.598	0.001	(n/a)
Log (C:\alogluns\log1)	0.000	0.000	0.000	0.000	0.000
Log (C:\alogluns\log2)	0.000	0.000	0.000	0.001	5.604
Log (C:\alogluns\log3)	0.000	0.000	0.000	0.001	12.870
Log (C:\alogluns\log4)	0.000	0.000	0.000	0.001	6.082
Log (C:\alogluns\log5)	0.000	0.000	0.000	0.001	6.082
Log (C:\alogluns\log6)	0.000	0.000	0.000	0.001	8.688
Log (C:\alogluns\log7)	0.000	0.000	0.000	0.001	9.505
Log (C:\alogluns\log8)	0.000	0.000	0.000	0.001	13.322
Log (C:\alogluns\log9)	0.000	0.000	0.000	0.001	5.918
Log (C:\alogluns\log10)	0.000	0.000	0.000	0.001	9.565
Log (C:\alogluns\log11)	0.000	0.000	0.000	0.001	9.714
Log (C:\alogluns\log12)	0.000	0.000	0.000	0.001	9.824
Log (C:\alogluns\log13)	0.000	0.000	0.000	0.001	5.424
Log (C:\alogluns\log14)	0.000	0.000	0.000	0.001	6.082
Log (C:\alogluns\log15)	0.000	0.000	0.000	0.001	13.214
Log (C:\alogluns\log16)	0.000	0.000	0.000	0.001	12.255

Log (C:\alogluns\log17)	0.000	0.000	0.000	0.001	8.644
Log (C:\alogluns\log18)	0.000	0.000	0.000	0.001	6.208
Log (C:\alogluns\log19)	0.000	0.000	0.000	0.001	9.191
Log (C:\alogluns\log20)	0.000	0.000	0.000	0.001	8.842
Log (C:\alogluns\log21)	0.000	0.000	0.000	0.001	8.877
Log (C:\alogluns\log22)	0.000	0.000	0.000	0.001	8.799
Log (C:\alogluns\log23)	0.000	0.000	0.000	0.001	8.842
Log (C:\alogluns\log24)	0.000	0.000	0.000	0.001	6.082
Log (C:\alogluns\log25)	0.000	0.000	0.000	0.001	5.978
Log (C:\alogluns\log26)	0.000	0.000	0.000	0.001	9.017
Log (C:\alogluns\log27)	0.000	0.000	0.000	0.001	6.082
Log (C:\alogluns\log28)	0.000	0.000	0.000	0.001	9.365
Log (C:\alogluns\log29)	0.000	0.000	0.000	0.001	9.191
Log (C:\alogluns\log30)	0.000	0.000	0.000	0.001	9.714
Log (C:\alogluns\log31)	0.000	0.000	0.000	0.001	12.415
Log (C:\alogluns\log32)	0.000	0.000	0.000	0.001	9.505
Log (C:\alogluns\log33)	0.000	0.000	0.000	0.001	6.127
Log (C:\alogluns\log34)	0.000	0.000	0.000	0.001	6.127
Log (C:\alogluns\log35)	0.000	0.000	0.000	0.001	12.678
Log (C:\alogluns\log36)	0.000	0.000	0.000	0.001	12.952
Log (C:\alogluns\log37)	0.000	0.000	0.000	0.001	8.756
Log (C:\alogluns\log38)	0.000	0.000	0.000	0.001	9.283
Log (C:\alogluns\log39)	0.000	0.000	0.000	0.001	9.824
Log (C:\alogluns\log40)	0.000	0.000	0.000	0.001	12.870
Log (C:\alogluns\log41)	0.000	0.000	0.000	0.001	8.785
Log (C:\alogluns\log42)	0.000	0.000	0.000	0.001	6.082
Log (C:\alogluns\log43)	0.000	0.000	0.000	0.001	13.206
Log (C:\alogluns\log44)	0.000	0.000	0.000	0.001	12.952
Log (C:\alogluns\log45)	0.000	0.000	0.000	0.001	8.785
Log (C:\alogluns\log46)	0.000	0.000	0.000	0.001	8.903
Log (C:\alogluns\log47)	0.000	0.000	0.000	0.001	9.714
Log (C:\alogluns\log48)	0.000	0.000	0.000	0.001	13.151
Log (C:\alogluns\log49)	0.000	0.000	0.000	0.001	8.939
Log (C:\alogluns\log50)	0.000	0.000	0.000	0.001	8.877

Host System Performance

<i>Counter</i>	<i>Average</i>	<i>Minimum</i>	<i>Maximum</i>
% Processor Time	0.615	0.314	1.033

Available MBytes	30435.265	30419.000	30440.000
Free System Page Table Entries	33559975.296	33559574.000	33560268.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	121960284.948	121937920.000	122011648.000
Pool Paged Bytes	199005227.899	198144000.000	199237632.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```

11/19/2009 6:56:05 AM -- Jetstress testing begins ...
11/19/2009 6:56:05 AM -- Prepare testing begins ...
11/19/2009 6:56:56 AM -- Attaching databases ...
11/19/2009 6:56:56 AM -- Prepare testing ends.
11/19/2009 6:57:52 AM -- Performance logging begins (interval: 30000 ms).
11/19/2009 6:57:52 AM -- Streaming backup databases ...
11/19/2009 4:31:48 PM -- Performance logging ends.
11/19/2009 4:31:48 PM -- Instance5872.1 (100% processed), Instance5872.2 (100%
processed), Instance5872.3 (100% processed), Instance5872.4 (100% processed),
Instance5872.5 (100% processed), Instance5872.6 (100% processed), Instance5872.7
(100% processed), Instance5872.8 (100% processed), Instance5872.9 (100%
processed), Instance5872.10 (100% processed), Instance5872.11 (100% processed),
Instance5872.12 (100% processed), Instance5872.13 (100% processed),
Instance5872.14 (100% processed), Instance5872.15 (100% processed),
Instance5872.16 (100% processed), Instance5872.17 (100% processed),
Instance5872.18 (100% processed), Instance5872.19 (100% processed),
Instance5872.20 (100% processed), Instance5872.21 (100% processed),
Instance5872.22 (100% processed), Instance5872.23 (100% processed),
Instance5872.24 (100% processed), Instance5872.25 (100% processed),
Instance5872.26 (100% processed), Instance5872.27 (100% processed),
Instance5872.28 (100% processed), Instance5872.29 (100% processed),
Instance5872.30 (100% processed), Instance5872.31 (100% processed),
Instance5872.32 (100% processed), Instance5872.33 (100% processed),
Instance5872.34 (100% processed), Instance5872.35 (100% processed),
Instance5872.36 (100% processed), Instance5872.37 (100% processed),
Instance5872.38 (100% processed), Instance5872.39 (100% processed),
Instance5872.40 (100% processed), Instance5872.41 (100% processed),
Instance5872.42 (100% processed), Instance5872.43 (100% processed),
Instance5872.44 (100% processed), Instance5872.45 (100% processed),
Instance5872.46 (100% processed), Instance5872.47 (100% processed),
Instance5872.48 (100% processed), Instance5872.49 (100% processed), and
Instance5872.50 (100% processed)
11/19/2009 4:31:48 PM -- C:\ESRP HDP 2GB\SUN158\1700
users\StreamingBackup\StreamingBackup_2009_11_19_6_56_56.blg has 1143 samples.
11/19/2009 4:31:48 PM -- Creating test report ...

```

Soft Recovery Test Result: SUN158

Soft-Recovery Statistics - All

Database Instance	Log files replayed	Elapsed seconds
Instance4268.1	520	4237.1275609
Instance4268.2	507	4222.8066691
Instance4268.3	506	4220.4198538
Instance4268.4	523	4264.9737394
Instance4268.5	507	4196.5517008
Instance4268.6	515	4237.3927626

Instance4268.7	508	4241.6359898
Instance4268.8	514	4262.5869241
Instance4268.9	506	4203.1817433
Instance4268.10	508	4231.8235269
Instance4268.11	514	4251.183251
Instance4268.12	514	4262.5869241
Instance4268.13	515	4233.9451405
Instance4268.14	506	4227.315098
Instance4268.15	512	4254.1004697
Instance4268.16	512	4256.7524867
Instance4268.17	515	4230.4975184
Instance4268.18	511	4236.5971575
Instance4268.19	510	4233.4147371
Instance4268.20	504	4211.1377943
Instance4268.21	519	4227.315098
Instance4268.22	518	4233.4147371
Instance4268.23	500	4223.3370725
Instance4268.24	515	4268.4213615
Instance4268.25	506	4189.3912549
Instance4268.26	507	4223.0718708
Instance4268.27	510	4241.3707881
Instance4268.28	509	4210.8725926
Instance4268.29	504	4195.2256923
Instance4268.30	522	4243.4924017
Instance4268.31	501	4211.6681977
Instance4268.32	518	4268.4213615
Instance4268.33	520	4237.6579643
Instance4268.34	505	4189.9216583
Instance4268.35	508	4258.3436969
Instance4268.36	511	4248.531234
Instance4268.37	512	4236.8623592
Instance4268.38	515	4237.3927626
Instance4268.39	516	4267.095353
Instance4268.40	509	4260.4653105
Instance4268.41	513	4241.1055864
Instance4268.42	510	4208.750979
Instance4268.43	518	4257.5480918
Instance4268.44	506	4235.0059473

Instance4268.45	513	4225.4586861
Instance4268.46	511	4225.9890895
Instance4268.47	510	4262.0565207
Instance4268.48	516	4259.9349071
Instance4268.49	519	4246.6748221
Instance4268.50	523	4246.6748221

Disk Subsystem Performance

Logical Disk	Avg. Disk sec/Read	Avg. Disk sec/Write	Disk Reads/sec	Disk Writes/sec	Avg. Disk Bytes/Write
Database (C:\asgluns\sg1)	0.172	0.029	60.188	1.563	(n/a)
Database (C:\asgluns\sg2)	0.171	0.028	58.668	1.538	(n/a)
Database (C:\asgluns\sg3)	0.149	0.029	58.416	1.529	(n/a)
Database (C:\asgluns\sg4)	0.152	0.029	59.924	1.566	(n/a)
Database (C:\asgluns\sg5)	0.155	0.030	58.339	1.537	(n/a)
Database (C:\asgluns\sg6)	0.150	0.029	60.275	1.556	(n/a)
Database (C:\asgluns\sg7)	0.153	0.030	59.208	1.537	(n/a)
Database (C:\asgluns\sg8)	0.161	0.028	59.688	1.558	(n/a)
Database (C:\asgluns\sg9)	0.146	0.030	58.935	1.534	(n/a)
Database (C:\asgluns\sg10)	0.144	0.027	59.194	1.534	(n/a)
Database (C:\asgluns\sg11)	0.157	0.030	59.615	1.551	(n/a)
Database (C:\asgluns\sg12)	0.149	0.028	59.410	1.555	(n/a)
Database (C:\asgluns\sg13)	0.146	0.030	59.727	1.554	(n/a)
Database (C:\asgluns\sg14)	0.171	0.027	58.846	1.530	(n/a)
Database (C:\asgluns\sg15)	0.151	0.030	60.313	1.548	(n/a)
Database (C:\asgluns\sg16)	0.142	0.029	58.895	1.542	(n/a)
Database (C:\asgluns\sg17)	0.154	0.029	59.992	1.558	(n/a)
Database	0.152	0.029	58.931	1.545	(n/a)

(C:\asgluns\sg18)					
Database (C:\asgluns\sg19)	0.147	0.029	58.013	1.542	(n/a)
Database (C:\asgluns\sg20)	0.153	0.031	59.227	1.531	(n/a)
Database (C:\asgluns\sg21)	0.145	0.027	59.182	1.568	(n/a)
Database (C:\asgluns\sg22)	0.156	0.025	60.151	1.562	(n/a)
Database (C:\asgluns\sg23)	0.160	0.029	58.466	1.517	(n/a)
Database (C:\asgluns\sg24)	0.150	0.028	59.420	1.547	(n/a)
Database (C:\asgluns\sg25)	0.141	0.029	58.736	1.533	(n/a)
Database (C:\asgluns\sg26)	0.154	0.027	58.903	1.533	(n/a)
Database (C:\asgluns\sg27)	0.157	0.029	60.489	1.536	(n/a)
Database (C:\asgluns\sg28)	0.144	0.029	58.684	1.538	(n/a)
Database (C:\asgluns\sg29)	0.162	0.028	59.043	1.529	(n/a)
Database (C:\asgluns\sg30)	0.149	0.027	60.199	1.569	(n/a)
Database (C:\asgluns\sg31)	0.155	0.029	57.900	1.524	(n/a)
Database (C:\asgluns\sg32)	0.157	0.028	60.083	1.550	(n/a)
Database (C:\asgluns\sg33)	0.144	0.027	60.422	1.558	(n/a)
Database (C:\asgluns\sg34)	0.135	0.028	59.215	1.529	(n/a)
Database (C:\asgluns\sg35)	0.161	0.028	58.767	1.538	(n/a)
Database (C:\asgluns\sg36)	0.158	0.029	59.531	1.543	(n/a)
Database (C:\asgluns\sg37)	0.148	0.027	59.335	1.548	(n/a)
Database (C:\asgluns\sg38)	0.160	0.028	60.400	1.556	(n/a)
Database (C:\asgluns\sg39)	0.154	0.031	59.132	1.549	(n/a)
Database (C:\asgluns\sg40)	0.151	0.028	58.986	1.539	(n/a)
Database (C:\asgluns\sg41)	0.145	0.028	59.995	1.546	(n/a)

Database (C:\asgluns\sg42)	0.138	0.026	59.543	1.535	(n/a)
Database (C:\asgluns\sg43)	0.150	0.028	60.071	1.559	(n/a)
Database (C:\asgluns\sg44)	0.141	0.031	59.724	1.539	(n/a)
Database (C:\asgluns\sg45)	0.145	0.026	59.668	1.546	(n/a)
Database (C:\asgluns\sg46)	0.155	0.027	59.187	1.545	(n/a)
Database (C:\asgluns\sg47)	0.156	0.029	59.208	1.544	(n/a)
Database (C:\asgluns\sg48)	0.152	0.031	59.884	1.562	(n/a)
Database (C:\asgluns\sg49)	0.158	0.028	59.483	1.560	(n/a)
Database (C:\asgluns\sg50)	0.144	0.028	60.722	1.568	(n/a)
Log (C:\alogluns\log1)	0.027	0.000	4.027	0.009	36.423
Log (C:\alogluns\log2)	0.028	0.000	3.926	0.009	23.516
Log (C:\alogluns\log3)	0.032	0.000	3.918	0.011	39.677
Log (C:\alogluns\log4)	0.030	0.000	4.050	0.007	17.362
Log (C:\alogluns\log5)	0.027	0.000	3.926	0.010	42.049
Log (C:\alogluns\log6)	0.029	0.000	3.988	0.008	25.010
Log (C:\alogluns\log7)	0.031	0.000	3.934	0.009	29.776
Log (C:\alogluns\log8)	0.028	0.000	3.981	0.008	17.166
Log (C:\alogluns\log9)	0.030	0.000	3.918	0.010	37.736
Log (C:\alogluns\log10)	0.030	0.000	3.934	0.009	28.458
Log (C:\alogluns\log11)	0.030	0.000	3.981	0.008	25.081
Log (C:\alogluns\log12)	0.030	0.000	3.981	0.007	15.146
Log (C:\alogluns\log13)	0.029	0.000	3.988	0.009	28.738
Log (C:\alogluns\log14)	0.029	0.000	3.918	0.009	27.223
Log (C:\alogluns\log15)	0.030	0.000	3.965	0.009	29.152
Log (C:\alogluns\log16)	0.032	0.000	3.965	0.008	27.254
Log (C:\alogluns\log17)	0.029	0.000	3.988	0.009	24.752
Log (C:\alogluns\log18)	0.030	0.000	3.957	0.008	25.092
Log (C:\alogluns\log19)	0.030	0.000	3.949	0.009	31.101
Log (C:\alogluns\log20)	0.029	0.000	3.902	0.010	38.580
Log (C:\alogluns\log21)	0.028	0.000	4.019	0.009	26.934
Log (C:\alogluns\log22)	0.026	0.000	4.012	0.009	32.412
Log (C:\alogluns\log23)	0.030	0.000	3.872	0.010	35.175

Log (C:\alogluns\log24)	0.030	0.000	3.981	0.002	13.220
Log (C:\alogluns\log25)	0.027	0.000	3.918	0.010	36.411
Log (C:\alogluns\log26)	0.028	0.000	3.926	0.009	33.871
Log (C:\alogluns\log27)	0.030	0.000	3.947	0.009	25.775
Log (C:\alogluns\log28)	0.031	0.000	3.941	0.010	35.880
Log (C:\alogluns\log29)	0.028	0.000	3.902	0.010	31.843
Log (C:\alogluns\log30)	0.029	0.000	4.043	0.008	28.458
Log (C:\alogluns\log31)	0.030	0.001	3.879	0.011	41.250
Log (C:\alogluns\log32)	0.032	0.000	4.005	0.003	13.220
Log (C:\alogluns\log33)	0.028	0.000	4.027	0.009	27.089
Log (C:\alogluns\log34)	0.028	0.000	3.910	0.011	39.477
Log (C:\alogluns\log35)	0.031	0.000	3.935	0.008	21.825
Log (C:\alogluns\log36)	0.030	0.000	3.957	0.009	31.407
Log (C:\alogluns\log37)	0.028	0.000	3.965	0.009	36.308
Log (C:\alogluns\log38)	0.029	0.000	3.988	0.008	25.010
Log (C:\alogluns\log39)	0.034	0.000	3.993	0.003	16.885
Log (C:\alogluns\log40)	0.033	0.000	3.942	0.008	19.302
Log (C:\alogluns\log41)	0.033	0.000	3.973	0.009	30.567
Log (C:\alogluns\log42)	0.030	0.000	3.949	0.010	31.253
Log (C:\alogluns\log43)	0.030	0.000	4.007	0.008	18.994
Log (C:\alogluns\log44)	0.031	0.000	3.918	0.008	28.145
Log (C:\alogluns\log45)	0.029	0.000	3.972	0.009	40.006
Log (C:\alogluns\log46)	0.026	0.000	3.958	0.009	28.738
Log (C:\alogluns\log47)	0.031	0.000	3.950	0.007	17.050
Log (C:\alogluns\log48)	0.030	0.000	3.996	0.007	26.224
Log (C:\alogluns\log49)	0.029	0.000	4.020	0.009	30.806
Log (C:\alogluns\log50)	0.031	0.000	4.051	0.008	23.640

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.575	0.000	13.458
Available MBytes	18770.562	17064.000	30150.000
Free System Page Table Entries	33562446.291	33561923.000	33562981.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	138534888.301	122974208.000	139096064.000
Pool Paged Bytes	204174832.694	203292672.000	204296192.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

11/19/2009 5:14:41 PM -- Jetstress testing begins ...
11/19/2009 5:14:42 PM -- Prepare testing begins ...
11/19/2009 5:15:32 PM -- Attaching databases ...
11/19/2009 5:15:32 PM -- Prepare testing ends.
11/19/2009 5:15:32 PM -- Dispatching transactions begins ...
11/19/2009 5:15:33 PM -- Database cache settings: (minimum: 1.6 GB, maximum: 12.5 GB)
11/19/2009 5:15:33 PM -- Database flush thresholds: (start: 128.0 MB, stop: 256.0 MB)
11/19/2009 5:16:27 PM -- Database read latency thresholds: (average: 0.02 seconds/read, maximum: 0.05 seconds/read).
11/19/2009 5:16:27 PM -- Log write latency thresholds: (average: 0.01 seconds/write, maximum: 0.05 seconds/write).
11/19/2009 5:16:33 PM -- Operation mix: Sessions 2, Inserts 40%, Deletes 30%, Replaces 5%, Reads 25%, Lazy Commits 55%.
11/19/2009 5:16:33 PM -- Performance logging begins (interval: 15000 ms).
11/19/2009 5:16:33 PM -- Generating log files ...
11/20/2009 12:33:22 AM -- C:\alogluns\log1 (104.2% generated), C:\alogluns\log2 (101.6% generated), C:\alogluns\log3 (101.4% generated), C:\alogluns\log4 (104.8% generated), C:\alogluns\log5 (101.6% generated), C:\alogluns\log6 (103.2% generated), C:\alogluns\log7 (101.8% generated), C:\alogluns\log8 (103.0% generated), C:\alogluns\log9 (101.4% generated), C:\alogluns\log10 (101.8% generated), C:\alogluns\log11 (103.0% generated), C:\alogluns\log12 (103.0% generated), C:\alogluns\log13 (103.2% generated), C:\alogluns\log14 (101.4% generated), C:\alogluns\log15 (102.6% generated), C:\alogluns\log16 (102.6% generated), C:\alogluns\log17 (103.2% generated), C:\alogluns\log18 (102.4% generated), C:\alogluns\log19 (102.2% generated), C:\alogluns\log20 (101.0% generated), C:\alogluns\log21 (104.0% generated), C:\alogluns\log22 (103.8% generated), C:\alogluns\log23 (100.2% generated), C:\alogluns\log24 (103.2% generated), C:\alogluns\log25 (101.4% generated), C:\alogluns\log26 (101.6% generated), C:\alogluns\log27 (102.2% generated), C:\alogluns\log28 (102.0% generated), C:\alogluns\log29 (101.0% generated), C:\alogluns\log30 (104.6% generated), C:\alogluns\log31 (100.4% generated), C:\alogluns\log32 (103.8% generated), C:\alogluns\log33 (104.2% generated), C:\alogluns\log34 (101.0% generated), C:\alogluns\log35 (101.8% generated), C:\alogluns\log36 (102.4% generated), C:\alogluns\log37 (102.6% generated), C:\alogluns\log38 (103.2% generated), C:\alogluns\log39 (103.4% generated), C:\alogluns\log40 (102.0% generated), C:\alogluns\log41 (102.8% generated), C:\alogluns\log42 (102.2% generated), C:\alogluns\log43 (103.8% generated), C:\alogluns\log44 (101.4% generated), C:\alogluns\log45 (102.8% generated), C:\alogluns\log46 (102.4% generated), C:\alogluns\log47 (102.2% generated), C:\alogluns\log48 (103.4% generated), C:\alogluns\log49 (104.0% generated), and C:\alogluns\log50 (104.8% generated)
11/20/2009 12:33:22 AM -- Performance logging ends.
11/20/2009 12:33:22 AM -- JetInterop batch transaction stats: 14212, 13812, 13925, 14120, 13868, 14197, 13930, 13971, 13966, 13872, 13961, 14060, 14116, 13884, 14128, 13957, 14128, 14053, 13834, 13944, 14079, 14067, 13812, 14043, 13835, 13836, 14111, 13848, 13906, 14210, 13775, 14119, 14059, 13948, 13927, 14050, 14020, 14158, 14109, 13989, 14100, 13968, 14120, 13989, 14052, 14066, 14018, 14128, 14096, and 14181.
11/20/2009 12:33:22 AM -- Dispatching transactions ends.
11/20/2009 12:33:22 AM -- Shutting down databases ...
11/20/2009 12:33:32 AM -- Instance4268.1 (complete), Instance4268.2 (complete), Instance4268.3 (complete), Instance4268.4 (complete), Instance4268.5 (complete), Instance4268.6 (complete), Instance4268.7 (complete), Instance4268.8 (complete), Instance4268.9 (complete), Instance4268.10 (complete), Instance4268.11 (complete), Instance4268.12 (complete), Instance4268.13 (complete), Instance4268.14 (complete), Instance4268.15 (complete), Instance4268.16 (complete), Instance4268.17 (complete), Instance4268.18 (complete), Instance4268.19 (complete), Instance4268.20 (complete), Instance4268.21 (complete), Instance4268.22 (complete), Instance4268.23 (complete), Instance4268.24 (complete), Instance4268.25 (complete), Instance4268.26 (complete), Instance4268.27 (complete), Instance4268.28 (complete), Instance4268.29 (complete), Instance4268.30 (complete), Instance4268.31 (complete), Instance4268.32 (complete), Instance4268.33 (complete),

Instance4268.34 (complete), Instance4268.35 (complete), Instance4268.36 (complete), Instance4268.37 (complete), Instance4268.38 (complete), Instance4268.39 (complete), Instance4268.40 (complete), Instance4268.41 (complete), Instance4268.42 (complete), Instance4268.43 (complete), Instance4268.44 (complete), Instance4268.45 (complete), Instance4268.46 (complete), Instance4268.47 (complete), Instance4268.48 (complete), Instance4268.49 (complete), and Instance4268.50 (complete)
11/20/2009 12:33:32 AM -- C:\ESRP HDP 2GB\SUN158\1700 users\SoftRecovery\Performance_2009_11_19_17_16_27.blg has 1736 samples.
11/20/2009 12:33:32 AM -- Creating test report ...
11/20/2009 12:34:56 AM -- Volume C:\asgluns\sg1 has 0.0114 for Avg. Disk sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg2 has 0.0116 for Avg. Disk sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg3 has 0.0118 for Avg. Disk sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg4 has 0.0117 for Avg. Disk sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg5 has 0.0116 for Avg. Disk sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg6 has 0.0115 for Avg. Disk sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg7 has 0.0119 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg8 has 0.0118 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg9 has 0.0115 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg10 has 0.0114 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg11 has 0.0117 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg12 has 0.0117 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg13 has 0.0115 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg14 has 0.0116 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg15 has 0.0119 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg16 has 0.0117 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg17 has 0.0116 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg18 has 0.0116 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg19 has 0.0120 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg20 has 0.0118 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg21 has 0.0116 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg22 has 0.0116 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg23 has 0.0121 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg24 has 0.0119 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg25 has 0.0115 for Avg. Disk sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg26 has 0.0115 for Avg. Disk sec/Read.
11/20/2009 12:34:58 AM -- volume C:\asgluns\sg27 has 0.0117 for Avg. Disk sec/Read.
11/20/2009 12:34:58 AM -- volume C:\asgluns\sg28 has 0.0118 for Avg. Disk sec/Read.
11/20/2009 12:34:58 AM -- volume C:\asgluns\sg29 has 0.0115 for Avg. Disk sec/Read.

11/20/2009 12:35:00 AM -- Volume C:\alogluns\log41 has 0.0000 for Avg. Disk sec/Read.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log42 has 0.0018 for Avg. Disk sec/Write.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log42 has 0.0000 for Avg. Disk sec/Read.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log43 has 0.0020 for Avg. Disk sec/Write.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log43 has 0.0000 for Avg. Disk sec/Read.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log44 has 0.0020 for Avg. Disk sec/Write.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log44 has 0.0000 for Avg. Disk sec/Read.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log45 has 0.0018 for Avg. Disk sec/Write.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log45 has 0.0000 for Avg. Disk sec/Read.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log46 has 0.0018 for Avg. Disk sec/Write.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log46 has 0.0000 for Avg. Disk sec/Read.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log47 has 0.0020 for Avg. Disk sec/Write.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log47 has 0.0000 for Avg. Disk sec/Read.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log48 has 0.0020 for Avg. Disk sec/Write.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log48 has 0.0000 for Avg. Disk sec/Read.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log49 has 0.0018 for Avg. Disk sec/Write.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log49 has 0.0000 for Avg. Disk sec/Read.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log50 has 0.0017 for Avg. Disk sec/Write.
 11/20/2009 12:35:00 AM -- volume C:\alogluns\log50 has 0.0000 for Avg. Disk sec/Read.
 11/20/2009 12:35:00 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
 11/20/2009 12:35:00 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
 11/20/2009 12:35:00 AM -- C:\ESRP HDP 2GB\SUN158\1700 users\SoftRecovery\Performance_2009_11_19_17_16_27.xml has 1735 samples queried.
 11/20/2009 12:35:00 AM -- C:\ESRP HDP 2GB\SUN158\1700 users\SoftRecovery\Performance_2009_11_19_17_16_27.html is saved.
 11/20/2009 2:52:50 AM -- Performance logging begins (interval: 4000 ms).
 11/20/2009 2:52:50 AM -- Recovering databases ...
 11/20/2009 4:03:58 AM -- Performance logging ends.
 11/20/2009 4:03:58 AM -- Instance4268.1 (4237.1275609), Instance4268.2 (4222.8066691), Instance4268.3 (4220.4198538), Instance4268.4 (4264.9737394), Instance4268.5 (4196.5517008), Instance4268.6 (4237.3927626), Instance4268.7 (4241.6359898), Instance4268.8 (4262.5869241), Instance4268.9 (4203.1817433), Instance4268.10 (4231.8235269), Instance4268.11 (4251.183251), Instance4268.12 (4262.5869241), Instance4268.13 (4233.9451405), Instance4268.14 (4227.315098), Instance4268.15 (4254.1004697), Instance4268.16 (4256.7524867), Instance4268.17 (4230.4975184), Instance4268.18 (4236.5971575), Instance4268.19 (4233.4147371), Instance4268.20 (4211.1377943), Instance4268.21 (4227.315098), Instance4268.22 (4233.4147371), Instance4268.23 (4223.3370725), Instance4268.24 (4268.4213615), Instance4268.25 (4189.3912549), Instance4268.26 (4223.0718708), Instance4268.27 (4241.3707881), Instance4268.28 (4210.8725926), Instance4268.29 (4195.2256923), Instance4268.30 (4243.4924017), Instance4268.31 (4211.6681977), Instance4268.32 (4268.4213615), Instance4268.33 (4237.6579643), Instance4268.34 (4189.9216583), Instance4268.35 (4258.3436969), Instance4268.36 (4248.531234), Instance4268.37 (4236.8623592), Instance4268.38 (4237.3927626), Instance4268.39 (4267.095353), Instance4268.40 (4260.4653105), Instance4268.41 (4241.1055864), Instance4268.42 (4208.750979), Instance4268.43 (4257.5480918), Instance4268.44 (4235.0059473), Instance4268.45 (4225.4586861), Instance4268.46 (4225.9890895), Instance4268.47 (4262.0565207), Instance4268.48 (4259.9349071), Instance4268.49 (4246.6748221),

and Instance4268.50 (4246.6748221)
 11/20/2009 4:04:00 AM -- C:\ESRP HDP 2GB\SUN158\1700
 users\SoftRecovery\SoftRecovery_2009_11_20_2_52_26.blg has 1037 samples.
 11/20/2009 4:04:00 AM -- Creating test report ...

Soft Recovery Test Performance Result: SUN158

Soft Recovery Test – Performance

Jetstress Version	08.02.0060.000
Ese Version	08.01.0240.005
Operating System	Windows Server (R) 2008 Enterprise Service Pack 1 (6.0.6001.65536)
Performance Log	C:\ESRP HDP 2GB\SUN158\1700 users\SoftRecovery\Performance_2009_11_19_17_16_27.blg

Database Sizing and Throughput

Achieved I/O per Second	1489.781
Capacity Percentage	100%
Throughput Percentage	100%
Initial database size	3743456198656
Final database size	3760950640640
Database files (count)	50

Jetstress System Parameters

Thread count	2 (per storage group)
Log buffers	9000
Minimum database cache	1600.0 MB
Maximum database cache	12800.0 MB
Insert operations	40%
Delete operations	30%
Replace operations	5%
Read operations	25%
Lazy commits	55%

Disk Subsystem Performance

Logical Disk	Avg. Disk sec/Read	Avg. Disk sec/Write	Disk Reads/sec	Disk Writes/sec	Avg. Disk Bytes/Write
Database (C:\asgluns\sg1)	0.011	0.004	16.641	13.608	(n/a)
Database (C:\asgluns\sg2)	0.012	0.004	16.268	13.130	(n/a)
Database (C:\asgluns\sg3)	0.012	0.004	16.303	13.186	(n/a)

Database (C:\asgluns\sg4)	0.012	0.004	16.489	13.463	(n/a)
Database (C:\asgluns\sg5)	0.012	0.004	16.265	13.145	(n/a)
Database (C:\asgluns\sg6)	0.012	0.004	16.626	13.615	(n/a)
Database (C:\asgluns\sg7)	0.012	0.004	16.382	13.293	(n/a)
Database (C:\asgluns\sg8)	0.012	0.004	16.403	13.421	(n/a)
Database (C:\asgluns\sg9)	0.011	0.004	16.327	13.249	(n/a)
Database (C:\asgluns\sg10)	0.011	0.004	16.359	13.308	(n/a)
Database (C:\asgluns\sg11)	0.012	0.004	16.480	13.449	(n/a)
Database (C:\asgluns\sg12)	0.012	0.004	16.397	13.315	(n/a)
Database (C:\asgluns\sg13)	0.011	0.004	16.548	13.460	(n/a)
Database (C:\asgluns\sg14)	0.012	0.004	16.274	13.262	(n/a)
Database (C:\asgluns\sg15)	0.012	0.004	16.762	13.512	(n/a)
Database (C:\asgluns\sg16)	0.012	0.004	16.234	13.239	(n/a)
Database (C:\asgluns\sg17)	0.012	0.004	16.590	13.476	(n/a)
Database (C:\asgluns\sg18)	0.012	0.004	16.346	13.302	(n/a)
Database (C:\asgluns\sg19)	0.012	0.004	16.097	13.097	(n/a)
Database (C:\asgluns\sg20)	0.012	0.004	16.404	13.171	(n/a)
Database (C:\asgluns\sg21)	0.012	0.004	16.288	13.428	(n/a)
Database (C:\asgluns\sg22)	0.012	0.004	16.489	13.517	(n/a)
Database (C:\asgluns\sg23)	0.012	0.004	16.420	13.245	(n/a)
Database (C:\asgluns\sg24)	0.012	0.004	16.340	13.384	(n/a)
Database (C:\asgluns\sg25)	0.012	0.004	16.292	13.227	(n/a)
Database (C:\asgluns\sg26)	0.012	0.004	16.287	13.232	(n/a)
Database	0.012	0.004	16.696	13.534	(n/a)

(C:\asgluns\sg27)					
Database (C:\asgluns\sg28)	0.012	0.004	16.267	13.222	(n/a)
Database (C:\asgluns\sg29)	0.012	0.004	16.454	13.143	(n/a)
Database (C:\asgluns\sg30)	0.011	0.004	16.592	13.624	(n/a)
Database (C:\asgluns\sg31)	0.012	0.004	16.087	12.966	(n/a)
Database (C:\asgluns\sg32)	0.012	0.004	16.604	13.470	(n/a)
Database (C:\asgluns\sg33)	0.012	0.004	16.482	13.523	(n/a)
Database (C:\asgluns\sg34)	0.012	0.004	16.445	13.284	(n/a)
Database (C:\asgluns\sg35)	0.012	0.004	16.309	13.281	(n/a)
Database (C:\asgluns\sg36)	0.012	0.004	16.368	13.321	(n/a)
Database (C:\asgluns\sg37)	0.011	0.004	16.410	13.351	(n/a)
Database (C:\asgluns\sg38)	0.011	0.004	16.633	13.579	(n/a)
Database (C:\asgluns\sg39)	0.012	0.004	16.366	13.341	(n/a)
Database (C:\asgluns\sg40)	0.012	0.004	16.387	13.288	(n/a)
Database (C:\asgluns\sg41)	0.011	0.004	16.597	13.460	(n/a)
Database (C:\asgluns\sg42)	0.011	0.004	16.453	13.365	(n/a)
Database (C:\asgluns\sg43)	0.012	0.004	16.524	13.555	(n/a)
Database (C:\asgluns\sg44)	0.012	0.004	16.551	13.305	(n/a)
Database (C:\asgluns\sg45)	0.012	0.004	16.458	13.394	(n/a)
Database (C:\asgluns\sg46)	0.012	0.004	16.457	13.364	(n/a)
Database (C:\asgluns\sg47)	0.012	0.004	16.440	13.418	(n/a)
Database (C:\asgluns\sg48)	0.012	0.004	16.559	13.508	(n/a)
Database (C:\asgluns\sg49)	0.012	0.004	16.474	13.503	(n/a)
Database (C:\asgluns\sg50)	0.011	0.004	16.669	13.654	(n/a)

Log (C:\alogluns\log1)	0.000	0.002	0.000	11.372	3955.982
Log (C:\alogluns\log2)	0.000	0.002	0.000	11.068	3966.654
Log (C:\alogluns\log3)	0.000	0.002	0.000	11.005	3988.813
Log (C:\alogluns\log4)	0.000	0.002	0.000	11.394	3960.995
Log (C:\alogluns\log5)	0.000	0.002	0.000	10.950	4016.769
Log (C:\alogluns\log6)	0.000	0.002	0.000	11.278	3966.100
Log (C:\alogluns\log7)	0.000	0.002	0.000	11.081	3924.659
Log (C:\alogluns\log8)	0.000	0.002	0.000	11.229	3952.072
Log (C:\alogluns\log9)	0.000	0.002	0.000	11.072	3959.253
Log (C:\alogluns\log10)	0.000	0.002	0.000	11.171	3909.206
Log (C:\alogluns\log11)	0.000	0.002	0.000	11.195	3991.545
Log (C:\alogluns\log12)	0.000	0.002	0.000	11.156	3985.443
Log (C:\alogluns\log13)	0.000	0.002	0.000	11.211	3977.653
Log (C:\alogluns\log14)	0.000	0.002	0.000	11.051	3919.119
Log (C:\alogluns\log15)	0.000	0.002	0.000	11.203	3938.345
Log (C:\alogluns\log16)	0.000	0.002	0.000	11.066	3981.784
Log (C:\alogluns\log17)	0.000	0.002	0.000	11.253	3926.334
Log (C:\alogluns\log18)	0.000	0.002	0.000	11.124	3980.566
Log (C:\alogluns\log19)	0.000	0.002	0.000	10.990	3992.061
Log (C:\alogluns\log20)	0.000	0.002	0.000	10.971	3962.393
Log (C:\alogluns\log21)	0.000	0.002	0.000	11.301	3958.687
Log (C:\alogluns\log22)	0.000	0.002	0.000	11.309	3985.014
Log (C:\alogluns\log23)	0.000	0.002	0.000	10.915	3922.273
Log (C:\alogluns\log24)	0.000	0.002	0.000	11.215	3952.449
Log (C:\alogluns\log25)	0.000	0.002	0.000	11.038	3917.791
Log (C:\alogluns\log26)	0.000	0.002	0.000	11.025	4024.388
Log (C:\alogluns\log27)	0.000	0.002	0.000	11.159	3931.863
Log (C:\alogluns\log28)	0.000	0.002	0.000	11.031	3978.345
Log (C:\alogluns\log29)	0.000	0.002	0.000	10.991	3941.676
Log (C:\alogluns\log30)	0.000	0.002	0.000	11.328	4000.007
Log (C:\alogluns\log31)	0.000	0.002	0.000	10.915	3912.759
Log (C:\alogluns\log32)	0.000	0.002	0.000	11.289	3978.006
Log (C:\alogluns\log33)	0.000	0.002	0.000	11.344	3951.899
Log (C:\alogluns\log34)	0.000	0.002	0.000	11.092	3918.500
Log (C:\alogluns\log35)	0.000	0.002	0.000	11.081	3954.056
Log (C:\alogluns\log36)	0.000	0.002	0.000	11.137	3955.447
Log (C:\alogluns\log37)	0.000	0.002	0.000	11.145	4010.685
Log (C:\alogluns\log38)	0.000	0.002	0.000	11.290	3928.023

Log (C:\alogluns\log39)	0.000	0.002	0.000	11.208	3984.300
Log (C:\alogluns\log40)	0.000	0.002	0.000	11.055	3990.841
Log (C:\alogluns\log41)	0.000	0.002	0.000	11.209	3946.440
Log (C:\alogluns\log42)	0.000	0.002	0.000	11.131	3956.635
Log (C:\alogluns\log43)	0.000	0.002	0.000	11.291	3935.007
Log (C:\alogluns\log44)	0.000	0.002	0.000	11.055	3931.330
Log (C:\alogluns\log45)	0.000	0.002	0.000	11.163	3941.035
Log (C:\alogluns\log46)	0.000	0.002	0.000	11.183	3949.889
Log (C:\alogluns\log47)	0.000	0.002	0.000	11.125	3981.222
Log (C:\alogluns\log48)	0.000	0.002	0.000	11.213	3968.994
Log (C:\alogluns\log49)	0.000	0.002	0.000	11.304	3939.049
Log (C:\alogluns\log50)	0.000	0.002	0.000	11.394	3959.379

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.942	0.671	8.709
Available MBytes	18075.365	17078.000	30134.000
Free System Page Table Entries	33562740.923	33559162.000	33566449.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	122503500.682	121745408.000	123011072.000
Pool Paged Bytes	201536219.429	198201344.000	202240000.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

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11/19/2009 5:14:41 PM -- Jetstress testing begins ...
11/19/2009 5:14:42 PM -- Prepare testing begins ...
11/19/2009 5:15:32 PM -- Attaching databases ...
11/19/2009 5:15:32 PM -- Prepare testing ends.
11/19/2009 5:15:32 PM -- Dispatching transactions begins ...
11/19/2009 5:15:33 PM -- Database cache settings: (minimum: 1.6 GB, maximum: 12.5
GB)
11/19/2009 5:15:33 PM -- Database flush thresholds: (start: 128.0 MB, stop: 256.0
MB)
11/19/2009 5:16:27 PM -- Database read latency thresholds: (average: 0.02
seconds/read, maximum: 0.05 seconds/read).
11/19/2009 5:16:27 PM -- Log write latency thresholds: (average: 0.01
seconds/write, maximum: 0.05 seconds/write).
11/19/2009 5:16:33 PM -- Operation mix: Sessions 2, Inserts 40%, Deletes 30%,
Replaces 5%, Reads 25%, Lazy Commits 55%.
11/19/2009 5:16:33 PM -- Performance logging begins (interval: 15000 ms).
11/19/2009 5:16:33 PM -- Generating log files ...
11/20/2009 12:33:22 AM -- C:\alogluns\log1 (104.2% generated), C:\alogluns\log2
(101.6% generated), C:\alogluns\log3 (101.4% generated), C:\alogluns\log4 (104.8%
generated), C:\alogluns\log5 (101.6% generated), C:\alogluns\log6 (103.2%
generated), C:\alogluns\log7 (101.8% generated), C:\alogluns\log8 (103.0%
generated), C:\alogluns\log9 (101.4% generated), C:\alogluns\log10 (101.8%
generated), C:\alogluns\log11 (103.0% generated), C:\alogluns\log12 (103.0%
generated), C:\alogluns\log13 (103.2% generated), C:\alogluns\log14 (101.4%
generated), C:\alogluns\log15 (102.6% generated), C:\alogluns\log16 (102.6%

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generated), C:\alogluns\log17 (103.2% generated), C:\alogluns\log18 (102.4%
generated), C:\alogluns\log19 (102.2% generated), C:\alogluns\log20 (101.0%
generated), C:\alogluns\log21 (104.0% generated), C:\alogluns\log22 (103.8%
generated), C:\alogluns\log23 (100.2% generated), C:\alogluns\log24 (103.2%
generated), C:\alogluns\log25 (101.4% generated), C:\alogluns\log26 (101.6%
generated), C:\alogluns\log27 (102.2% generated), C:\alogluns\log28 (102.0%
generated), C:\alogluns\log29 (101.0% generated), C:\alogluns\log30 (104.6%
generated), C:\alogluns\log31 (100.4% generated), C:\alogluns\log32 (103.8%
generated), C:\alogluns\log33 (104.2% generated), C:\alogluns\log34 (101.0%
generated), C:\alogluns\log35 (101.8% generated), C:\alogluns\log36 (102.4%
generated), C:\alogluns\log37 (102.6% generated), C:\alogluns\log38 (103.2%
generated), C:\alogluns\log39 (103.4% generated), C:\alogluns\log40 (102.0%
generated), C:\alogluns\log41 (102.8% generated), C:\alogluns\log42 (102.2%
generated), C:\alogluns\log43 (103.8% generated), C:\alogluns\log44 (101.4%
generated), C:\alogluns\log45 (102.8% generated), C:\alogluns\log46 (102.4%
generated), C:\alogluns\log47 (102.2% generated), C:\alogluns\log48 (103.4%
generated), C:\alogluns\log49 (104.0% generated), and C:\alogluns\log50 (104.8%
generated)
11/20/2009 12:33:22 AM -- Performance logging ends.
11/20/2009 12:33:22 AM -- JetInterop batch transaction stats: 14212, 13812,
13925, 14120, 13868, 14197, 13930, 13971, 13966, 13872, 13961, 14060, 14116,
13884, 14128, 13957, 14128, 14053, 13834, 13944, 14079, 14067, 13812, 14043,
13835, 13836, 14111, 13848, 13906, 14210, 13775, 14119, 14059, 13948, 13927,
14050, 14020, 14158, 14109, 13989, 14100, 13968, 14120, 13989, 14052, 14066,
14018, 14128, 14096, and 14181.
11/20/2009 12:33:22 AM -- Dispatching transactions ends.
11/20/2009 12:33:22 AM -- Shutting down databases ...
11/20/2009 12:33:32 AM -- Instance4268.1 (complete), Instance4268.2 (complete),
Instance4268.3 (complete), Instance4268.4 (complete), Instance4268.5 (complete),
Instance4268.6 (complete), Instance4268.7 (complete), Instance4268.8 (complete),
Instance4268.9 (complete), Instance4268.10 (complete), Instance4268.11
(complete), Instance4268.12 (complete), Instance4268.13 (complete),
Instance4268.14 (complete), Instance4268.15 (complete), Instance4268.16
(complete), Instance4268.17 (complete), Instance4268.18 (complete),
Instance4268.19 (complete), Instance4268.20 (complete), Instance4268.21
(complete), Instance4268.22 (complete), Instance4268.23 (complete),
Instance4268.24 (complete), Instance4268.25 (complete), Instance4268.26
(complete), Instance4268.27 (complete), Instance4268.28 (complete),
Instance4268.29 (complete), Instance4268.30 (complete), Instance4268.31
(complete), Instance4268.32 (complete), Instance4268.33 (complete),
Instance4268.34 (complete), Instance4268.35 (complete), Instance4268.36
(complete), Instance4268.37 (complete), Instance4268.38 (complete),
Instance4268.39 (complete), Instance4268.40 (complete), Instance4268.41
(complete), Instance4268.42 (complete), Instance4268.43 (complete),
Instance4268.44 (complete), Instance4268.45 (complete), Instance4268.46
(complete), Instance4268.47 (complete), Instance4268.48 (complete),
Instance4268.49 (complete), and Instance4268.50 (complete)
11/20/2009 12:33:32 AM -- C:\ESRP HDP 2GB\SUN158\1700
users\SoftRecovery\Performance_2009_11_19_17_16_27.blg has 1736 samples.
11/20/2009 12:33:32 AM -- Creating test report ...
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg1 has 0.0114 for Avg. Disk
sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg2 has 0.0116 for Avg. Disk
sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg3 has 0.0118 for Avg. Disk
sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg4 has 0.0117 for Avg. Disk
sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg5 has 0.0116 for Avg. Disk
sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg6 has 0.0115 for Avg. Disk
sec/Read.
11/20/2009 12:34:56 AM -- volume C:\asgluns\sg7 has 0.0119 for Avg. Disk
sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg8 has 0.0118 for Avg. Disk
sec/Read.
11/20/2009 12:34:57 AM -- volume C:\asgluns\sg9 has 0.0115 for Avg. Disk
sec/Read.

11/20/2009 12:35:00 AM -- Volume C:\alogluns\log48 has 0.0000 for Avg. Disk
sec/Read.
11/20/2009 12:35:00 AM -- volume C:\alogluns\log49 has 0.0018 for Avg. Disk
sec/write.
11/20/2009 12:35:00 AM -- volume C:\alogluns\log49 has 0.0000 for Avg. Disk
sec/Read.
11/20/2009 12:35:00 AM -- volume C:\alogluns\log50 has 0.0017 for Avg. Disk
sec/write.
11/20/2009 12:35:00 AM -- volume C:\alogluns\log50 has 0.0000 for Avg. Disk
sec/Read.
11/20/2009 12:35:00 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
11/20/2009 12:35:00 AM -- Test has 0 Database Page Fault Stalls/sec samples
higher than 0.
11/20/2009 12:35:00 AM -- C:\ESRP HDP 2GB\SUN158\1700
users\SoftRecovery\Performance_2009_11_19_17_16_27.xml has 1735 samples queried.

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