

NotesBench Disclosure Report
for
IBM @server xSeries 235
using
Lotus Domino Server 6.0
and
Microsoft Windows 2000 Advanced Server

Results Submitted August 1, 2003

Results Certified August 18, 2003



IBM Corporation

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Edition Notice

Executive Summary

The IBM® @server™ xSeries® 235 server demonstrated leadership performance running Lotus® Domino® Server Release 6.0 on Microsoft® Windows® 2000 Advanced Server. The results detailed in this report were obtained using the NotesBench R6Mail-Only workload.

| Test Script | Maximum Users | NotesMark (tpm) | Ave. Response Time (sec) | \$/User | \$/NotesMark |
|-------------|---------------|-----------------|--------------------------|---------|--------------|
| R6Mail-Only | 16,100 | 23,917 | 0.157 | \$5.54 | \$3.73 |

The xSeries 235 server was configured with two 3.06GHz¹ Intel® Xeon™ Processor DP, 4GB of PC2100 memory, and 81 hard disk drives. Two Domino partitions, which were part of the same domain, shared a directory containing more than 32,200 person documents. For complete configuration details, see Appendix A: Overall Test Setup and Software Versions.

The server under test, configured with two Domino partitions, supported an R6Mail-Only workload of 16,100 active mail users (see price/performance results² above).

IBM's xSeries Server Performance Laboratory in Research Triangle Park, NC, conducted the benchmark in July, and KMDS Technical Associates, Inc., audited and certified the results in August 2003.

NotesBench provides an objective method for evaluating the performance of different platforms running Lotus Domino Server. NotesBench generates a transactions-per-minute (tpm) throughput metric, called a NotesMark, for each test, along with a value for the maximum capacity (number of users) supported, and the average response time.

Benchmarking Objectives

The benchmark objective was to provide customers with information on how to utilize the capability of the xSeries 235 system as a Domino Server 6.0 mail server configured with the IBM ServeRAID-4H Ultra160 SCSI Adapter for RAID-1 data redundancy.

¹ GHz only measures microprocessor internal clock speed, not application performance. Many factors affect application performance.

² The price/performance results are based on IBM's published list prices.

Test Methodologies

Test Setup and Hardware/Software Configuration

The xSeries 235 system under test (SUT) was configured with two 3.06GHz Xeon DP processors (512KB of ECC full-speed L2 write-back cache with Intel Hyper_Threading Technology), 4GB of PC2100 memory, and eighty-one 36.4GB 15K rpm Ultra320 hard disk drives. Six RAID-1 arrays, each composed of 13 hard drives, which contained the mail database files, were connected to a channel on the ServeRAID-4H Ultra160 SCSI Adapter. Three hard drives, one of which was contained in a RAID-0 array that was used as the boot disk and two of which were contained in a RAID-1 array drive that was used to hold the Domino executable codes and data directory, were connected to a channel on the integrated SCSI interface to a ServeRAID-5i SCSI controller. A more detailed description of the configuration of the RAID-1 arrays is provided in Appendix A.

The network consisted of one LAN segment using one 28-port Extreme Networks Summit 7i switch.

The xSeries 235 system under test ran Microsoft Windows 2000 Advanced Server and Domino Server 6.0.

The RAID controller configuration value for Stripe Unit Size was set at 16KB. Write-back cache was enabled for all RAID-1 arrays.

The following NOTES.INI parameters were modified as recommended in the NotesBench operator's manual.

| R6Mail-Only Workload |
|----------------------------------|
| Server_Max_Concurrent_Trans=1000 |
| NSF_DBcache_MaxEntries=10000 |
| NSF_Buffer_Pool_Size_MB=320 |
| MailLogToEventsOnly=1 |
| Log_MailRouting=10 |
| Log_Sessions=0 |
| Server_Pool_Tasks=100 |
| Max_Users=10000 |
| DBMaxEntries=10000 |

In the Server-Configuration document for both partitions, four mailboxes were used on each partition for mail routing.

The following parameters were added to suppress database activity logging after long runs and to capture server console output:

No_Force_Activity_Logging=1

```
Server_Show_Performance=1
Tcplp_TcplpAddress=0,192.1.1.x:1352
Debug_Outfile=j:\tmp\SUTy_INFO.TXT
```

In the last two lines above, x is the net address and y is the partition number for the corresponding partition. All Notes server tasks were disabled except Router.

All Domino mail database files were located on the D:, E:, F:, G:, H:, and I: RAID-1 arrays. The Domino executable codes, data directory and mail link files were located on the J: RAID-1 array.

Test Procedures

Several trial runs were conducted with the system under test to attempt to exhaust at least one of the system resources: processor, memory or disk subsystem. When average user response time reached an unacceptable level before any one of these resources had been fully utilized, an additional resource was installed. System resource utilization was monitored using Windows 2000 Performance Monitor (PERFMON), which enabled the system configuration to be optimized while balancing system resources.

The 16,100 users were distributed over 12 clients. Clients 1 to 5, 7 to 11 added 1,350 users to the system under test. Clients 6 and 12 added 1,300 users to the system under test. The test ran for 13 hours, including ramp-up. The actual ramp-up period from startup of child 1 to the point when all 16,100 users were reflected in the clients' result files was approximately 7 hours. The length of the ramp-up period was determined by observing the server console, which displayed the total number of users as 16,100. The test ran for more than 6 hours after ramp-up. During the test runs, the tools used to determine steady state included the child driver RES files, and Domino Server statistics output to the server console on a minute-by-minute basis.

We confirmed steady state when the number of users on the SUT Domino Server console reached the intended number of users. We also used the Show Stat Mail command on the server to verify that at least 90 percent of the mail generated during the test period was delivered to the local mail databases during the test period.

To ensure that the test results were reproducible, all tests were repeated, and the results were compared and were found to be consistent.

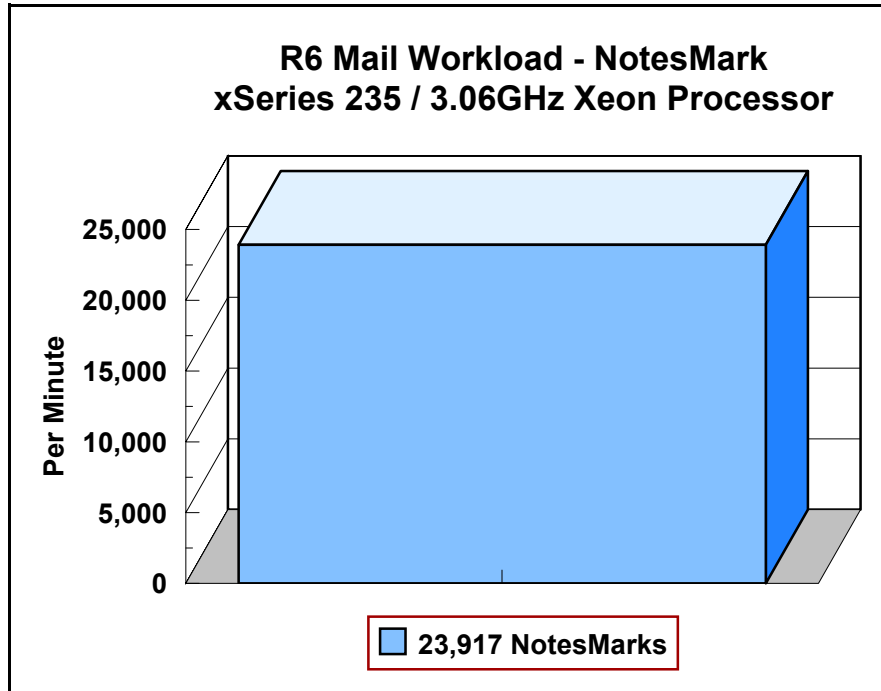
Other NotesBench Tests

IBM intends to continue conducting NotesBench measurements to further optimize and exploit the performance capability of the xSeries product line running Domino Server 6.0.

Data

xSeries 235 NotesMark Value for R6Mail-Only Test

The xSeries 235 server demonstrated that it can support 16,100 concurrent, active users with this workload. The NotesMark throughput value was 23,917. Average response time was 0.157 seconds. The test ran error-free for a period of more than six hours.



The R6Mail workload executes Notes transactions that model a server for mail users at sites that rely only on mail for communication. The resulting capacity metric for a mail-only server is the maximum number of users that can be supported before the average user response time becomes unacceptable.

The Domino R6Mail-Only test script models an active user who is reading and sending mail. The script contains an average of 15 minutes of waiting; thus, the average user would execute this script a maximum of four times each hour. For each iteration of the test script, there are 5 documents read, 2 documents updated, 2 documents deleted, 2 documents added, 1 view scrolling operation, 1 database opened and closed, 1 view opened and closed, looking up of recipients and sending an invitation every 30 minutes, as well as some miscellaneous operations. In sending messages, each user creates and sends a mail message to NumMessageRecipients no more frequently than every 90 minutes. About every 90 minutes, each user creates a meeting invitation and responds to an invitation.

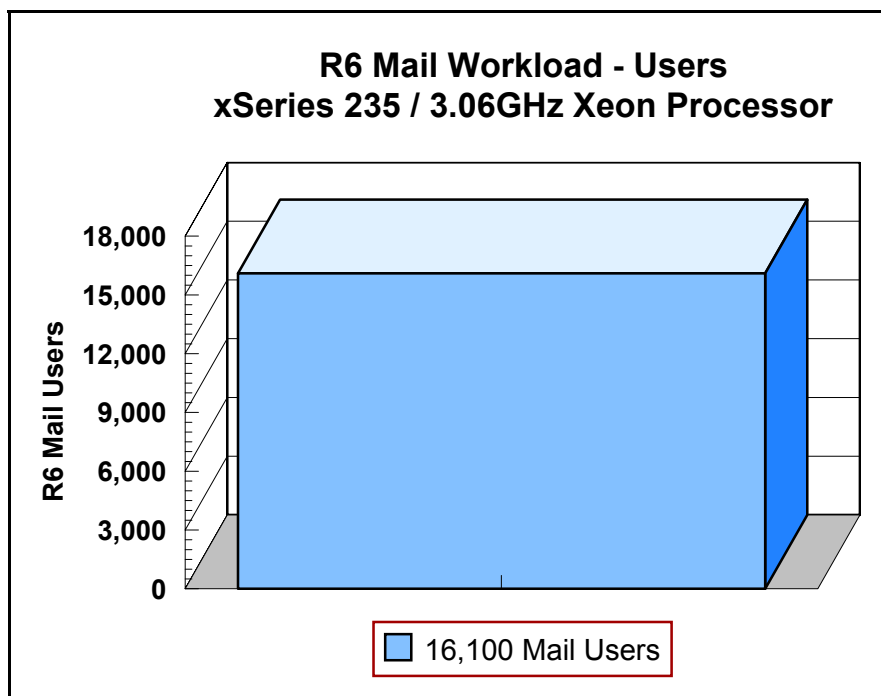
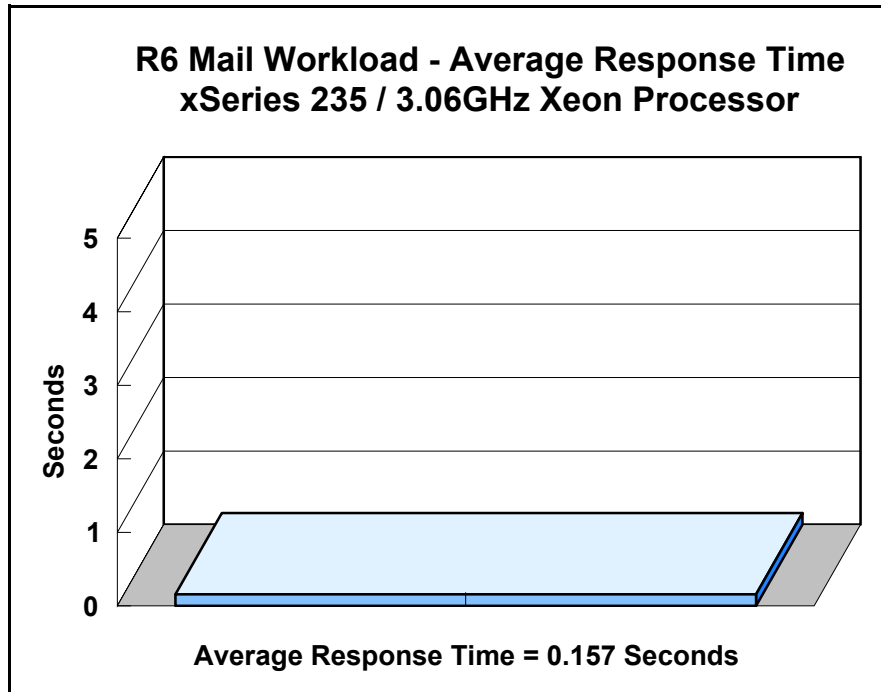
NotesNum Output for R6Mail-Only Test

Min Start Time = 07/30/2003 08:56:46 AM Max Stop Time = 07/30/2003 10:20:19 PM

Total Test Errors = 0

Total Test Time = 48240 sec

Test Run: Users = 16100 NotesMark = 23917 Response Time = 157 msec (07/30/2003 03:41:00 PM to 07/30/2003 10:05:00 PM)



Analysis

When configured as described in this report, the xSeries 235 server demonstrated that it can manage the intense resource usage during ramp-up to 16,100 concurrent R6Mail users with no errors at the clients. During the steady-state period on one of the successful 16,100-user runs, the average CPU utilization was 84.8 percent. The average available memory was 736.3MB.

The transaction logging option was not enabled for this audit run. When this option is enabled, we recommend placing the transaction logging directory on a dedicated disk that is attached to a less-busy adapter on a less-busy PCI bus to improve response time.

Conclusions

The test results demonstrate that the xSeries 235 configured as described in this report can support up to 16,100 concurrent, active R6Mail users with a response time well below that permitted by the test criteria.

These results are based on running the xSeries 235 as a dedicated Domino server. The addition of other application workloads will affect the number of users supported as well as the response time. Achieving optimum performance in a customer environment is highly dependent upon selecting adequate processor power, memory and disk storage as well as balancing the configuration of that hardware and appropriately tuning the operating system and Domino software.

Statement by Auditor

The original “Lotus NotesBench Test Results Report Certification Letter” was signed by Daryl K. Thompson, NotesBench Auditor for KMDS Technical Associates, Inc., and is on file at IBM.

Appendix A: Overall Test Setup and Software Versions

Number of Client Systems

For the R6Mail-Only test, 13 driver systems were used. Twelve systems were configured as child drivers 1 through 12; one system was used as parent driver to control the run.

The disk configuration used for the child driver systems follows:

Child drivers 1-12:

- Pentium III 500MHz with 512MB memory
- C: Partition (2GB - NTFS) - Windows 2000 /SP2
- D: Partition (6.5GB - NTFS) - Notes 6.0 client

Parent driver:

- Pentium III 500MHz with 512MB memory
- C: Partition (2GB - NTFS) - Windows 2000 /SP2 and Notes 6.0 client

Number of Server Platforms

One server platform, the xSeries 235 with two 3.06GHz Xeon DP processors and 4GB of memory, was benchmarked.

The disk configuration used for the system under test follows:

- C: Single disk drive (33.9GB - NTFS) - Windows 2000 Advanced Server (Boot Partition)
- D: Partition (220GB - NTFS) - Domino mail files
- E: Partition (220GB - NTFS) - Domino mail files
- F: Partition (220GB - NTFS) - Domino mail files
- G: Partition (220GB - NTFS) - Domino mail files
- H: Partition (220GB - NTFS) - Domino mail files
- I: Partition (220GB - NTFS) - Domino mail files
- J: Partition (33.9GB - NTFS) - Domino executables and Domino mail data subdirectory

Network

The network consisted of one segment. All child drivers, parents and SUT were connected to one of 28 ports on the Extreme Networks Summit 7i switch. One Intel PRO/1000 Gigabit Adapter with the embedded 10/100/1000 Mbps Ethernet Controller was used in the xSeries 235 system under test.

Software Versions

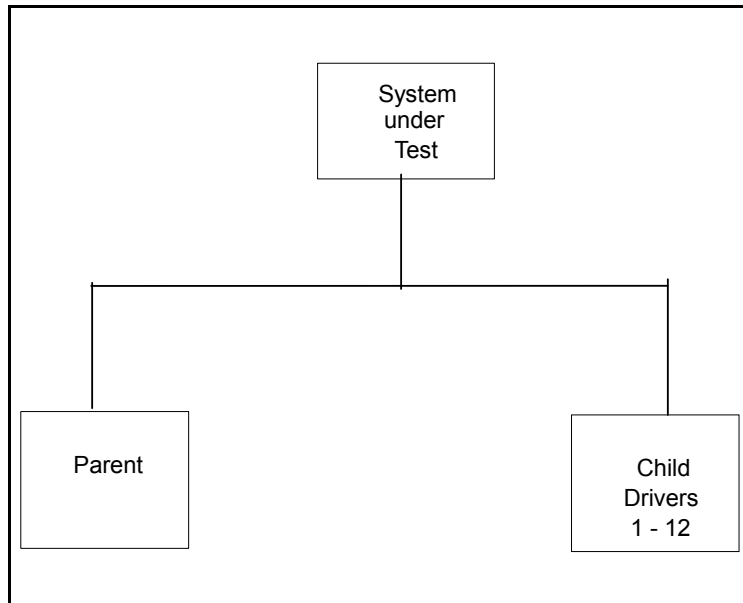
Software versions used on the system under test were as follows:

- Microsoft Windows 2000 Advanced Server and Service Pack 3
- Lotus Domino Server Release 6.0 for Windows 2000

Software versions used on the child and parent drivers were as follows:

- Microsoft Windows 2000 Professional for child drivers and Windows 2000 Server for the parent systems
- Lotus Domino Client Release 6.0 for Windows 2000
- NotesBench Version 6.0 - Windows/32

Test Setup Diagram



Details of Configuration

| System Under Test | Parent Source Driver and Child Drivers 1-12 |
|--|---|
| xSeries 235 | IBM IntelliStation M Pro |
| 2 x 3.06GHz Xeon DP Processor | 1 x 500MHz Pentium III |
| 4GB Memory | 512MB Memory |
| 81 x 36.4GB Drives | 1 x 9.1GB Drive |
| 1 x ServeRAID-5i SCSI Controller 2 x ServeRAID-4H Ultra160 SCSI Adapter | |
| Embedded 10/100/1000Mbps Ethernet Controller Intel PRO/1000 Gigabit Adapter | Integrated 10/100 Ethernet Controller |
| Microsoft Windows 2000 Advanced Server | Microsoft Windows 2000 Professional |

Appendix B: System Configurations

| Server under Test | |
|--------------------------|---|
| System | xSeries 235 |
| Processor | 2 x 3.06GHz Xeon DP Processor |
| Memory | 4GB |
| Cache | 512KB ECC Full-Speed L2 Cache per Processor |
| RAID Controller | 2 x ServeRAID-4H Ultra160 SCSI Adapter, 1 x ServeRAID-5i SCSI Controller |
| Disk Drive | 78 x 36.4GB 15K rpm (configured as six RAID-1 arrays) 3 x 36.4GB 15K rpm (two drives configured as a RAID-1 array, and one drive configured as RAID-0 for system boot drive) |
| Network Interface | Embedded 10/100/1000Mbps Ethernet Controller, Intel PRO/1000 Gigabit Adapter |
| I/O | PCI Bus (64 Bit) |
| Operating System | Microsoft Windows 2000 Advanced Server with Service Pack 3 |
| Notes | Lotus Domino Server Release 6.0 for Windows 2000 |

| Parent Source Drivers and Child Drivers 1 - 12 | |
|--|---|
| System | IBM IntelliStation M Pro |
| Processor | 1 x 500MHz Pentium III |
| Memory | 512MB |
| Disk Drive | 1 x 9.1GB |
| Network Interface | Integrated 10/100 Ethernet Controller |
| I/O | PCI Bus |
| Operating System | Microsoft Windows 2000 Professional with Service Pack 2 |
| Notes | Lotus Domino Client Release 6.0 for Windows 2000 |
| NotesBench | NotesBench Version 6.0 - Windows/32 |

Appendix C: Operating System Parameters

In the system under test, the following registry variables were changed from their default values of 2 to 0:

HKEY_LOCAL_MACHINE/System/CurrentControlSet/Control/PriorityControl/Win32PrioritySeparation:
REG_DWORD:0

HKEY_LOCAL_MACHINE/System/CurrentControlSet/Control/SessionManager/MemoryManager/
LargeSystemCache: REG_DWORD:0


```

LOG_REPLICATION=0
LOG_SESSIONS=0
ExistingServerName=CN=nchild22/O=ibm
KeyFilename=J:\granite\admin.id
ServerKeyFileName=sut1.id
MailServer=CN=sut1/O=ibm
Domain=IBM
Admin=CN=administrator/O=ibm
NAMELOOKUP_TRUST_DIRCAT=0
TemplateSetup=6010
Setup=6023
ServerSetup=6010
CleanSetup=1
PhoneLog=2
Log=log.nsf, 1, 0, 7, 40000
ServerName=sut1/ibm
ServerNameNative=02F402F4737574312F69626D
FormulaTimeout=120
NSF_QUOTA_METHOD=2
TRANSLOG_AutoFixup=1
TRANSLOG_UseAll=0
TRANSLOG_Style=0
TRANSLOG_Performance=2
TRANSLOG_Status=0
server_show_performance=1
mailuseprocesses=0
ServerController=0
FaultRecovery=0
MTEnabled=0
EventSetup=600
UPDATE_TIMER=04/01/2003 07:28:36 AM
SUDIALOG_ON=0
WWWDSPPREFETCH_BROWSERCACHE=0
WWWDSPPREFETCH_OBJECT=0
EnablePlugins=1
AltNameLanguage=en
ContentLanguage=en-US
WeekStart=1
ViewWeekStart=2
NavWeekStart=1
XLATE_CSID=52
SPELL_LANG=1033
SPELL_PREFERENCES=0
Region=en-US
DatePickerDirection=0
ECLSetup=3
AdminSetup=6011
WindowSizeOtherServer=343 153 337 212
DontShowAdminHelp=1
CertificateExpChecked=J:\granite\admin.id 04/01/2003
AdminLastDomain=IBM
SERVERS_FRAME_PERCENT=21
MONITOR_DATA_STORAGE_HOURS=168
MONITOR_SCALE=1
ADMINWINDOWSIZEWIN=20 15 984 715
ADMINMAXIMIZED=0
RequestCertTableUpdate=J:\granite\admin.id 04/01/2003
AdminLastServer=sut1/ibm
DYNINFOCR_OFB92FC04E:81CE6E11-ONB679C5D8:0DE027FC=OF64B2CEA5:BD44B0DA-ON3C4AAE60:9E7CC3EF
Location=,133E,CN=administrator/O=ibm
;=====
tcpip_tcpipaddress=0,192.1.1.222:1352
MailLogToEventsOnly=1
Log_mailRouting=10
DBMaxEntries=10000
Max_users=10000
NSF_DBCache_MaxEntries=10000
Server_Pool_Tasks=100

```



```

$$HasLANPort=1
Ports=TCPIP
;Ports=TCPIP,LAN0tcpip,LAN3tcpip,TCPIP
DisabledPorts=SPX,LAN1,LAN2,LAN4,LAN5,LAN6,LAN7,LAN8,COM1,COM2,COM3,COM4,COM5
LOG_REPLICATION=0
LOG_SESSIONS=0
ExistingServerName=CN=nchild22/O=ibm
KeyFilename=J:\granite\admin.id
ServerKeyFileName=sut2.id
MailServer=CN=sut2/O=ibm
Domain=IBM
Admin=CN=administrator/O=ibm
NAMELOOKUP_TRUST_DIRCAT=0
TemplateSetup=6010
Setup=6023
ServerSetup=6010
CleanSetup=1
PhoneLog=2
Log=log.nsf, 1, 0, 7, 40000
ServerName=sut2/ibm
ServerNameNative=02F502F5737574322F69626D
FormulaTimeout=120
NSF_QUOTA_METHOD=2
TRANSLOG_AutoFixup=1
TRANSLOG_UseAll=0
TRANSLOG_Style=0
TRANSLOG_Performance=2
TRANSLOG_Status=0
server_show_performance=1
mailuseprocesses=0
ServerController=0
FaultRecovery=0
MTEEnabled=0
EventSetup=600
UPDATE_TIMER=04/01/2003 07:43:02 AM
SUDIALOG_ON=0
WWWDSync_BROWSERCACHE=0
WWWDSync_PREFETCH_OBJECT=0
EnablePlugins=1
AltNameLanguage=en
ContentLanguage=en-US
WeekStart=1
ViewWeekStart=2
NavWeekStart=1
XLATE_CSID=52
SPELL_LANG=1033
SPELL_PREFERENCES=0
Region=en-US
DatePickerDirection=0
ECLSetup=3
CertificateExpChecked=J:\granite\admin.id 07/18/2003
AdminLastDomain=IBM
SERVERS_FRAME_PERCENT=21
MONITOR_DATA_STORAGE_HOURS=168
MONITOR_SCALE=1
ADMINWINDOWSIZEWIN=21 -3 984 715
ADMINMAXIMIZED=0
AdminSetup=6011
RequestCertTableUpdate=J:\granite\admin.id 04/01/2003
DYNINFOCR_OFB92FC04E:81CE6E11-ONB679C5D8:0DE027FC=OF64B2CEA5:BD44B0DA-ON3C4AAE60:9E7CC3EF
WindowSizeOtherServer=343 153 337 212
DontShowAdminHelp=1
AdminLastServer=sut2/ibm
Location=,1342,CN=administrator/O=ibm
;=====
tcpip_tcpipaddress=0,192.1.3.222:1352
MailLogToEventsOnly=1
Log_mailRouting=10

```

```
DBMaxEntries=10000
Max_users=10000
NSF_DBCache_MaxEntries=10000
Server_Pool_Tasks=100
Server_max_Concurrent_Trans=1000
No_Force_Activity_Logging=1
NSF_Buffer_Pool_Size_MB=320
MailCompactDisabled=1
Update_No_FullText=1
Debug_OutFile=j:\temp\sut2_info.txt
;=====
CONSOLE_sut2/ibm=80 300 7 192 400 860 731
CONSOLE_LOG_ENABLED=1
WindowSizeBrowse=352 135 322 318
BROWSERSIZE=148
DESIGNWINDOWSIZEWIN=20 15 984 715
DESIGNMAXIMIZED=0
Win32InfoboxPos=2 110
```

NOTES.INI for Child 1

[Notes]

```
Directory=D:\Notes\data
KitType=1
InstallType=2
;=====mail=====
NthIteration=6
Tmp=Notestmp
;MaxSessions=100
;NumAddLocalReplica=1
;NumDeleteLocalReplica=1
;NumStampLocalReplica=1
;NumUpdateLocalReplica=1
NumMessageRecipients=3
NumMailNotesPerUser=100
;AttachmentSize=50000
;LargeMessageSize=32000
NodeName=nchild1
MailTemplate=sut1!!mail6.ntf
;=====iNotes=====
;MailTemplate=iNotes5.ntf
;NBiNotes=1
;HTTPNABView=$People/M
;WebAuthenticationOff=1
;WebPreferencesOff=1
;HTTPHost=sut.ibm.com
;RecipientDomain=ibm.com
;Domail=ibm.com
;=====
USESERNAB=1
ResultsDirectory=\\parent3\c$\results
DEBUG_OUTFILE=\\parent3\c$\results\res1
;NumNotesLocalReplica=90
;NumSharedNotes=900
NormalMessageSize=1000
MaxDocToDelete=10000
;nb_dbdir=mail\
$DialogMode=0
ThreadStagger=0.4
;nopause=1
;=====imap=====
;NodeName=nchild1
;USESERNAB=1
;domain=ibm
;Tmp=Notestmp
;NthIteration=6
;MailTemplate=mail6.ntf
```

```

;imap_session_timeout=30
;MaxSessions=100
;NumMailNotesPerUser=100
;NumMessageRecipients=3
;NumNotesLocalReplica=90
;NumSharedNotes=900
;MailRecipientPercentUser=50
;MailRecipientPercentVolume=50
;mailrecipientbeginnumber=1
;mailrecipientendnumber=10000
;r5imap_loop_n=1000
;clienthost=nchild11.ibm.com
;smtpghost=sut.ibm.com
;ldaphost=sut.ibm.com
;imaphost=sut.ibm.com
;recipientdomain=ibm.com
;messagelinesize=100
;normalmessagesize=50000
;ScriptIterationLimit=1
;NBTestReset=0
;nopause=0
;enable_break=1
;KillProcess=1
;Imail_No_APC=1
;ResultsDirectory=\\parent1\c$\results
;DEBUG_OUTFILE=\\parent1\c$\results\res11
;ThreadStagger=4
;nabentries=10000
;
=====
;

```

```

FaultRecovery_Build=Build V60_09252002
CONSOLE_LOG_ENABLED=1
DSTLAW=4,1,1,10,-1,1
UPDATE_TIMER=07/17/2003 01:01:07 PM
SUDIALOG_ON=0
Timezone=5
DST=1
MailType=0
$$HasLANPort=1
WWWDSPP_SYNC_BROWSERCACHE=0
WWWDSPP_PREFETCH_OBJECT=0
EnableJavaApplets=1
EnablePlugins=1
Preferences=-2147480463
AltNameLanguage=en
ContentLanguage=en-US
WeekStart=1
ViewWeekStart=2
NavWeekStart=1
XLATE_CSID=52
SPELL_LANG=1033
SPELL_PREFERENCES=0
Region=en-US
DatePickerDirection=0
Passthru_LogLevel=0
Console_LogLevel=2
VIEWIMP1=Lotus 1-2-3,0,_IWKSV,,123,WK1,WK3,WK4,WKS,WR1,WRK,,4,
VIEWIMP2=Structured Text,0,_ISTR,,CGN,LTR,,STR,,1,
VIEWIMP3=Tabular Text,0,_ITAB,,PRN,RPT,TAB, TXT,,1,
VIEWIMP4=vCard,0,_IVCRD,,VCF,,1,
VIEWEXP1=Lotus 1-2-3,0,_XWKS,,123,WK1,WK3,WK4,WKS,WR1,WRK,,4,
VIEWEXP2=Structured Text,0,_XSTR,,CGN,LTR,,STR,,1,
VIEWEXP3=Tabular Text,1,_XTAB,,CGN,LTR,RPT,TAB,,1,
VIEWEXP4=vCard 2.1,0,_XVCRD,,VCF,,1,
VIEWEXP5=vCard 3.0,0,_XVCRD3,,VCF,,1,
EDITIMP1=ASCII Text,0,_ITEXT,,C,H,PRN,RIP, TXT,,1,
EDITIMP2=Binary with Text,0,_ISTRNGS,,*,1,
EDITIMP3=BMP Image,0,_IBMP,,BMP,,18,

```



```

ReplDefPartAtchLimitAmt=40
ReplDefFullText=0
ReplDefEncrypt=1
ReplDefEncryptType=2
ReplDefReplImmed=1
$headlineDisableHeadlines=0
PromptForLocation=0
EmptyTrash=0
UNICODE_Display=1
AltCalendar=0
MIMEPromptMultilingual=1
MIMEMultilingualMode=1
QuotePrefix=>
QuoteLineLength=70
EnableActiveXInBrowser=1
EnableJavaScript=1
EnableJavaScriptErrorDialogs=1
EnableLiveConnect=1
BackgroundPrinting=1
ShowAccelerators=1
DisableImageDithering=1
FileDlgDirectory=C:\Documents and Settings\Administrator\My Documents

```

NOTES.INI for Parent Source Driver

```

[Notes]
KitType=1
Directory=c:\notes\data
InstallType=2
=====
;
;
;   Begin Notesbench variables for parent 1
;
; *****
;
;   NodeName=parent3
;
;
;   Runtime=800
;ChildStagger=1,1;17,2;21,3;23,4;26,5;32,6;38,7;42,8;46,9;49,10-12
ChildStagger=1,1;18,2-3;22,4;24,5;28,6;30,7;32,8;40,9;45,10;51,11;53,12;55,13;60,14
;
;
;   NumClients1=1350
;   NumClients2=1350
;   NumClients3=1350
;   NumClients4=1350
;   NumClients5=1350
;   NumClients6=1300
;   NumClients7=1350
;   NumClients8=1350
;   NumClients9=1350
;   NumClients10=1350
;   NumClients11=1350
;   NumClients12=1300
;   NumClients13=1300
;   NumClients14=1200
;   NumClients15=500
;   NumClients16=500
;   NumClients17=500
;   NumClients18=500
;   NumClients19=500
;   NumClients20=500
;   ResultsDirectory=c:\results
;   DEBUG_OUTFILE=c:\results\notesnum_sut1.txt
;-----End
; *****
;
;   Multirun Variables
; *****
;

```

```

; ProbeIntervalDelay=wait after end of one run before starting next
; ProbeWaitTime=wait to start Probe (default=15mins)
; ProbeRunTime=#minutes probe will collect stats
;;Probe_Interval=2800,2900,3000
;;ProbeIntervalDelay=30
;;ProbeWaitTime=30
;;ProbeRunTime=180
; ProbeRunTime=2 because we want 240 minutes of runtime after ramp-up
; without overhead of PROBE
; Next line cause command 'show stat' to execute on SUT console
; before start of each multi-run and when ramped up for that run
; Mail statistics required for audit at ramp-up and before ramp-down
;;ProbeTestIncrementCMD=show stat mail
;;ProbeTestIncrementCMD=show stat database
;;NBTestReset=1
;*****
; Server.Planner Variables
;*****
;;CPDatabase=c:\notesb3\data\Server.Planner.nsf
;;SUTMachineID=Teton600
;-----End
;-----End
FaultRecovery_Build=Build V60_09252002
CONSOLE_LOG_ENABLED=1
DSTLAW=4,1,1,10,-1,1
UPDATE_TIMER=07/17/2003 12:58:30 PM
SUDIALOG_ON=0
Timezone=5
DST=1
MailType=0
$$HasLANPort=1
WWWDSPP_SYNC_BROWSERCACHE=0
WWWDSPP_PREFETCH_OBJECT=0
EnableJavaApplets=1
EnablePlugins=1
Preferences=-2147480463
AltNameLanguage=en
ContentLanguage=en-US
WeekStart=1
ViewWeekStart=2
NavWeekStart=1
XLATE_CSID=52
SPELL_LANG=1033
SPELL_PREFERENCES=0
Region=en-US
DatePickerDirection=0
Passthru_LogLevel=0
Console_LogLevel=2
VIEWIMP1=Lotus 1-2-3,0,_IWKSV,,123,.WK1,.WK3,.WK4,.WKS,.WR1,.WRK,,4,
VIEWIMP2=Structured Text,0,_ISTR,,CGN,.LTR,.STR,,1,
VIEWIMP3=Tabular Text,0,_ITAB,,.PRN,.RPT,.TAB,.TXT,,1,
VIEWIMP4=vCard,0,_IVCRD,,.VCF,,1,
VIEWEXP1=Lotus 1-2-3,0,_XWKS,,123,.WK1,.WK3,.WK4,.WKS,.WR1,.WRK,,4,
VIEWEXP2=Structured Text,0,_XSTR,,CGN,.LTR,.STR,,1,
VIEWEXP3=Tabular Text,1,_XTAB,,CGN,.LTR,.RPT,.TAB,,1,
VIEWEXP4=vCard 2.1,0,_XVCRD,,.VCF,,1,
VIEWEXP5=vCard 3.0,0,_XVCRD3,,.VCF,,1,
EDITIMP1=ASCII Text,0,_ITEXT,,.C,.H,.PRN,.RIP,.TXT,,1,
EDITIMP2=Binary with Text,0,_ISTRNGS,,*,1,
EDITIMP3=BMP Image,0,_IBMP,,.BMP,,18,
EDITIMP4=CGM Image,0,_IFL,,.CGM,.GMF,,8,
EDITIMP5=GIF Image,0,_IGIF,,.GIF,,18,
EDITIMP6=HTML File,0,_IHTML,,.HTM,.HTML,,1,
EDITIMP7=JPEG Image,0,_IJPEG,,.JPG,,18,
EDITIMP8=Lotus 1-2-3,0,_IW4W,_IWKSE,.123,.WK1,.WK3,.WK4,.WKS,.WR1,.WRK,,4,
EDITIMP9=Lotus PIC,0,_IPIC,,.PIC,,8,
EDITIMP10=Lotus Word Pro,0,_IW4W,,.LWP,,2,
EDITIMP11=Microsoft Excel,0,_IW4W,,.XLS,,4,

```


EmptyTrash=0
UNICODE_Display=1
AltCalendar=0
MIMEPromptMultilingual=1
MIMEMultilingualMode=1
QuotePrefix=>
QuoteLineLength=70
EnableActiveXInBrowser=1
EnableJavaScript=1
EnableJavaScriptErrorDialogs=1
EnableLiveConnect=1
BackgroundPrinting=1
ShowAccelerators=1
DisableImageDithering=1
EventSetup=600
RequestCertTableUpdate=user.id 07/18/2003
DYNINFOCR_OFB92FC04E:81CE6E11-ONB679C5D8:0DE027FC=OF2A41E792:01F296D6-ON8528DF1F:36021593
AdminSetup=6011
DontShowAdminHelp=1
AdminLastServer=sut1/ibm
AdminLastDomain=IBM
SERVERS_FRAME_PERCENT=21
MONITOR_DATA_STORAGE_HOURS=168
MONITOR_SCALE=1
ADMINWINDOWSIZEWIN=20 15 984 715
ADMINMAXIMIZED=0

Appendix E: Network Configuration

The standard TCP/IP stack provided by Microsoft Windows 2000 Advanced Server was used.

Appendix F: Guidelines for Information Usage

This report is intended for IBM Business Partners, customers, and IBM marketing and technical support personnel. The report may be distributed in accordance with the requirements stated in the Edition notice.

Appendix G: Pricing

The table provides the IBM List Price for the U.S. only. Actual prices may vary, and prices may also vary by country. Prices are subject to change without notice. For additional information and current prices, contact your local IBM representative.

| Item Description | Order Number | Qty | IBM List Price | Extended Price |
|---|--------------|-----|----------------|-----------------|
| IBM xSeries 235 One 3.06GHz Xeon Processor DP Embedded 10/100/1000 Ethernet Controller | 8671-81X | 1 | \$2,949 | \$2,949 |
| 3.06GHz Xeon Processor DP Upgrade | 02R1988 | 1 | 1,099 | 1,099 |
| 1GB PC2100 DDR SDRAM RDIMM Memory | 33L5039 | 4 | 659 | 2,636 |
| ServeRAID-4H Ultra160 SCSI Adapter | 37L6889 | 2 | 1,099 | 2,198 |
| ServeRAID-5i SCSI Controller | 25P3492 | 1 | 499 | 499 |
| Intel Pro/1000 XT Gigabit Server Adapter | 22P6801 | 1 | 185 | 185 |
| 36.4GB 15K Ultra320 SCSI Hard Disk Drives | 32P0734 | 81 | 659 | 53,379 |
| EXP300 Rack Storage Expansion Enclosure | 3531-1RU | 6 | 3,179 | 19,074 |
| E54 15" (13.8" Viewable) Color Monitor | 633147N | 1 | 119 | 119 |
| Software | | | | |
| Microsoft Windows 2000 Advanced Server | | 1 | 2,399 | 2,399 |
| Lotus Domino 6 Enterprise Server (List Price per Processor) | | 2 | 2,308 | 4,616 |
| Total System Price | | | | \$89,153 |

Appendix H: Vendor-Defined Information

None.

Appendix I: Domino “Show Statistics” Output

Show Stat Output from First Partition

```
> sh stat
Database.DAFailoverCount = 0
Database.DARefreshServerInfoCount = 0
Database.DAReloadCount = 0
Database.Database.BufferPool.Maximum.Megabytes = 320
Database.Database.BufferPool.MM.Reads = 40
Database.Database.BufferPool.MM.Writes = 15
Database.Database.BufferPool.Peak.Megabytes = 318
Database.Database.BufferPool.PerCentReadsInBuffer = 88.66
Database.DbCache.CurrentEntries = 1
Database.DbCache.HighWaterMark = 8051
Database.DbCache.Hits = 3401
Database.DbCache.InitialDbOpens = 13822
Database.DbCache.Lookups = 465366
Database.DbCache.MaxEntries = 10000
Database.DbCache.OvercrowdingRejections = 0
Database.ExtMgrPool.Peak = 65,406
Database.ExtMgrPool.Used = 148
Database.FreeHandleStack.FreeHandleStackHits = 2175087
Database.FreeHandleStack.HandleAllocations = 2264241
Database.FreeHandleStack.MissRate = 3
Database.LDAP.NAMELookupBindFailures = 0
Database.LDAP.NAMELookupBinds = 0
Database.LDAP.NAMELookupBytesReceived = 0
Database.LDAP.NAMELookupEntries = 0
Database.LDAP.NAMELookupFailures = 0
Database.LDAP.NAMELookupTotal = 0
Database.LDAP.NAMELookupTotalLookupTime = 0
Database.NAMELookupCacheCacheSize = 13,646,308
Database.NAMELookupCacheHashSize = 1,162,944
Database.NAMELookupCacheHits = 258,679
Database.NAMELookupCacheLookups = 1,082,489
Database.NAMELookupCacheMaxSize = 16,777,216
Database.NAMELookupCacheMisses = 815,743
Database.NAMELookupCacheNoHitHits = 8,067
Database.NAMELookupCachePool.Peak = 16,777,216
Database.NAMELookupCachePool.Used = 16,772,384
Database.NAMELookupCacheResets = 0
Database.NAMELookupMisses = 79
Database.NAMELookupTotal = 829123
Database.NAMELookupTotalLookupTime = 8,518.24
Database.NIFPool.Peak = 35,651,584
Database.NIFPool.Used = 225,568
Database.NSFPool.Peak = 180,355,072
Database.NSFPool.Used = 493,728
Database.NSF.ClusterHashTable.EntriesWithSameIndex = 0
Database.NSF.ClusterHashTable.FreedEntriesOnCleanup = 0
Database.NSF.ClusterHashTable.HashedEntries = 0
Database.NSF.ClusterHashTable.HashIsFull = 0
Database.NSF.ClusterHashTable.MissedHashHits = 0
Database.NSF.ClusterHashTable.SuccessfullHashHits = 0
Database.NSF.Replicate.NotesMergedBack = 0
Database.NSF.Replicate.NotesReceived = 0
Database.NSF.Replicate.NotesReopened = 0
Database.NSF.Replicate.NotesSent = 0
Database.NSF.SignatureCache.Hits = 0
Database.NSF.SignatureCache.Tries = 0
Database.RM.Sys.Logged = Disabled
Disk.C.Free = 30,848,180,224
Disk.C.Size = 36,385,185,792
Disk.C.Type = Fixed
Disk.D.Free = 188,254,720,000
```

Disk.D.Size = 236,600,143,872
Disk.D.Type = Fixed
Disk.E.Free = 188,254,986,240
Disk.E.Size = 236,600,143,872
Disk.E.Type = Fixed
Disk.Fixed = 8
Disk.F.Free = 188,275,974,144
Disk.F.Size = 236,600,143,872
Disk.F.Type = Fixed
Disk.G.Free = 188,214,640,640
Disk.G.Size = 236,600,143,872
Disk.G.Type = Fixed
Disk.H.Free = 188,223,016,960
Disk.H.Size = 236,600,143,872
Disk.H.Type = Fixed
Disk.I.Free = 188,200,730,624
Disk.I.Size = 236,600,143,872
Disk.I.Type = Fixed
Disk.J.Free = 22,023,746,560
Disk.J.Size = 36,396,831,232
Disk.J.Type = Fixed
Mail.AverageDeliverTime = 1
Mail.AverageServerHops = 1
Mail.AverageSizeDelivered = 19
Mail.CurrentByteDeliveryRate = 0
Mail.CurrentByteTransferRate = 0
Mail.CurrentMessageDeliveryRate = 0
Mail.CurrentMessageTransferRate = 0
Mail.DBCacheEntries = 0
Mail.DBCacheHits = 57959
Mail.DBCacheReads = 435832
MAIL.Dead = 0
Mail.Delivered = 430216
Mail.DeliveredSize.100KB_to_1MB = 15856
Mail.DeliveredSize.10KB_to_100KB = 131683
Mail.DeliveredSize.1KB_to_10KB = 164126
Mail.DeliveredSize.1MB_to_10MB = 169
Mail.DeliveredSize.Under_1KB = 118382
Mail.Deliveries = 435741
Mail.DeliveryThreads.Active = 0
Mail.DeliveryThreads.Max = 13
Mail.DeliveryThreads.Total = 13
Mail.Domain = IBM
MAIL.Hold = 0
Mail.Mailbox.AccessConflicts = 0
Mail.Mailbox.Accesses = 0
Mail.Mailbox.AccessWarnings = 0
Mail.Mailbox.CurrentAccesses = 0
Mail.Mailbox.MaxConcurrentAccesses = 0
Mail.Mailbox.Opens = 247643
Mail.MaximumDeliverTime = 40
Mail.MaximumServerHops = 2
Mail.MaximumSizeDelivered = 9767
Mail.MinimumDeliverTime = 1
Mail.MinimumServerHops = 1
Mail.MinimumSizeDelivered = 1
Mail.PeakByteDeliveryRate = 247932
Mail.PeakByteTransferRate = 68486
Mail.PeakMessageDeliveryRate = 15
Mail.PeakMessageDeliveryTime = 07/30/2003 20:12:16 EDT
Mail.PeakMessagesDelivered = 902
Mail.PeakMessagesTransferred = 181
Mail.PeakMessageTransferRate = 3
Mail.PeakMessageTransferTime = 07/30/2003 12:59:25 EDT
Mail.PeakTotalBytesDelivered = 14875945
Mail.PeakTotalBytesTransferred = 4109178
Mail.TotalKBDelivered = 8,963,773
Mail.TotalKBTransferred = 2,802,094

Mail.TotalKBTransferred.NRPC = 2,802,094
Mail.TotalPending = 0
Mail.TotalRouted = 620031
Mail.TotalRouted.NRPC = 620031
Mail.Transferred = 111292
Mail.TransferredSize.100KB_to_1MB = 5382
Mail.TransferredSize.10KB_to_100KB = 44594
Mail.TransferredSize.1KB_to_10KB = 55824
Mail.TransferredSize.1MB_to_10MB = 39
Mail.TransferredSize.Under_1KB = 5453
Mail.Transferred.NRPC = 111292
Mail.TransferThreads.Active = 0
Mail.TransferThreads.Concurrent.Highest = 6
Mail.TransferThreads.Concurrent.Max = 6
Mail.TransferThreads.Max = 13
Mail.TransferThreads.Total = 6
MAIL.Waiting = 0
MAIL.WaitingForDIR = 0
MAIL.WaitingForDNS = 0
MAIL.WaitingRecipients = 0
Mem.Allocated = 634835222
Mem.Allocated.Process = -52552930
Mem.Allocated.Shared = 687388152
Mem.Availability = Plentiful
Mem.Free = 5,112,152,063
Mem.PhysicalRAM = 2147483647
Monitor.Last.ROUTER.Failure = 13,208
Monitor.Last.ROUTER.FailureText = Router: Unable to obtain Internet host and domain names
Monitor.ROUTER.Failure = 1
NET.GroupCache.Hits = 72,837
NET.GroupCache.Misses = 18
NET.GroupCache.NumEntries = 9
NET.GroupCache.Size = 65,406
NET.GroupCache.Used = 2,432
NET.Log.sut1/ibm.PeakUnwrittenEntries = 44
NET.Log.sut1/ibm.UnwrittenEntries = 2
NET.TCPIP.BytesReceived = 47,372,068,042
NET.TCPIP.BytesSent = 9,351,587,240
NET.TCPIP.Sessions.Established.Incoming = 72797
NET.TCPIP.Sessions.Established.Outgoing = 70364
NET.TCPIP.Sessions.Limit = 65535
NET.TCPIP.Sessions.LimitMax = 65535
NET.TCPIP.Sessions.LimitMin = 10
NET.TCPIP.Sessions.Peak = 8062
NET.TCPIP.Sessions.Recycled = 0
NET.TCPIP.Sessions.Recycling = 0
Platform.ActiveNumOfDominoPartitions = 2
Platform.LogicalDisk.1.AssignedName = HarddiskVolume1
Platform.LogicalDisk.1.AvgQueueLen = 0
Platform.LogicalDisk.1.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.1.AvgQueueLen.Peak = 1.8
Platform.LogicalDisk.1.PctUtil = 0
Platform.LogicalDisk.1.PctUtil.Avg = 17.6
Platform.LogicalDisk.1.PctUtil.Peak = 100
Platform.LogicalDisk.2.AssignedName = HarddiskVolume2
Platform.LogicalDisk.2.AvgQueueLen = 0
Platform.LogicalDisk.2.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.2.AvgQueueLen.Peak = 2.5
Platform.LogicalDisk.2.PctUtil = 0
Platform.LogicalDisk.2.PctUtil.Avg = 19.9
Platform.LogicalDisk.2.PctUtil.Peak = 100
Platform.LogicalDisk.3.AssignedName = HarddiskVolume3
Platform.LogicalDisk.3.AvgQueueLen = 0
Platform.LogicalDisk.3.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.3.AvgQueueLen.Peak = 2.1
Platform.LogicalDisk.3.PctUtil = 0
Platform.LogicalDisk.3.PctUtil.Avg = 18.6
Platform.LogicalDisk.3.PctUtil.Peak = 100

Platform.LogicalDisk.4.AssignedName = HarddiskVolume4
Platform.LogicalDisk.4.AvgQueueLen = 0
Platform.LogicalDisk.4.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.4.AvgQueueLen.Peak = 2.2
Platform.LogicalDisk.4.PctUtil = 0
Platform.LogicalDisk.4.PctUtil.Avg = 17.6
Platform.LogicalDisk.4.PctUtil.Peak = 100
Platform.LogicalDisk.5.AssignedName = HarddiskVolume5
Platform.LogicalDisk.5.AvgQueueLen = 0
Platform.LogicalDisk.5.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.5.AvgQueueLen.Peak = 2.4
Platform.LogicalDisk.5.PctUtil = 0
Platform.LogicalDisk.5.PctUtil.Avg = 16.6
Platform.LogicalDisk.5.PctUtil.Peak = 100
Platform.LogicalDisk.6.AssignedName = HarddiskVolume6
Platform.LogicalDisk.6.AvgQueueLen = 0
Platform.LogicalDisk.6.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.6.AvgQueueLen.Peak = 2.5
Platform.LogicalDisk.6.PctUtil = 0
Platform.LogicalDisk.6.PctUtil.Avg = 17.9
Platform.LogicalDisk.6.PctUtil.Peak = 100
Platform.LogicalDisk.7.AssignedName = C
Platform.LogicalDisk.7.AvgQueueLen = 0
Platform.LogicalDisk.7.AvgQueueLen.Avg = 0
Platform.LogicalDisk.7.AvgQueueLen.Peak = 0.1
Platform.LogicalDisk.7.PctUtil = 0.1
Platform.LogicalDisk.7.PctUtil.Avg = 1.3
Platform.LogicalDisk.7.PctUtil.Peak = 5.4
Platform.LogicalDisk.8.AssignedName = J
Platform.LogicalDisk.8.AvgQueueLen = 0
Platform.LogicalDisk.8.AvgQueueLen.Avg = 0.1
Platform.LogicalDisk.8.AvgQueueLen.Peak = 0.7
Platform.LogicalDisk.8.PctUtil = 0.5
Platform.LogicalDisk.8.PctUtil.Avg = 11.6
Platform.LogicalDisk.8.PctUtil.Peak = 67.7
Platform.LogicalDisk.TotalNumofDisks = 8
Platform.Memory.PagesPerSec = 0.1
Platform.Memory.PagesPerSec.Avg = 2,730.1
Platform.Memory.PagesPerSec.Peak = 6,317.7
Platform.Memory.RAM.AvailMBytes = 779.1
Platform.Memory.RAM.AvailMBytes.Avg = 1,004
Platform.Memory.RAM.AvailMBytes.Min = 695.8
Platform.Memory.RAM.AvailMBytes.Peak = 3,224.1
Platform.Memory.RAM.PctUtil = 79
Platform.Memory.RAM.TotalMBytes = 3840
Platform.Network.1.AdapterName = Intel[R] PRO_1000 XT Server Adapter
Platform.Network.1.BytesRecvdPerSec = 24.2
Platform.Network.1.BytesSentPerSec = 4.9
Platform.Network.1.CurrBandwidthMbitsPerSec = 1,000
Platform.Network.1.PctUtilBandwidth = 0
Platform.Network.1.TotalBytesPerSec = 29.1
Platform.Network.2.AdapterName = Broadcom NetXtreme Gigabit Ethernet Driver
Platform.Network.2.BytesRecvdPerSec = 23.6
Platform.Network.2.BytesSentPerSec = 4.2
Platform.Network.2.CurrBandwidthMbitsPerSec = 1,000
Platform.Network.2.PctUtilBandwidth = 0
Platform.Network.2.TotalBytesPerSec = 27.8
Platform.Network.TotalNumofAdapters = 2
Platform.Network.Total.BytesRecvdPerSec = 47.8
Platform.Network.Total.BytesSentPerSec = 9.1
Platform.Network.Total.CurrBandwidthMbitsPerSec = 2,000
Platform.Network.Total.NetworkBytesPerSec = 56.9
Platform.Network.Total.PctUtilBandwidth = 0
Platform.PagingFile.Total.PctUtil = 1.2
Platform.PagingFile.Total.PctUtil.Avg = 0.8
Platform.PagingFile.Total.PctUtil.Peak = 1.4
Platform.Process.ActiveDomino.TotalCpuUtil = 0.2
Platform.Process.ActiveNumOfDominoProc = 3

Platform.Process.event.1.PctCpuUtil = 0
Platform.Process.event.1.ProcessID = 1108
Platform.Process.router.1.PctCpuUtil = 0
Platform.Process.router.1.ProcessID = 1536
Platform.Process.server.1.PctCpuUtil = 0.2
Platform.Process.server.1.ProcessID = 1040
Platform.System.ContextSwitchesPerSec = 707.5
Platform.System.ContextSwitchesPerSec.Avg = 9,400.5
Platform.System.ContextSwitchesPerSec.Min = 693.9
Platform.System.ContextSwitchesPerSec.Peak = 27,351.8
Platform.System.PctCombinedCpuUtil = 0.1
Platform.System.PctCombinedCpuUtil.Avg = 34.3
Platform.System.PctCombinedCpuUtil.Peak = 91.2
Platform.System.PctTotalPrivilegedCpuUtil = 0
Platform.System.PctTotalPrivilegedCpuUtil.Avg = 12.7
Platform.System.PctTotalPrivilegedCpuUtil.Peak = 36.3
Platform.System.PctTotalUserCpuUtil = 0.1
Platform.System.PctTotalUserCpuUtil.Avg = 21.6
Platform.System.PctTotalUserCpuUtil.Peak = 55.8
Platform.Time.LastSample = 07/31/2003 07:09:41 EDT
Platform.Time.SampleRateInMins = 10
Server.Administrators = CN=admin administrator/O=ibm
Server.Administrators.Access = CN=admin administrator/O=ibm
Server.Administrators.FullAccess = CN=admin administrator/O=ibm
Server.AvailabilityIndex = 100
Server.AvailabilityThreshold = 0
Server.BootID = 4544489
Server.BusyTimeQuery.ReceivedCount = 0
Server.CPU.Count = 4
Server.CPU.Type = Intel Pentium
Server.ElapsedTime = 22:24:57
Server.ExpansionFactor = 1
Server.MailBoxes = 4
Server.Monitor.Start = 07/30/2003 08:42:23 EDT
Server.Name = CN=sut1/O=ibm
Server.OpenRequest.MaxUsers = 0
Server.OpenRequest.Restricted = 0
Server.Path.Configfile = j:\domino\sut1\notes.ini
Server.Path.Data = j:\domino\sut1
Server.Path.Executable = J:\domino\
Server.Ports = TCPIP
Server.PoweredBy = Notes
Server.Sessions.Dropped = 0
Server.SharedMail = 0
Server.Task = Router: Searching for mail to transfer: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to transfer: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to transfer: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to transfer: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:42 EDT]
Server.Task = Router: Searching for mail to transfer: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Idle: [07/31/2003 07:07:18 EDT]
Server.Task = Event Monitor: Idle: [07/31/2003 07:07:19 EDT]
Server.Tasks = 140
Server.Task.DB = Database Server: Idle: [07/31/2003 07:07:19 EDT]
Server.Time.Start = 07/30/2003 08:42:23 EDT

```

Server.Title =
Server.Trans.PerMinute = 0
Server.Trans.PerMinute.Peak = 13211
Server.Trans.PerMinute.Peak.Time = 07/30/2003 11:07:49 EDT
Server.Trans.Total = 8971149
Server.Users = 0
Server.Users.1MinPeak = 2816
Server.Users.1MinPeakTime = 07/30/2003 20:10:53 EDT
Server.Users.5MinPeak = 6595
Server.Users.5MinPeakTime = 07/30/2003 11:32:52 EDT
Server.Users.Active = 0
Server.Users.Active15Min = 0
Server.Users.Active1Min = 0
Server.Users.Active30Min = 0
Server.Users.Active3Min = 0
Server.Users.Active5Min = 0
Server.Users.Peak = 8057
Server.Users.Peak.Time = 07/30/2003 14:10:22 EDT
Server.Version.Notes = Release 6.0
Server.Version.Notes.BuildNumber = 190
Server.Version.OS = Windows NT 5.0
Server.WorkThreads = 100
Stats.Time.Current = 07/31/2003 07:10:04 EDT
Stats.Time.Start = 07/30/2003 08:37:24 EDT

357 statistics found

```

Show Stat Output from Second Partition

```

> sh stat
Database.DAFailoverCount = 0
Database.DARefreshServerInfoCount = 0
Database.DAReloadCount = 0
Database.Database.BufferPool.Maximum.Megabytes = 320
Database.Database.BufferPool.MM.Reads = 30
Database.Database.BufferPool.MM.Writes = 11
Database.Database.BufferPool.Peak.Megabytes = 318
Database.Database.BufferPool.PerCentReadsInBuffer = 89.11
Database.DbCache.CurrentEntries = 1
Database.DbCache.HighWaterMark = 8051
Database.DbCache.Hits = 37136
Database.DbCache.InitialDbOpens = 70447
Database.DbCache.Lookups = 421633
Database.DbCache.MaxEntries = 10000
Database.DbCache.OvercrowdingRejections = 0
Database.ExtMgrPool.Peak = 65,406
Database.ExtMgrPool.Used = 148
Database.FreeHandleStack.FreeHandleStackHits = 1700297
Database.FreeHandleStack.HandleAllocations = 1766909
Database.FreeHandleStack.MissRate = 3
Database.LDAP.NAMELookupBindFailures = 0
Database.LDAP.NAMELookupBinds = 0
Database.LDAP.NAMELookupBytesReceived = 0
Database.LDAP.NAMELookupEntries = 0
Database.LDAP.NAMELookupFailures = 0
Database.LDAP.NAMELookupTotal = 0
Database.LDAP.NAMELookupTotalLookupTime = 0
Database.NAMELookupCacheCacheSize = 13,653,880
Database.NAMELookupCacheHashSize = 1,162,944
Database.NAMELookupCacheHits = 218,693
Database.NAMELookupCacheLookups = 876,915
Database.NAMELookupCacheMaxSize = 16,777,216
Database.NAMELookupCacheMisses = 650,161
Database.NAMELookupCacheNoHitHits = 8,061
Database.NAMELookupCachePool.Peak = 16,777,216
Database.NAMELookupCachePool.Used = 16,772,384
Database.NAMELookupCacheResets = 0
Database.NAMELookupCacheMisses = 75

```

Database.NAMELookupTotal = 692336
Database.NAMELookupTotalLookupTime = 7,727.622
Database.NIFPool.Peak = 35,651,584
Database.NIFPool.Used = 215,296
Database.NSFPool.Peak = 191,889,408
Database.NSFPool.Used = 490,656
Database.NSF.ClusterHashTable.EntriesWithSameIndex = 0
Database.NSF.ClusterHashTable.FreedEntriesOnCleanup = 0
Database.NSF.ClusterHashTable.HashedEntries = 0
Database.NSF.ClusterHashTable.HashIsFull = 0
Database.NSF.ClusterHashTable.MissedHashHits = 0
Database.NSF.ClusterHashTable.SuccessfullHashHits = 0
Database.NSF.Replicate.NotesMergedBack = 0
Database.NSF.Replicate.NotesReceived = 0
Database.NSF.Replicate.NotesReopened = 0
Database.NSF.Replicate.NotesSent = 0
Database.NSF.SignatureCache.Hits = 0
Database.NSF.SignatureCache.Tries = 0
Database.RM.Sys.Logged = Disabled
Disk.C.Free = 30,848,180,224
Disk.C.Size = 36,385,185,792
Disk.C.Type = Fixed
Disk.D.Free = 188,254,720,000
Disk.D.Size = 236,600,143,872
Disk.D.Type = Fixed
Disk.E.Free = 188,254,986,240
Disk.E.Size = 236,600,143,872
Disk.E.Type = Fixed
Disk.Fixed = 8
Disk.F.Free = 188,275,974,144
Disk.F.Size = 236,600,143,872
Disk.F.Type = Fixed
Disk.G.Free = 188,214,640,640
Disk.G.Size = 236,600,143,872
Disk.G.Type = Fixed
Disk.H.Free = 188,223,016,960
Disk.H.Size = 236,600,143,872
Disk.H.Type = Fixed
Disk.I.Free = 188,200,730,624
Disk.I.Size = 236,600,143,872
Disk.I.Type = Fixed
Disk.J.Free = 22,023,746,560
Disk.J.Size = 36,396,831,232
Disk.J.Type = Fixed
Mail.AverageDeliverTime = 1
Mail.AverageServerHops = 1
Mail.AverageSizeDelivered = 25
Mail.CurrentByteDeliveryRate = 0
Mail.CurrentByteTransferRate = 0
Mail.CurrentMessageDeliveryRate = 0
Mail.CurrentMessageTransferRate = 0
Mail.DBCacheEntries = 0
Mail.DBCacheHits = 45658
Mail.DBCacheReads = 335273
MAIL.Dead = 0
Mail.Delivered = 328442
Mail.DeliveredSize.100KB_to_1MB = 15866
Mail.DeliveredSize.10KB_to_100KB = 131502
Mail.DeliveredSize.1KB_to_10KB = 164751
Mail.DeliveredSize.1MB_to_10MB = 143
Mail.DeliveredSize.Under_1KB = 16180
Mail.Deliveries = 335204
Mail.DeliveryThreads.Active = 0
Mail.DeliveryThreads.Max = 13
Mail.DeliveryThreads.Total = 13
Mail.Domain = IBM
MAIL.Hold = 0
Mail.Mailbox.AccessConflicts = 0

Mail.Mailbox.Accesses = 0
Mail.Mailbox.AccessWarnings = 0
Mail.Mailbox.CurrentAccesses = 0
Mail.Mailbox.MaxConcurrentAccesses = 0
Mail.Mailbox.Opens = 207859
Mail.MaximumDeliverTime = 36
Mail.MaximumServerHops = 2
Mail.MaximumSizeDelivered = 9767
Mail.MinimumDeliverTime = 1
Mail.MinimumServerHops = 1
Mail.MinimumSizeDelivered = 1
Mail.PeakByteDeliveryRate = 263446
Mail.PeakByteTransferRate = 56918
Mail.PeakMessageDeliveryRate = 10
Mail.PeakMessageDeliveryTime = 07/30/2003 18:03:38 EDT
Mail.PeakMessagesDelivered = 610
Mail.PeakMessagesTransferred = 248
Mail.PeakMessageTransferRate = 4
Mail.PeakMessageTransferTime = 07/30/2003 15:29:04 EDT
Mail.PeakTotalBytesDelivered = 15806780
Mail.PeakTotalBytesTransferred = 3415123
Mail.TotalKBDelivered = 8,582,951
Mail.TotalKBTransferred = 2,394,310
Mail.TotalKBTransferred.NRPC = 2,394,310
Mail.TotalPending = 0
Mail.TotalRouted = 512036
Mail.TotalRouted.NRPC = 512036
Mail.Transferred = 126425
Mail.TransferredSize.100KB_to_1MB = 3907
Mail.TransferredSize.10KB_to_100KB = 32378
Mail.TransferredSize.1KB_to_10KB = 40618
Mail.TransferredSize.1MB_to_10MB = 57
Mail.TransferredSize.Under_1KB = 49465
Mail.Transferred.NRPC = 126425
Mail.TransferThreads.Active = 0
Mail.TransferThreads.Concurrent.Highest = 6
Mail.TransferThreads.Concurrent.Max = 6
Mail.TransferThreads.Max = 13
Mail.TransferThreads.Total = 6
MAIL.Waiting = 0
MAIL.WaitingForDIR = 0
MAIL.WaitingForDNS = 0
MAIL.WaitingRecipients = 0
Mem.Allocated = 672986914
Mem.Allocated.Process = -24415170
Mem.Allocated.Shared = 697402084
Mem.Availability = Plentiful
Mem.Free = 5,112,012,799
Mem.PhysicalRAM = 2147483647
Monitor.Last.ROUTER.Failure = 13,208
Monitor.Last.ROUTER.FailureText = Router: Unable to obtain Internet host and domain names
Monitor.ROUTER.Failure = 1
NET.GroupCache.Hits = 78,461
NET.GroupCache.Misses = 14
NET.GroupCache.NumEntries = 7
NET.GroupCache.Size = 65,406
NET.GroupCache.Used = 2,316
NET.Log.sut2/ibm.PeakUnwrittenEntries = 21
NET.Log.sut2/ibm.UnwrittenEntries = 2
NET.TCPIP.BytesReceived = 35,714,728,184
NET.TCPIP.BytesSent = 7,060,151,978
NET.TCPIP.Sessions.Established.Incoming = 78415
NET.TCPIP.Sessions.Established.Outgoing = 64746
NET.TCPIP.Sessions.Limit = 65535
NET.TCPIP.Sessions.LimitMax = 65535
NET.TCPIP.Sessions.LimitMin = 10
NET.TCPIP.Sessions.Peak = 8062
NET.TCPIP.Sessions.Recycled = 0

NET.TCPIP.Sessions.Recycling = 0
Platform.ActiveNumOfDominoPartitions = 2
Platform.LogicalDisk.1.AssignedName = HarddiskVolume1
Platform.LogicalDisk.1.AvgQueueLen = 0
Platform.LogicalDisk.1.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.1.AvgQueueLen.Peak = 2
Platform.LogicalDisk.1.PctUtil = 0
Platform.LogicalDisk.1.PctUtil.Avg = 19.2
Platform.LogicalDisk.1.PctUtil.Peak = 100
Platform.LogicalDisk.2.AssignedName = HarddiskVolume2
Platform.LogicalDisk.2.AvgQueueLen = 0
Platform.LogicalDisk.2.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.2.AvgQueueLen.Peak = 2.3
Platform.LogicalDisk.2.PctUtil = 0
Platform.LogicalDisk.2.PctUtil.Avg = 20.2
Platform.LogicalDisk.2.PctUtil.Peak = 100
Platform.LogicalDisk.3.AssignedName = HarddiskVolume3
Platform.LogicalDisk.3.AvgQueueLen = 0
Platform.LogicalDisk.3.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.3.AvgQueueLen.Peak = 1.7
Platform.LogicalDisk.3.PctUtil = 0
Platform.LogicalDisk.3.PctUtil.Avg = 21.9
Platform.LogicalDisk.3.PctUtil.Peak = 100
Platform.LogicalDisk.4.AssignedName = HarddiskVolume4
Platform.LogicalDisk.4.AvgQueueLen = 0
Platform.LogicalDisk.4.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.4.AvgQueueLen.Peak = 1.6
Platform.LogicalDisk.4.PctUtil = 0
Platform.LogicalDisk.4.PctUtil.Avg = 21.2
Platform.LogicalDisk.4.PctUtil.Peak = 100
Platform.LogicalDisk.5.AssignedName = HarddiskVolume5
Platform.LogicalDisk.5.AvgQueueLen = 0
Platform.LogicalDisk.5.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.5.AvgQueueLen.Peak = 2.2
Platform.LogicalDisk.5.PctUtil = 0
Platform.LogicalDisk.5.PctUtil.Avg = 23.7
Platform.LogicalDisk.5.PctUtil.Peak = 100
Platform.LogicalDisk.6.AssignedName = HarddiskVolume6
Platform.LogicalDisk.6.AvgQueueLen = 0
Platform.LogicalDisk.6.AvgQueueLen.Avg = 0.2
Platform.LogicalDisk.6.AvgQueueLen.Peak = 1.8
Platform.LogicalDisk.6.PctUtil = 0
Platform.LogicalDisk.6.PctUtil.Avg = 22.7
Platform.LogicalDisk.6.PctUtil.Peak = 100
Platform.LogicalDisk.7.AssignedName = C
Platform.LogicalDisk.7.AvgQueueLen = 0
Platform.LogicalDisk.7.AvgQueueLen.Avg = 0
Platform.LogicalDisk.7.AvgQueueLen.Peak = 0.1
Platform.LogicalDisk.7.PctUtil = 0
Platform.LogicalDisk.7.PctUtil.Avg = 1.3
Platform.LogicalDisk.7.PctUtil.Peak = 5.2
Platform.LogicalDisk.8.AssignedName = J
Platform.LogicalDisk.8.AvgQueueLen = 0
Platform.LogicalDisk.8.AvgQueueLen.Avg = 0.1
Platform.LogicalDisk.8.AvgQueueLen.Peak = 0.7
Platform.LogicalDisk.8.PctUtil = 0.5
Platform.LogicalDisk.8.PctUtil.Avg = 13.4
Platform.LogicalDisk.8.PctUtil.Peak = 70.8
Platform.LogicalDisk.TotalNumofDisks = 8
Platform.Memory.PagesPerSec = 0
Platform.Memory.PagesPerSec.Avg = 2,846.3
Platform.Memory.PagesPerSec.Peak = 6,337.4
Platform.Memory.RAM.AvailMBytes = 785.1
Platform.Memory.RAM.AvailMBytes.Avg = 1,000.3
Platform.Memory.RAM.AvailMBytes.Min = 696.2
Platform.Memory.RAM.AvailMBytes.Peak = 3,149.8
Platform.Memory.RAM.PctUtil = 79
Platform.Memory.RAM.TotalMBytes = 3840

Platform.Network.1.AdapterName = Intel[R] PRO_1000 XT Server Adapter
Platform.Network.1.BytesRecvdPerSec = 23.6
Platform.Network.1.BytesSentPerSec = 5.3
Platform.Network.1.CurrBandwidthMbitsPerSec = 1,000
Platform.Network.1.PctUtilBandwidth = 0
Platform.Network.1.TotalBytesPerSec = 28.9
Platform.Network.2.AdapterName = Broadcom NetXtreme Gigabit Ethernet Driver
Platform.Network.2.BytesRecvdPerSec = 23
Platform.Network.2.BytesSentPerSec = 4.6
Platform.Network.2.CurrBandwidthMbitsPerSec = 1,000
Platform.Network.2.PctUtilBandwidth = 0
Platform.Network.2.TotalBytesPerSec = 27.6
Platform.Network.TotalNumofAdapters = 2
Platform.Network.Total.BytesRecvdPerSec = 46.6
Platform.Network.Total.BytesSentPerSec = 9.9
Platform.Network.Total.CurrBandwidthMbitsPerSec = 2,000
Platform.Network.Total.NetworkBytesPerSec = 56.5
Platform.Network.Total.PctUtilBandwidth = 0
Platform.PagingFile.Total.PctUtil = 1.2
Platform.PagingFile.Total.PctUtil.Avg = 0.8
Platform.PagingFile.Total.PctUtil.Peak = 1.5
Platform.Process.ActiveDomino.TotalCpuUtil = 0.1
Platform.Process.ActiveNumOfDominoProc = 3
Platform.Process.event.1.PctCpuUtil = 0
Platform.Process.event.1.ProcessID = 1696
Platform.Process.router.1.PctCpuUtil = 0
Platform.Process.router.1.ProcessID = 2140
Platform.Process.server.1.PctCpuUtil = 0.1
Platform.Process.server.1.ProcessID = 1676
Platform.System.ContextSwitchesPerSec = 708.1
Platform.System.ContextSwitchesPerSec.Avg = 9,764.3
Platform.System.ContextSwitchesPerSec.Min = 695.3
Platform.System.ContextSwitchesPerSec.Peak = 26,767.2
Platform.System.PctCombinedCpuUtil = 0.1
Platform.System.PctCombinedCpuUtil.Avg = 35.7
Platform.System.PctCombinedCpuUtil.Peak = 89.8
Platform.System.PctTotalPrivilegedCpuUtil = 0
Platform.System.PctTotalPrivilegedCpuUtil.Avg = 13.3
Platform.System.PctTotalPrivilegedCpuUtil.Peak = 36.1
Platform.System.PctTotalUserCpuUtil = 0.1
Platform.System.PctTotalUserCpuUtil.Avg = 22.5
Platform.System.PctTotalUserCpuUtil.Peak = 55.7
Platform.Time.LastSample = 07/31/2003 07:02:13 EDT
Platform.Time.SampleRateInMins = 10
Server.Administrators = CN=adminstrator/O=ibm
Server.Administrators.Access = CN=adminstrator/O=ibm
Server.Administrators.FullAccess = CN=adminstrator/O=ibm
Server.AvailabilityIndex = 100
Server.AvailabilityThreshold = 0
Server.BootID = 4579649
Server.BusyTimeQuery.ReceivedCount = 0
Server.CPU.Count = 4
Server.CPU.Type = Intel Pentium
Server.ElapsedTime = 22:25:28
Server.ExpansionFactor = 1
Server.MailBoxes = 4
Server.Monitor.Start = 07/30/2003 08:44:10 EDT
Server.Name = CN=sut2/O=ibm
Server.OpenRequest.MaxUsers = 0
Server.OpenRequest.Restricted = 0
Server.Path.Configfile = j:\domino\sut2\notes.ini
Server.Path.Data = j:\domino\sut2
Server.Path.Executable = J:\domino\
Server.Ports = TCPIP
Server.PoweredBy = Notes
Server.Sessions.Dropped = 0
Server.SharedMail = 0
Server.Task = Router: Searching for mail to transfer: [07/30/2003 22:22:39 EDT]

Server.Task = Router: Searching for mail to transfer: [07/30/2003 22:22:15 EDT]
Server.Task = Router: Searching for mail to transfer: [07/30/2003 22:22:29 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to transfer: [07/30/2003 22:22:39 EDT]
Server.Task = Router: Searching for mail to transfer: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to transfer: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Searching for mail to deliver: [07/30/2003 22:22:41 EDT]
Server.Task = Router: Idle: [07/31/2003 07:09:36 EDT]
Server.Task = Event Monitor: Idle: [07/31/2003 07:09:38 EDT]
Server.Tasks = 140
Server.Task.DB = Database Server: Idle: [07/31/2003 07:09:38 EDT]
Server.Time.Start = 07/30/2003 08:44:10 EDT
Server.Title =
Server.Trans.PerMinute = 0
Server.Trans.PerMinute.Peak = 13137
Server.Trans.PerMinute.Peak.Time = 07/30/2003 18:27:51 EDT
Server.Trans.Total = 6679483
Server.Users = 0
Server.Users.1MinPeak = 2812
Server.Users.1MinPeakTime = 07/30/2003 17:41:43 EDT
Server.Users.5MinPeak = 6589
Server.Users.5MinPeakTime = 07/30/2003 19:27:26 EDT
Server.Users.Active = 0
Server.Users.Active15Min = 0
Server.Users.Active1Min = 0
Server.Users.Active30Min = 0
Server.Users.Active3Min = 0
Server.Users.Active5Min = 0
Server.Users.Peak = 8057
Server.Users.Peak.Time = 07/30/2003 15:46:23 EDT
Server.Version.Notes = Release 6.0
Server.Version.Notes.BuildNumber = 190
Server.Version.OS = Windows NT 5.0
Server.WorkThreads = 100
Stats.Time.Current = 07/31/2003 07:09:57 EDT
Stats.Time.Start = 07/30/2003 08:43:16 EDT
357 statistics found

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