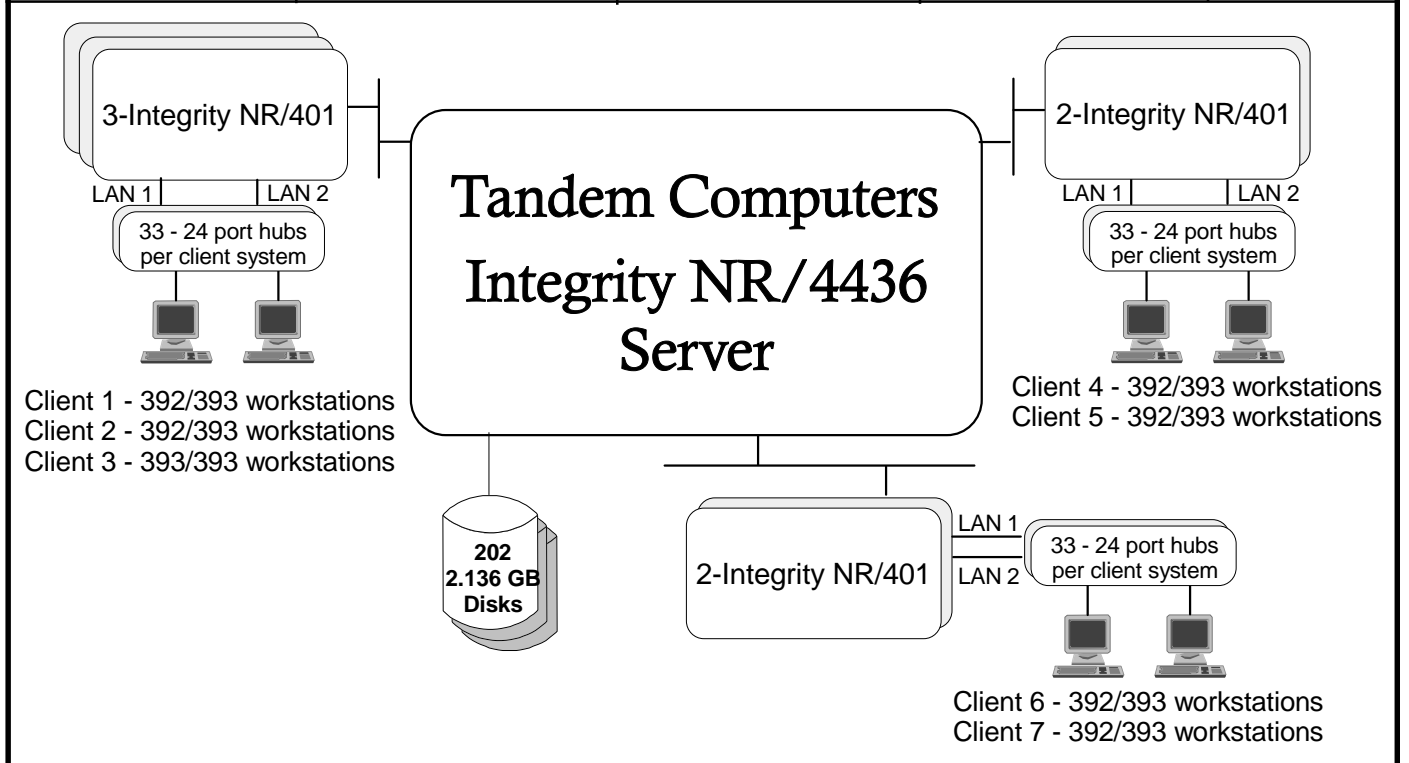


| | | | |
|--------------------------|---|-------------------|---|
| Tandem Informix Software | Tandem Integrity NR/4436 Server | | TPC-C Rev 3.0 |
| | C/S Configuration - 7 Integrity NR/401 front-ends | | Report Date: 6 Nov 1995 |
| Total System Cost | TPC-C Throughput | Price/Performance | Availability Date |
| \$3,115,351 | 6,313.78 tpmC | \$493 per tpmC | 28 Feb 96 |
| Processors | Database Manager | Operating System | Other Software |
| 16 R4400SC 250 MHz | INFORMIX- OnLine Dynamic Server version 7.11.UD1 | IRIX 6.2 | IMC TUXEDO Transaction Monitor v4.2.2 |
| | | | Number of Users 5,500 |



| System Components | Server | | Client(s) | |
|-----------------------|----------|--|-----------|--|
| | Quantity | Type | Quantity | Type |
| Processors | 16 | R4400SC 250 MHz | 1 | R4400SC 175 MHz per client |
| Cache Memory | | 16 KB Instruction and Data 4 MB Secondary | | 16 KB Instruction and Data 1 MB Secondary |
| Memory | | 2,048 MB | | 256 MB per client |
| Disk Controllers | 8 | SCSI2 Fast/Wide Interfaces | 1 | SCSI interface per client |
| Disk Drives | 202 | 2.136 GB SCSI | 1 | 1.0 GB per client |
| Total Storage | | 431.503 GB | | |
| Tape Drives | 1 | 7 GB, 8mm internal tape | | |
| Terminals | 1 | System Console | 1 | System Console per client |
| Terminal Connectivity | | | 5,500 | Indy R4600 Workstations total |
| | | | 33 | 24 port hubs per client (plus 10% spares) |

| | | |
|-----------------------------|--|-------------------------|
| Tandem Informix Software | Tandem Integrity NR/4436 Server Client/Server Configuration | TPC-C Rev 3.0 |
| | | Report Date: 6 Nov 1995 |

| Description | Part Number | Unit Price | Quantity | Extended Price | 5 Year Support |
|--|--------------------|------------|----------|-----------------------|---------------------|
| 4 CPU Integrity NR/4436 (server) | R4636-4 | \$202,900 | 1 | \$202,900.00 | \$96,210.00 |
| 4x250 MHz CPU Expansion Card | R1043 | 106000 | 3 | 318,000.00 | 167,220.00 |
| 2 GB 8 way interleaved SD Memory | R1231 | 218,250 | 1 | 218,250.00 | 28,890.00 |
| Additional PowerChannel-2 | R1511 | 12,750 | 3 | 38,250.00 | 17,010.00 |
| HIO, 3 FWSCSI card for NR | R1508 | 3,700 | 8 | 29,600.00 | 10,800.00 |
| 7 GB 8mm Tape Drive, Internal | R1444 | 5,750 | 1 | 5,750.00 | 2,700.00 |
| NR/4436 Disk Expansion Rack - 12 bays | R1613A | 10,000 | 2 | 20,000.00 | 4,320.00 |
| 8 x 2 GB Disks and SCSIbox2 for NR/4436 | R1641 | 28,000 | 1 | 28,000.00 | 4,590.00 |
| 8 x 2 GB Disks and SCSIbox2 for NR/4436 exp. | R1643 | 28,000 | 24 | 672,000.00 | 110,160.00 |
| 2.1 GB 7200 RPM Disk for NR Sys/Exp Cabinet | R1636 | 3,750 | 1 | 3,750.00 | 810.00 |
| IRIX development option for IRIX 6.2 | R1715-C | 1,200 | 1 | 1,200.00 | 3,780.00 |
| Integrity NR/401 (clients) | R401CC | 16,695 | 7 | 116,865.00 | 46,890.00 |
| 64 MB memoryb upgrade | R1209 | 5,450 | 21 | 114,450.00 | 0.00 |
| GIO Ethernet Card | R1535 | 625 | 7 | 4,375.00 | 0.00 |
| HTI Ultra Slimline 24 port hub | DEH-1477 | 318 | 253 | 80,454.00 | 0.00 |
| IMC Tuxedo 4.2.2 Transaction Monitor | | 3,500 | 7 | 24,500.00 | 18,375.00 |
| INFORMIX-OnLine RT (5,000+ users) | | 702,000 | 1 | 702,000.00 | 168,480.00 |
| INFORMIX-ESQL/C RT (5,000+ users) | | 117,000 | 1 | 117,000.00 | 28,080.00 |
| INFORMIX-OnLine Development (1 user) | | 1,500 | 1 | 1,500.00 | 1,080.00 |
| INFORMIX -ESQL/C Development (1 user) | | 375 | 1 | 375.00 | 300.00 |
| Grand Totals | | | | \$2,699,219.00 | \$709,695.00 |
| Tandem NR/4436 Discount | | | | (184,524.00) | |
| Tandem NR/401 Discount | | | | (28,283.00) | |
| Tandem Hardware Support Discount | | | | | (70,915) |
| Tandem Software Support Discount | | | | | (9,841) |
| Grand Totals after Discounts | | | | \$2,486,412.00 | \$628,939.00 |
| Five Year Cost of Ownership | \$3,115,351 | | | | |
| tpmC | 6,313.78 | | | | |
| \$/tmpC | \$493 | | | | |

Notes:

Audited by Tom Sawyer of Performance Metrics, Inc.

Numerical Quantities Summary
Tandem Computers Integrity NR/4436 Server
INFORMIX-OnLine Dynamic Server version 7.11.UD1

MQTh, Computed Maximum Qualified Throughput: 6,313.78

Transaction Mix
(% of Total Transactions)

| | |
|--------------|-------------|
| New-Order | 44.8000000% |
| Payment | 43.0900000% |
| Order-Status | 3.9977058% |
| Delivery | 4.0300000% |
| Stock-Level | 4.0800000% |

Response Time (seconds)

| Transaction | Average | 90th Percentile | Maximum |
|------------------------|---------|--------------------|---------|
| New-Order | 2.64 | 2.89 | 63.92 |
| Payment | 1.26 | 1.50 | 54.03 |
| Order-Status | 1.24 | 1.73 | 16.83 |
| Delivery (interactive) | 0.19 | 0.33 | 1.56 |
| Delivery (deferred) | 5.32 | 7.91 | 62.33 |
| Stock-Level | 9.17 | 14.26 | 73.99 |
| Menu | | | |

Keying/Think Times (seconds)

| | Minimum | Average | Maximum |
|------------------------|--------------|---------------|----------------|
| New-Order | 18.00 / 0.10 | 18.00 / 12.03 | 18.00 / 120.00 |
| Payment | 3.00 / 0.10 | 3.00 / 12.15 | 3.00 / 120.00 |
| Order-Status | 2.00 / 0.10 | 2.00 / 10.15 | 2.00 / 100.00 |
| Delivery (interactive) | 2.00 / 0.10 | 2.00 / 5.01 | 2.00 / 50.00 |
| Stock-Level | 2.00 / 0.10 | 2.00 / 5.00 | 2.00 / 44.80 |

| Test Duration: | |
|----------------------------------|---------------|
| Ramp-up time | 30.03 minutes |
| Measurement interval (MI) | 30 minutes |
| Transactions completed during MI | 420,191 |
| Ramp-down time | 9 minutes |
| Checkpointing: | |
| Number of checkpoints | 1 |
| Checkpoint interval | 30 minutes |
| Reproducibility: | |
| Reported measurement | 6,313.78 |
| Reproducibility measurement | 6,257.67 |
| Difference | 0.89% |