

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

**Results Submitted April 21, 2003**

**Results Certified May 6, 2003**



**IBM Corporation**

## **Table of Contents**

***Section 1: Executive Summary***

***Section 2: Benchmarking Objectives***

***Section 3: Test Methodologies***

***Section 4: Data***

***Section 5: Analysis***

***Section 6: Conclusions***

***Section 7: Statement by Auditor***

***Appendix A: Overall Test Setup and Software Versions***

***Appendix B: System Configurations***

***Appendix C: Operating System Parameters Values***

***Appendix D: Notes Parameters (NOTES.INI file)***

***Appendix E: Network Configuration File(s)***

***Appendix F: Guidelines for Information Usage***

***Appendix G: Pricing***

***Appendix H: Optional (vendor-defined information)***

***Appendix I: Domino “Show Statistics” Output***

***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	10,400	15,034	0.086	\$6.09	\$4.21

The xSeries 235 server was configured with two 3.06GHz<sup>1</sup> Intel® Xeon™ Processor DP, 4GB of PC2100 memory, and 59 hard disk drives. Two Domino partitions, which were part of the same domain, shared a directory containing more than 26,000 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 10,400 active mail users (see price/performance results<sup>2</sup> above).

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

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

<sup>2</sup> 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 Processor DP (512KB of ECC full-speed L2 write-back cache with Intel Hyper\_Threading Technology), 4GB of PC2100 memory, and 59 36.4GB 15K rpm U320 hard disk drives. Four RAID-1 arrays, each composed of 14 hard drives, which contained the mail database files, were connected to a channel on a 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 adapter equipped with an optional ServeRAID-5i Ultra320 SCSI controller. A more detailed description of the configuration of the RAID-1 arrays is provided in Appendix A.

The network consisted of two LAN segments; each segment consisted of one 16-port IBM Type 8371-A16 switch. The LAN segments were configured as follow:

- Segment 1 was connected to partition 1 on the SUT to child drivers 1, 2, 3, 4, 5 and parent 1.
- Segment 2 was connected to partition 2 on the SUT to child drivers 6, 7, 8 and parent 2.

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.

<b>R6Mail-Only Workload</b>
Server_Max_Concurrent_Trans=1000
NSF_DBCache_MaxEntries=10000
NSF_Buffer_Pool_Size_MB=330
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 mail boxes 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
TcpIp_TcpIpAddress=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:, and G: 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 10,400 users were distributed over 8 clients. Each client added 1,300 users to the system under test. The test ran for 11 hours, including ramp-up. The actual ramp-up period from startup of child 1 to the point when all 10,400 users were shown on the server console was approximately 4 hours. 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.

To confirm steady state, we verified the number of users at the server and its logs. 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.

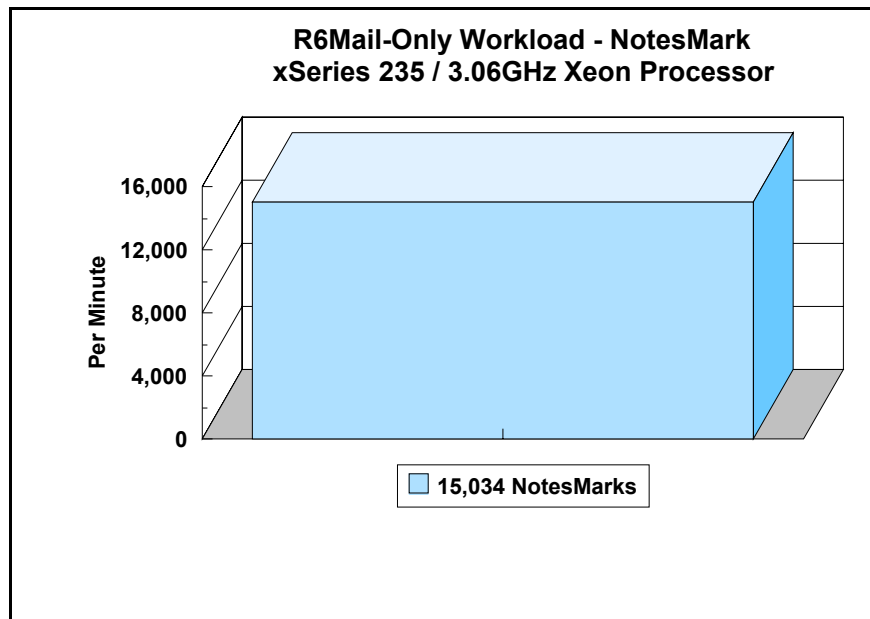
### ***Other NotesBench Tests***

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 10,400 concurrent, active users with this workload. The NotesMark throughput value was 15,034. Average response time was 0.086 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.

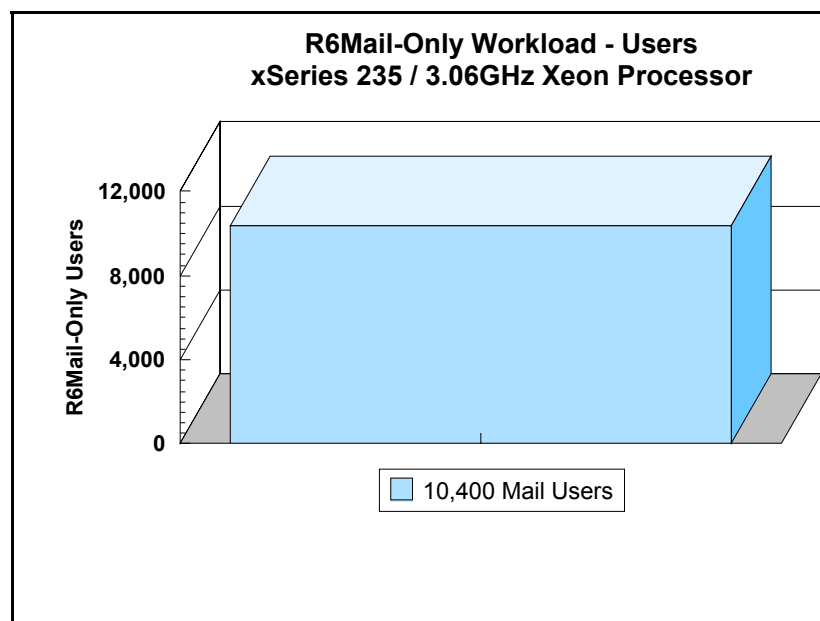
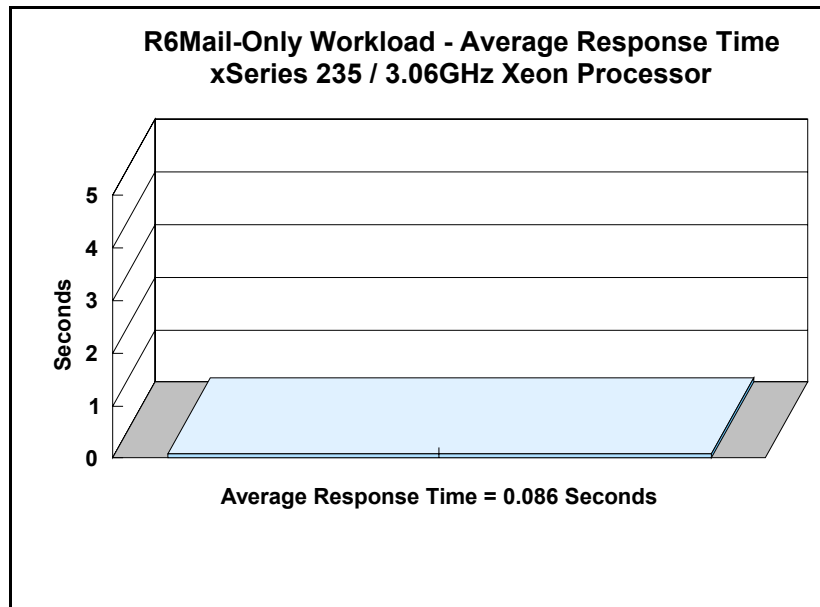
### NotesNum Output for R6Mail-Only Test

Min Start Time = 04/12/2003 08:40:27 AM Max Stop Time = 04/12/2003 07:12:01 PM

Total Test Errors = 0

Total Test Time = 37920 sec

Test Run: Users = 10400 NotesMark = 15034 Response Time = 86 msec (04/12/2003 12:17:00 AM to 04/12/2003 07:02:00 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 10,400 concurrent R6Mail users with no errors at the clients. During the steady-state period on one of the successful 10,400-user runs, the average CPU utilization was 35.67 percent. The average available memory was 1244MB.

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.



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## Conclusions

The test results demonstrate that the xSeries 235 configured as described in this report can support up to 10,400 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.

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## **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.

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## **Appendix A: Overall Test Setup and Software Versions**

### ***Number of Client Systems***

For the R6Mail-Only test, nine driver systems were used. Eight systems were configured as child drivers 1 through 8; one system was used as parent driver to control the run.

The disk configuration used for the child driver systems follows:

Child drivers 1-8:

- 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 Processor DP 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 (237.3GB - NTFS) - Domino mail files
- E: Partition (237.3GB - NTFS) - Domino mail files
- F: Partition (237.3GB - NTFS) - Domino mail files
- G: Partition (237.3GB - NTFS) - Domino mail files
- J: Partition (33.9GB - NTFS) - Domino executables and Domino mail data subdirectory

### ***Network***

The network consisted of two segments. All child drivers, parents and SUT were connected to one of 16 ports on two IBM TYPE 8371 A-16 switches. One 10/100 Server Adapter was installed in the xSeries 235 system under test. The LAN segments were configured as follow:

- Segment 1 was connected to partition 1 on the SUT to child drivers 1, 2, 3, 4, 5 and parent 1.
- Segment 2 was connected to partition 2 on the SUT to child drivers 6, 7, 8 and parent 2.

### ***Software Versions***

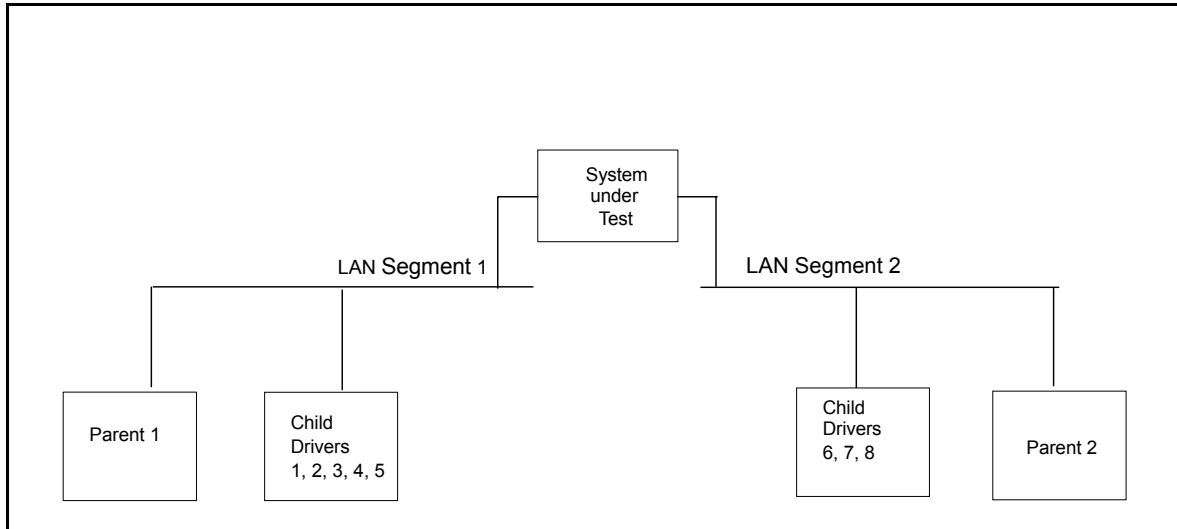
Software versions used on the system under test were as follows:

- Microsoft Windows 2000 Advanced Server and Service Pack 2
- 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 Drivers and Child Drivers 1-8
xSeries 235	IBM IntelliStation M Pro
2 x 3.06GHz Xeon Processor DP	1 x 500MHz Pentium III
4GB Memory	512MB Memory
59 x 36.4GB Drives	1 x 9.1GB Drive
1 x ServeRAID-5i Ultra320 SCSI Adapter 1 x ServeRAID-4H Ultra160 SCSI Adapter	
Embedded 10/100/1000Mbps Ethernet Controller Intel Pro 10/100 Server Adapter	Integrated 10/100 Ethernet Controller
Microsoft Windows 2000 Advanced Server	Microsoft Windows 2000 Professional

## Appendix B: System Configurations

Server under Test	
<b>System</b>	xSeries 235
<b>Processor</b>	2 x 3.06GHz Xeon Processor DP
<b>Memory</b>	4GB
<b>Cache</b>	512KB ECC Full-Speed L2 Cache per Processor
<b>RAID Controller</b>	1x ServeRAID-4H Ultra160 SCSI Adapter, 1x ServeRAID-5i Ultra320 SCSI Adapter
<b>Disk Drive</b>	56 x 36.4GB 15K rpm (configured as four RAID-1 arrays) 3 x 36.4GB 15K rpm (configured two as a RAID-1 array, and one as RAID-0 for system boot drive)
<b>Network Interface</b>	Embedded 10/100/1000Mbps Ethernet controller, Intel PRO 10/100 Server Adapter
<b>I/O</b>	PCI Bus (64 Bit)
<b>Operating System</b>	Microsoft Windows 2000 Advanced Server with Service Pack 2
<b>Notes</b>	Lotus Domino Server Release 6.0 for Windows 2000

Parent Source Drivers and Child Drivers 1 - 8	
<b>System</b>	IBM IntelliStation M Pro
<b>Processor</b>	1 x 500MHz Pentium III
<b>Memory</b>	512MB
<b>Disk Drive</b>	1 x 9.1GB
<b>Network Interface</b>	Integrated 10/100 Ethernet Controller
<b>I/O</b>	PCI Bus
<b>Operating System</b>	Microsoft Windows 2000 Professional with Service Pack 2
<b>Notes</b>	Lotus Domino Client Release 6.0 for Windows 2000
<b>NotesBench</b>	NotesBench Version 6.0 - Windows/32

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## 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  
 WWWDSP\_SYNC\_BROWSERCACHE=0  
 WWWDSP\_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  
 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



DST=1  
MailType=0  
\$\$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  
WWWDSPP\_SYNC\_BROWSERCACHE=0  
WWWDSPP\_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 04/03/2003  
AdminLastDomain=IBM  
SERVERS\_FRAME\_PERCENT=21  
MONITOR\_DATA\_STORAGE\_HOURS=168  
MONITOR\_SCALE=1  
ADMINWINDOWSIZEWIN=20 15 984 715  
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=330
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=351 153 322 318
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=500000
;LargeMessageSize=32000
NodeName=nchild1
MailTemplate=sut1!!mail6.ntf
;=====iNotes=====
;MailTemplate=iNotes5.ntf
;NBiNotes=1
;HTTPNABView=$People/M
;WebAuthenticationOff=1
;WebPreferencesOff=1
;HTTPHost=sut.ibm.com
;RecipientDomain=ibm.com
;Domail=ibm.com
;=====
USESERVERNAB=1
ResultsDirectory=\\parent3\c$\results
DEBUG_OUTFILE=\\parent3\c$\results\res1
;NumNotesLocalReplica=90
;NumSharedNotes=900
NormalMessageSize=1000
MaxDocToDelete=10000
;nb_dbdir=mail\
$DialogMode=0
ThreadStagger=0.3
;nopause=1
;=====imap=====

```

```

;nodeName=nchild11
;USESERVERNAB=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
;smtphost=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$\results
;DEBUG_UTF8FILE=\\parent1\c$\results\res11
;ThreadStagger=4
;nabentries=10000
;
=====
;
FaultRecovery_Build=Build V60_09252002
CONSOLE_LOG_ENABLED=1
DSTLAW=4,1,1,10,-1,1
UPDATE_TIMER=04/01/2003 08:19:07 AM
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,

```



MAXIMIZED=0  
NAMES=names.nsf  
ReplDefFullDocs=1  
ReplDefPartDocsLimit=0  
ReplDefPartDocsLimitAmt=40  
ReplDefPartAtchLimit=0  
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=630
ChildStagger=1,1;15,2;18,3;20,4;22,5;30,6;35,7;40,8;43,9;38,10

NumClients1=1300
NumClients2=1300
NumClients3=1300
NumClients4=1300
NumClients5=1300
NumClients6=1300
NumClients7=1300
NumClients8=1300
NumClients9=300
NumClients10=1300
NumClients11=500
NumClients12=500
NumClients13=500
NumClients14=500
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=04/01/2003 08:15:24 AM
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,

```





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

---

## **Appendix E: Network Configuration**

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

In the system under test, the network adapter speed for the embedded Full Duplex 10/100/1000 Mbps Ethernet controller was changed from the default 'Auto' to 100 Mbps.

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## **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
<b>IBM xSeries 235</b> 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	1	2,099	2,099
ServeRAID-5i Ultra320 SCSI Adapter	25P3492	1	499	499
Intel Pro/1000 Gigabit Server Adapter	22P6801	1	185	185
36.4GB 15K Ultra320 SCSI Hard Disk Drives	32P0734	59	659	38,881
EXP300 Rack Storage Expansion Enclosure	3531-1RU	3	3,179	9,537
E54 15" (13.8" Viewable) Color Monitor	633147N	1	129	129
<b>Software</b>				
Windows 2000 Advanced Server		1	738	738
Lotus Domino 6 Enterprise Server (List Price per Processor)		2	2,308	4,616
<b>Total System Price</b>				<b>\$63,368</b>

---

## 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 = 330
Database.Database.BufferPool.MM.Reads = 24
Database.Database.BufferPool.MM.Writes = 9
Database.Database.BufferPool.Peak.Megabytes = 330
Database.Database.BufferPool.PerCentReadsInBuffer = 88.91
Database.DbCache.CurrentEntries = 1
Database.DbCache.HighWaterMark = 6501
Database.DbCache.Hits = 2015
Database.DbCache.InitialDbOpens = 9607
Database.DbCache.Lookups = 257239
Database.DbCache.MaxEntries = 10000
Database.DbCache.OvercrowdingRejections = 0
Database.ExtMgrPool.Peak = 65,406
Database.ExtMgrPool.Used = 148
Database.FreeHandleStack.FreeHandleStackHits = 1377839
Database.FreeHandleStack.HandleAllocations = 1439865
Database.FreeHandleStack.MissRate = 4
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 = 13,628,468
Database.NAMELookupCacheHashSize = 1,162,944
Database.NAMELookupCacheHits = 181,096
Database.NAMELookupCacheLookups = 659,144
Database.NAMELookupCacheMaxSize = 16,777,216
Database.NAMELookupCacheMisses = 471,533
Database.NAMELookupCacheNoHitHits = 6,515
Database.NAMELookupCachePool.Peak = 16,777,216
Database.NAMELookupCachePool.Used = 16,772,384
Database.NAMELookupCacheResets = 0
Database.NAMELookupMisses = 76
Database.NAMELookupTotal = 497523
Database.NAMELookupTotalLookupTime = 1,834.196
Database.NIFPool.Peak = 29,360,128
Database.NIFPool.Used = 204,672
Database.NSFPool.Peak = 141,557,760
Database.NSFPool.Used = 454,816
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 = 30,889,934,848
Disk.C.Size = 36,385,185,792
Disk.C.Type = Fixed
Disk.D.Free = 202,126,495,744
Disk.D.Size = 254,802,690,048
```

Disk.D.Type = Fixed  
Disk.E.Free = 202,152,181,760  
Disk.E.Size = 254,802,690,048  
Disk.E.Type = Fixed  
Disk.Fixed = 6  
Disk.F.Free = 202,125,692,928  
Disk.F.Size = 254,802,690,048  
Disk.F.Type = Fixed  
Disk.G.Free = 202,133,303,296  
Disk.G.Size = 254,802,690,048  
Disk.G.Type = Fixed  
Disk.J.Free = 27,883,964,928  
Disk.J.Size = 36,396,831,232  
Disk.J.Type = Fixed  
Mail.AverageDeliverTime = 1  
Mail.AverageServerHops = 1  
Mail.AverageSizeDelivered = 14  
Mail.CurrentByteDeliveryRate = 0  
Mail.CurrentByteTransferRate = 0  
Mail.CurrentMessageDeliveryRate = 0  
Mail.CurrentMessageTransferRate = 0  
Mail.DBCacheEntries = 0  
Mail.DBCacheHits = 37980  
Mail.DBCacheReads = 234714  
MAIL.Dead = 0  
Mail.Delivered = 232514  
Mail.DeliveredSize.100KB\_to\_1MB = 8456  
Mail.DeliveredSize.10KB\_to\_100KB = 72144  
Mail.DeliveredSize.1KB\_to\_10KB = 89382  
Mail.DeliveredSize.Under\_1KB = 62532  
Mail.Deliveries = 234681  
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 = 164406  
Mail.MaximumDeliverTime = 28  
Mail.MaximumServerHops = 2  
Mail.MaximumSizeDelivered = 147  
Mail.MinimumDeliverTime = 1  
Mail.MinimumServerHops = 1  
Mail.MinimumSizeDelivered = 1  
Mail.PeakByteDeliveryRate = 172882  
Mail.PeakByteTransferRate = 50599  
Mail.PeakMessageDeliveryRate = 8  
Mail.PeakMessageDeliveryTime = 04/12/2003 13:06:37 EDT  
Mail.PeakMessagesDelivered = 488  
Mail.PeakMessagesTransferred = 121  
Mail.PeakMessageTransferRate = 2  
Mail.PeakMessageTransferTime = 04/12/2003 10:04:11 EDT  
Mail.PeakTotalBytesDelivered = 10372930  
Mail.PeakTotalBytesTransferred = 3035985  
Mail.TotalKBDelivered = 3,882,111  
Mail.TotalKBTransferred = 1,510,884  
Mail.TotalKBTransferred.NRPC = 1,510,884  
Mail.TotalPending = 0  
Mail.TotalRouted = 354055  
Mail.TotalRouted.NRPC = 354055  
Mail.Transferred = 70836  
Mail.TransferredSize.100KB\_to\_1MB = 3348  
Mail.TransferredSize.10KB\_to\_100KB = 28352  
Mail.TransferredSize.1KB\_to\_10KB = 35577



Mail.TransferredSize.Under\_1KB = 3559  
Mail.Transferred.NRPC = 70836  
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 = 620782572  
Mem.Allocated.Process = -11315860  
Mem.Allocated.Shared = 632098432  
Mem.Availability = Plentiful  
Mem.Free = 5,619,662,847  
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 = 55,238  
NET.GroupCache.Misses = 16  
NET.GroupCache.NumEntries = 8  
NET.GroupCache.Size = 65,406  
NET.GroupCache.Used = 2,374  
NET.Log.sut1/ibm.PeakUnwrittenEntries = 81  
NET.Log.sut1/ibm.UnwrittenEntries = 2  
NET.TCPIP.BytesReceived = 29,622,057,252  
NET.TCPIP.BytesSent = 5,798,416,362  
NET.TCPIP.Sessions.Established.Incoming = 55213  
NET.TCPIP.Sessions.Established.Outgoing = 59607  
NET.TCPIP.Sessions.Limit = 65535  
NET.TCPIP.Sessions.LimitMax = 65535  
NET.TCPIP.Sessions.LimitMin = 10  
NET.TCPIP.Sessions.Peak = 6510  
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 = 0.3  
Platform.LogicalDisk.1.AvgQueueLen.Peak = 2.1  
Platform.LogicalDisk.1.PctUtil = 0  
Platform.LogicalDisk.1.PctUtil.Avg = 30.1  
Platform.LogicalDisk.1.PctUtil.Peak = 100  
Platform.LogicalDisk.2.AssignedName = HarddiskVolume2  
Platform.LogicalDisk.2.AvgQueueLen = 0  
Platform.LogicalDisk.2.AvgQueueLen.Avg = 0.3  
Platform.LogicalDisk.2.AvgQueueLen.Peak = 2.4  
Platform.LogicalDisk.2.PctUtil = 0  
Platform.LogicalDisk.2.PctUtil.Avg = 32.4  
Platform.LogicalDisk.2.PctUtil.Peak = 100  
Platform.LogicalDisk.3.AssignedName = HarddiskVolume3  
Platform.LogicalDisk.3.AvgQueueLen = 0  
Platform.LogicalDisk.3.AvgQueueLen.Avg = 0.4  
Platform.LogicalDisk.3.AvgQueueLen.Peak = 2.8  
Platform.LogicalDisk.3.PctUtil = 0  
Platform.LogicalDisk.3.PctUtil.Avg = 37.2  
Platform.LogicalDisk.3.PctUtil.Peak = 100  
Platform.LogicalDisk.4.AssignedName = HarddiskVolume4  
Platform.LogicalDisk.4.AvgQueueLen = 0  
Platform.LogicalDisk.4.AvgQueueLen.Avg = 0.4  
Platform.LogicalDisk.4.AvgQueueLen.Peak = 2.3  
Platform.LogicalDisk.4.PctUtil = 0  
Platform.LogicalDisk.4.PctUtil.Avg = 36.2  
Platform.LogicalDisk.4.PctUtil.Peak = 100  
Platform.LogicalDisk.5.AssignedName = C  
Platform.LogicalDisk.5.AvgQueueLen = 0

Platform.LogicalDisk.5.AvgQueueLen.Avg = 0  
Platform.LogicalDisk.5.AvgQueueLen.Peak = 0  
Platform.LogicalDisk.5.PctUtil = 0.1  
Platform.LogicalDisk.5.PctUtil.Avg = 0.1  
Platform.LogicalDisk.5.PctUtil.Peak = 0.6  
Platform.LogicalDisk.6.AssignedName = J  
Platform.LogicalDisk.6.AvgQueueLen = 0  
Platform.LogicalDisk.6.AvgQueueLen.Avg = 0.1  
Platform.LogicalDisk.6.AvgQueueLen.Peak = 0.3  
Platform.LogicalDisk.6.PctUtil = 0.3  
Platform.LogicalDisk.6.PctUtil.Avg = 10.5  
Platform.LogicalDisk.6.PctUtil.Peak = 26.1  
Platform.LogicalDisk.TotalNumofDisks = 6  
Platform.Memory.PagesPerSec = 0  
Platform.Memory.PagesPerSec.Avg = 2,587.4  
Platform.Memory.PagesPerSec.Peak = 3,984.5  
Platform.Memory.RAM.AvailMBytes = 1,263.4  
Platform.Memory.RAM.AvailMBytes.Avg = 1,518.3  
Platform.Memory.RAM.AvailMBytes.Min = 1,201.6  
Platform.Memory.RAM.AvailMBytes.Peak = 3,364.7  
Platform.Memory.RAM.PctUtil = 67  
Platform.Memory.RAM.TotalMBytes = 3840  
Platform.Network.1.AdapterName = Intel 8255x-based Integrated Fast Ethernet  
Platform.Network.1.BytesRecvdPerSec = 7.2  
Platform.Network.1.BytesSentPerSec = 1.5  
Platform.Network.1.CurrBandwidthMbitsPerSec = 100  
Platform.Network.1.PctUtilBandwidth = 0  
Platform.Network.1.TotalBytesPerSec = 8.8  
Platform.Network.2.AdapterName = Broadcom NetXtreme Gigabit Ethernet Driver  
Platform.Network.2.BytesRecvdPerSec = 8.2  
Platform.Network.2.BytesSentPerSec = 1.5  
Platform.Network.2.CurrBandwidthMbitsPerSec = 100  
Platform.Network.2.PctUtilBandwidth = 0  
Platform.Network.2.TotalBytesPerSec = 9.7  
Platform.Network.TotalNumofAdapters = 2  
Platform.Network.Total.BytesRecvdPerSec = 15.4  
Platform.Network.Total.BytesSentPerSec = 3  
Platform.Network.Total.CurrBandwidthMbitsPerSec = 200  
Platform.Network.Total.NetworkBytesPerSec = 18.5  
Platform.Network.Total.PctUtilBandwidth = 0  
Platform.PagingFile.Total.PctUtil = 0.1  
Platform.PagingFile.Total.PctUtil.Avg = 0.1  
Platform.PagingFile.Total.PctUtil.Peak = 0.1  
Platform.Process.ActiveDomino.TotalCpuUtil = 0.1  
Platform.Process.ActiveNumOfDominoProc = 3  
Platform.Process.event.1.PctCpuUtil = 0  
Platform.Process.event.1.ProcessID = 1252  
Platform.Process.router.1.PctCpuUtil = 0  
Platform.Process.router.1.ProcessID = 1640  
Platform.Process.server.1.PctCpuUtil = 0.1  
Platform.Process.server.1.ProcessID = 956  
Platform.System.ContextSwitchesPerSec = 701.9  
Platform.System.ContextSwitchesPerSec.Avg = 6,854.2  
Platform.System.ContextSwitchesPerSec.Min = 701.9  
Platform.System.ContextSwitchesPerSec.Peak = 10,205.6  
Platform.System.PctCombinedCpuUtil = 0.1  
Platform.System.PctCombinedCpuUtil.Avg = 23.4  
Platform.System.PctCombinedCpuUtil.Peak = 37.9  
Platform.System.PctTotalPrivilegedCpuUtil = 0  
Platform.System.PctTotalPrivilegedCpuUtil.Avg = 8.1  
Platform.System.PctTotalPrivilegedCpuUtil.Peak = 13.2  
Platform.System.PctTotalUserCpuUtil = 0  
Platform.System.PctTotalUserCpuUtil.Avg = 15.3  
Platform.System.PctTotalUserCpuUtil.Peak = 24.7  
Platform.Time.LastSample = 04/12/2003 21:11:46 EDT  
Platform.Time.SampleRateInMins = 10  
Server.Administrators = CN=administrator/O=ibm  
Server.Administrators.Access = CN=administrator/O=ibm

Server.Administrators.FullAccess = CN=administrator/O=ibm  
Server.AvailabilityIndex = 100  
Server.AvailabilityThreshold = 0  
Server.BootID = 4479332  
Server.BusyTimeQuery.ReceivedCount = 0  
Server.CPU.Count = 4  
Server.CPU.Type = Intel Pentium  
Server.ElapsedTime = 12:46:46  
Server.ExpansionFactor = 1  
Server.MailBoxes = 4  
Server.Monitor.Start = 04/12/2003 08:28:32 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 = TCP/IP  
Server.PoweredBy = Notes  
Server.Sessions.Dropped = 0  
Server.SharedMail = 0  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:14:17 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:07 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:07 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:07 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:07 EDT]  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:13:27 EDT]  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:13:29 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:18 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:07 EDT]  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:13:31 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:18 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:07 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:07 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:18 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:18 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:18 EDT]  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:14:17 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:07 EDT]  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:13:48 EDT]  
Server.Task = Router: Idle: [04/12/2003 21:15:13 EDT]  
Server.Task = Event Monitor: Idle: [04/12/2003 21:15:17 EDT]  
Server.Tasks = 140  
Server.Task.DB = Database Server: Idle: [04/12/2003 21:15:17 EDT]  
Server.Time.Start = 04/12/2003 08:28:32 EDT  
Server.Title =  
Server.Trans.PerMinute = 0  
Server.Trans.PerMinute.Peak = 12300  
Server.Trans.PerMinute.Peak.Time = 04/12/2003 19:14:07 EDT  
Server.Trans.Total = 5733682  
Server.Users = 0  
Server.Users.1MinPeak = 2236  
Server.Users.1MinPeakTime = 04/12/2003 14:19:24 EDT  
Server.Users.5MinPeak = 5335  
Server.Users.5MinPeakTime = 04/12/2003 11:39:02 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 = 6506  
Server.Users.Peak.Time = 04/12/2003 14:00:30 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 = 04/12/2003 21:20:13 EDT

Stats.Time.Start = 04/12/2003 08:26:32 EDT  
335 statistics found

Show Stat output from Second partition

```
> sh stat
Database.DAFailoverCount = 0
Database.DARefreshServerInfoCount = 0
Database.DAReloadCount = 0
Database.Database.BufferPool.Maximum.Megabytes = 330
Database.Database.BufferPool.MM.Reads = 12
Database.Database.BufferPool.MM.Writes = 4
Database.Database.BufferPool.Peak.Megabytes = 330
Database.Database.BufferPool.PerCentReadsInBuffer = 89.89
Database.DbCache.CurrentEntries = 1
Database.DbCache.HighWaterMark = 5584
Database.DbCache.Hits = 54731
Database.DbCache.InitialDbOpens = 92188
Database.DbCache.Lookups = 281239
Database.DbCache.MaxEntries = 10000
Database.DbCache.OvercrowdingRejections = 0
Database.ExtMgrPool.Peak = 65,406
Database.ExtMgrPool.Used = 148
Database.FreeHandleStack.FreeHandleStackHits = 845221
Database.FreeHandleStack.HandleAllocations = 873397
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 = 13,653,656
Database.NAMElookupCacheHashSize = 1,162,944
Database.NAMElookupCacheHits = 134,350
Database.NAMElookupCacheLookups = 440,970
Database.NAMElookupCacheMaxSize = 16,777,216
Database.NAMElookupCacheMisses = 302,707
Database.NAMElookupCacheNoHitHits = 3,913
Database.NAMElookupCachePool.Peak = 16,777,216
Database.NAMElookupCachePool.Used = 16,772,384
Database.NAMElookupCacheResets = 0
Database.NAMElookupMisses = 63
Database.NAMElookupTotal = 363486
Database.NAMElookupTotalLookupTime = 1,420.486
Database.NIFPool.Peak = 17,825,792
Database.NIFPool.Used = 201,952
Database.NSFPool.Peak = 120,586,240
Database.NSFPool.Used = 403,616
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 = 30,889,934,848
Disk.C.Size = 36,385,185,792
Disk.C.Type = Fixed
Disk.D.Free = 202,126,495,744
Disk.D.Size = 254,802,690,048
```

Disk.D.Type = Fixed  
Disk.E.Free = 202,152,181,760  
Disk.E.Size = 254,802,690,048  
Disk.E.Type = Fixed  
Disk.Fixed = 6  
Disk.F.Free = 202,125,692,928  
Disk.F.Size = 254,802,690,048  
Disk.F.Type = Fixed  
Disk.G.Free = 202,133,303,296  
Disk.G.Size = 254,802,690,048  
Disk.G.Type = Fixed  
Disk.J.Free = 27,883,964,928  
Disk.J.Size = 36,396,831,232  
Disk.J.Type = Fixed  
Mail.AverageDeliverTime = 1  
Mail.AverageServerHops = 1  
Mail.AverageSizeDelivered = 18  
Mail.CurrentByteDeliveryRate = 0  
Mail.CurrentByteTransferRate = 0  
Mail.CurrentMessageDeliveryRate = 0  
Mail.CurrentMessageTransferRate = 0  
Mail.DBCacheEntries = 0  
Mail.DBCacheHits = 28793  
Mail.DBCacheReads = 181252  
MAIL.Dead = 0  
Mail.Delivered = 179719  
Mail.DeliveredSize.100KB\_to\_1MB = 8628  
Mail.DeliveredSize.10KB\_to\_100KB = 71762  
Mail.DeliveredSize.1KB\_to\_10KB = 90315  
Mail.DeliveredSize.Under\_1KB = 9014  
Mail.Deliveries = 181236  
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 = 116959  
Mail.MaximumDeliverTime = 24  
Mail.MaximumServerHops = 2  
Mail.MaximumSizeDelivered = 147  
Mail.MinimumDeliverTime = 1  
Mail.MinimumServerHops = 1  
Mail.MinimumSizeDelivered = 1  
Mail.PeakByteDeliveryRate = 130851  
Mail.PeakByteTransferRate = 28770  
Mail.PeakMessageDeliveryRate = 6  
Mail.PeakMessageDeliveryTime = 04/12/2003 12:00:49 EDT  
Mail.PeakMessagesDelivered = 366  
Mail.PeakMessagesTransferred = 123  
Mail.PeakMessageTransferRate = 2  
Mail.PeakMessageTransferTime = 04/12/2003 12:29:05 EDT  
Mail.PeakTotalBytesDelivered = 7851113  
Mail.PeakTotalBytesTransferred = 1726253  
Mail.TotalKBDelivered = 3,844,867  
Mail.TotalKBTransferred = 747,999  
Mail.TotalKBTransferred.NRPC = 747,999  
Mail.TotalPending = 0  
Mail.TotalRouted = 256416  
Mail.TotalRouted.NRPC = 256416  
Mail.Transferred = 52555  
Mail.TransferredSize.100KB\_to\_1MB = 1636  
Mail.TransferredSize.10KB\_to\_100KB = 13617  
Mail.TransferredSize.1KB\_to\_10KB = 16984

Mail.TransferredSize.Under\_1KB = 20318  
Mail.Transferred.NRPC = 52555  
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 = 582152034  
Mem.Allocated.Process = 9020304  
Mem.Allocated.Shared = 573131730  
Mem.Availability = Plentiful  
Mem.Free = 5,619,585,023  
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 = 63,535  
NET.GroupCache.Misses = 10  
NET.GroupCache.NumEntries = 5  
NET.GroupCache.Size = 65,406  
NET.GroupCache.Used = 2,200  
NET.Log.sut2/ibm.PeakUnwrittenEntries = 36  
NET.Log.sut2/ibm.UnwrittenEntries = 2  
NET.TCPIP.BytesReceived = 15,446,560,904  
NET.TCPIP.BytesSent = 2,858,699,020  
NET.TCPIP.Sessions.Established.Incoming = 63508  
NET.TCPIP.Sessions.Established.Outgoing = 48712  
NET.TCPIP.Sessions.Limit = 65535  
NET.TCPIP.Sessions.LimitMax = 65535  
NET.TCPIP.Sessions.LimitMin = 10  
NET.TCPIP.Sessions.Peak = 3910  
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 = 0.4  
Platform.LogicalDisk.1.AvgQueueLen.Peak = 2.8  
Platform.LogicalDisk.1.PctUtil = 0  
Platform.LogicalDisk.1.PctUtil.Avg = 37  
Platform.LogicalDisk.1.PctUtil.Peak = 100  
Platform.LogicalDisk.2.AssignedName = HarddiskVolume2  
Platform.LogicalDisk.2.AvgQueueLen = 0  
Platform.LogicalDisk.2.AvgQueueLen.Avg = 0.5  
Platform.LogicalDisk.2.AvgQueueLen.Peak = 2.7  
Platform.LogicalDisk.2.PctUtil = 0  
Platform.LogicalDisk.2.PctUtil.Avg = 45.3  
Platform.LogicalDisk.2.PctUtil.Peak = 100  
Platform.LogicalDisk.3.AssignedName = HarddiskVolume3  
Platform.LogicalDisk.3.AvgQueueLen = 0  
Platform.LogicalDisk.3.AvgQueueLen.Avg = 0.3  
Platform.LogicalDisk.3.AvgQueueLen.Peak = 1.9  
Platform.LogicalDisk.3.PctUtil = 0  
Platform.LogicalDisk.3.PctUtil.Avg = 34.8  
Platform.LogicalDisk.3.PctUtil.Peak = 100  
Platform.LogicalDisk.4.AssignedName = HarddiskVolume4  
Platform.LogicalDisk.4.AvgQueueLen = 0  
Platform.LogicalDisk.4.AvgQueueLen.Avg = 0.3  
Platform.LogicalDisk.4.AvgQueueLen.Peak = 2.7  
Platform.LogicalDisk.4.PctUtil = 0  
Platform.LogicalDisk.4.PctUtil.Avg = 34.1  
Platform.LogicalDisk.4.PctUtil.Peak = 100  
Platform.LogicalDisk.5.AssignedName = C  
Platform.LogicalDisk.5.AvgQueueLen = 0

Platform.LogicalDisk.5.AvgQueueLen.Avg = 0  
Platform.LogicalDisk.5.AvgQueueLen.Peak = 0  
Platform.LogicalDisk.5.PctUtil = 0.1  
Platform.LogicalDisk.5.PctUtil.Avg = 0.1  
Platform.LogicalDisk.5.PctUtil.Peak = 0.8  
Platform.LogicalDisk.6.AssignedName = J  
Platform.LogicalDisk.6.AvgQueueLen = 0  
Platform.LogicalDisk.6.AvgQueueLen.Avg = 0.1  
Platform.LogicalDisk.6.AvgQueueLen.Peak = 0.2  
Platform.LogicalDisk.6.PctUtil = 0.3  
Platform.LogicalDisk.6.PctUtil.Avg = 10.3  
Platform.LogicalDisk.6.PctUtil.Peak = 24.7  
Platform.LogicalDisk.TotalNumofDisks = 6  
Platform.Memory.PagesPerSec = 0  
Platform.Memory.PagesPerSec.Avg = 2,564.6  
Platform.Memory.PagesPerSec.Peak = 3,956.8  
Platform.Memory.RAM.AvailMBytes = 1,263.4  
Platform.Memory.RAM.AvailMBytes.Avg = 1,497.6  
Platform.Memory.RAM.AvailMBytes.Min = 1,201.5  
Platform.Memory.RAM.AvailMBytes.Peak = 3,284.6  
Platform.Memory.RAM.PctUtil = 67  
Platform.Memory.RAM.TotalMBytes = 3840  
Platform.Network.1.AdapterName = Intel 8255x-based Integrated Fast Ethernet  
Platform.Network.1.BytesRecvdPerSec = 13.2  
Platform.Network.1.BytesSentPerSec = 5.3  
Platform.Network.1.CurrBandwidthMbitsPerSec = 100  
Platform.Network.1.PctUtilBandwidth = 0  
Platform.Network.1.TotalBytesPerSec = 18.5  
Platform.Network.2.AdapterName = Broadcom NetXtreme Gigabit Ethernet Driver  
Platform.Network.2.BytesRecvdPerSec = 14.5  
Platform.Network.2.BytesSentPerSec = 6  
Platform.Network.2.CurrBandwidthMbitsPerSec = 100  
Platform.Network.2.PctUtilBandwidth = 0  
Platform.Network.2.TotalBytesPerSec = 20.5  
Platform.Network.TotalNumofAdapters = 2  
Platform.Network.Total.BytesRecvdPerSec = 27.7  
Platform.Network.Total.BytesSentPerSec = 11.3  
Platform.Network.Total.CurrBandwidthMbitsPerSec = 200  
Platform.Network.Total.NetworkBytesPerSec = 39  
Platform.Network.Total.PctUtilBandwidth = 0  
Platform.PagingFile.Total.PctUtil = 0.1  
Platform.PagingFile.Total.PctUtil.Avg = 0.1  
Platform.PagingFile.Total.PctUtil.Peak = 0.1  
Platform.Process.ActiveDomino.TotalCpuUtil = 0.1  
Platform.Process.ActiveNumOfDominoProc = 3  
Platform.Process.event.1.PctCpuUtil = 0  
Platform.Process.event.1.ProcessID = 1220  
Platform.Process.router.1.PctCpuUtil = 0  
Platform.Process.router.1.ProcessID = 2052  
Platform.Process.server.1.PctCpuUtil = 0.1  
Platform.Process.server.1.ProcessID = 1760  
Platform.System.ContextSwitchesPerSec = 702.3  
Platform.System.ContextSwitchesPerSec.Avg = 6,837.7  
Platform.System.ContextSwitchesPerSec.Min = 701.6  
Platform.System.ContextSwitchesPerSec.Peak = 10,183  
Platform.System.PctCombinedCpuUtil = 0.1  
Platform.System.PctCombinedCpuUtil.Avg = 23.4  
Platform.System.PctCombinedCpuUtil.Peak = 37.7  
Platform.System.PctTotalPrivilegedCpuUtil = 0  
Platform.System.PctTotalPrivilegedCpuUtil.Avg = 8.1  
Platform.System.PctTotalPrivilegedCpuUtil.Peak = 13.3  
Platform.System.PctTotalUserCpuUtil = 0  
Platform.System.PctTotalUserCpuUtil.Avg = 15.3  
Platform.System.PctTotalUserCpuUtil.Peak = 24.6  
Platform.Time.LastSample = 04/12/2003 21:14:18 EDT  
Platform.Time.SampleRateInMins = 10  
Server.Administrators = CN=administrator/O=ibm  
Server.Administrators.Access = CN=administrator/O=ibm

Server.Administrators.FullAccess = CN=administrator/O=ibm  
Server.AvailabilityIndex = 100  
Server.AvailabilityThreshold = 0  
Server.BootID = 4493830  
Server.BusyTimeQuery.ReceivedCount = 0  
Server.CPU.Count = 4  
Server.CPU.Type = Intel Pentium  
Server.ElapsedTime = 12:46:47  
Server.ExpansionFactor = 1  
Server.MailBoxes = 4  
Server.Monitor.Start = 04/12/2003 08:30:34 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 = TCP/IP  
Server.PoweredBy = Notes  
Server.Sessions.Dropped = 0  
Server.SharedMail = 0  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:14:06 EDT]  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:14:06 EDT]  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:14:17 EDT]  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:14:06 EDT]  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:14:06 EDT]  
Server.Task = Router: Searching for mail to transfer: [04/12/2003 19:14:06 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:13:45 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:17 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:17 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:17 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:17 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:13:49 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:17 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:13:45 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:17 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:17 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:13:49 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:13:49 EDT]  
Server.Task = Router: Searching for mail to deliver: [04/12/2003 19:14:17 EDT]  
Server.Task = Router: Idle: [04/12/2003 21:17:17 EDT]  
Server.Task = Event Monitor: Idle: [04/12/2003 21:17:20 EDT]  
Server.Tasks = 140  
Server.Task.DB = Database Server: Idle: [04/12/2003 21:17:20 EDT]  
Server.Time.Start = 04/12/2003 08:30:34 EDT  
Server.Title =  
Server.Trans.PerMinute = 0  
Server.Trans.PerMinute.Peak = 8452  
Server.Trans.PerMinute.Peak.Time = 04/12/2003 19:14:13 EDT  
Server.Trans.Total = 2892573  
Server.Users = 0  
Server.Users.1MinPeak = 1398  
Server.Users.1MinPeakTime = 04/12/2003 14:26:37 EDT  
Server.Users.5MinPeak = 3197  
Server.Users.5MinPeakTime = 04/12/2003 12:46:25 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 = 3907  
Server.Users.Peak.Time = 04/12/2003 16:19:06 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 = 04/12/2003 21:20:02 EDT



Stats.Time.Start = 04/12/2003 08:28:58 EDT  
335 statistics found

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