

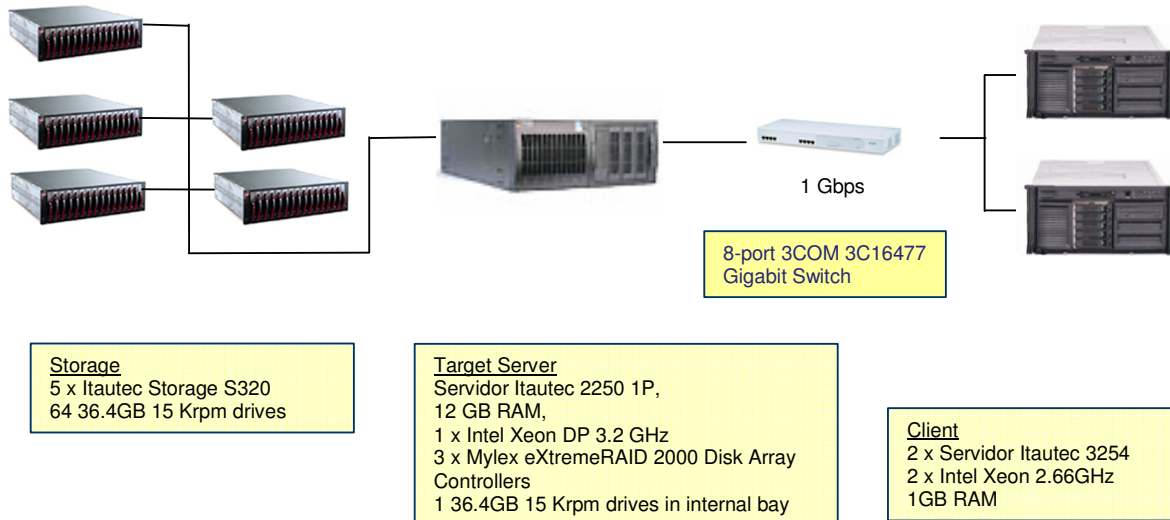


**Servidor Itautec 2250 1P C/S  
with Servidor Itautec 3254**

**TPC-C Rev. 5.3**

**Report Date: 12/14/2004**

|  |  |  |  |
|--|--|--|--|
| <b>Total System Cost</b>   | <b>TPC-C Throughput</b>                          | <b>Price/Performance</b>               | <b>Availability Date</b>               |
| R\$ 525,625 BRL  | 32,464   | R\$ 16.19 BRL                          | 12/14/2004                             |
| <b>Processors</b>  | <b>Database Manager</b>                          | <b>Operating System</b>                | <b>Other Software</b>                  |
| 1 Intel Xeon DP 3.2 GHz – Server<br>2 Intel Xeon 2.66 GHz – Client | Microsoft SQL Server 2000 Enterprise Edition SP3 | Windows Server 2003 Enterprise Edition | Microsoft Visual C++<br>Microsoft COM+ |
| <b>Number of Users</b>   |  |  |  |
| <b>25,880</b>  |  |  |  |



| System Components       | Server   |   | Each Client |   |
|-------------------------|----------|---|-------------|---|
|                         | Quantity | Description   | Quantity    | Description   |
| <b>Processor</b>        | 1        | 3.2 GHz Intel Xeon DP w/ 2 MB cache / 533 MHz frontside BUS | 2           | 2.66 GHz Xeon w/ 512 KB cache / 533 MHz frontside BUS |
| <b>Memory</b>           | 6        | 2GB Register DDR ECC 266MHz                                 | 2           | 512 MB Register SDRAM ECC DIMM                        |
| <b>Disk Controllers</b> | 3        | Mylex eXtremeRAID 2000                                      | 1           | Adaptec AIC-7899 Ultra2                               |
| <b>Disk Drives</b>      | 1        | 36.4 GB SCSI Drive 15 Krpm                                  | 1           | 36.4 GB 10Krpm SCSI Drive                             |
|                         | 64       | 36.4 GB SCSI Drive 15 Krpm                                  |             |   |
| <b>Total Storage</b>    | 2366 GB  |   | 36.4 GB     |   |
| <b>Tape Drives</b>      | 1        | 20/40 GB DAT  |             |   |

# Numerical Quantities Summary

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MQTh, Computed Maximum Qualified Throughput

32,464 tpmC

## Response Times (in seconds)

|                        | Average | 90 th | Max   |
|------------------------|---------|-------|-------|
| New Order              | 0.34    | 0.54  | 13.81 |
| Payment                | 0.22    | 0.35  | 13.40 |
| Order Status           | 0.39    | 0.65  | 14.14 |
| Delivery (interactive) | 0.10    | 0.11  | 2.40  |
| Delivery (deferred)    | 0.41    | 0.68  | 5.47  |
| Stock Level            | 1.31    | 2.15  | 8.04  |
| Menu                   | 0.11    | 0.11  | 8.85  |

## Response time delay added for emulated components

Menu 0.1  
Resp. 0.1

## Transaction Mix, in percent of total transactions


|              |        |
|--------------|--------|
| New-Order    | 44.93% |
| Payment      | 43.05% |
| Order-Status | 4.00%  |
| Delivery     | 4.01%  |
| Stock-Level  | 4.01%  |

## Keying/Think Times (in seconds)

|              | Min   |      | Average |       | Max   |        |
|--------------|-------|------|---------|-------|-------|--------|
| New Order    | 18.00 | 0.00 | 18.01   | 12.07 | 18.05 | 120.71 |
| Payment      | 3.00  | 0.00 | 3.01    | 12.08 | 3.05  | 120.71 |
| Delivery     | 2.00  | 0.00 | 2.01    | 5.08  | 2.05  | 50.71  |
| Stock Level  | 2.00  | 0.00 | 2.01    | 5.08  | 2.04  | 50.71  |
| Order Status | 2.00  | 0.00 | 2.01    | 10.08 | 2.04  | 100.71 |

## Test Duration

|  |             |
|--|-------------|
| Ramp-up time   | 54 minutes  |
| Measurement interval   | 120 minutes |
| Number of checkpoints  | 4           |
| Checkpoint interval  | 30 minutes  |
| Number of transactions (all types) completed in measurement interval | 9,016,986   |

|  | Itautec Philco | Servidor Itautec 2250 1P |         |            | TPC-C Rev. 5.3                |                                      |                    |
|---|----------------|--------------------------|---------|------------|-------------------------------|--------------------------------------|--------------------|
|   |                |                          |         |            | Report Date: October 15, 2004 |                                      |                    |
| Description   | Part Number    | Third Party              |         | Unit Price | Quantity                      | Extended Price                       | 3 yr. Maint. Price |
|   |                | Brand                    | Pricing | R\$        |                               |                                      |                    |
| <b>Server Hardware</b>  |                |                          |         |            |                               |                                      |                    |
| Servidor Itautec 2250 1P  |                |                          |         |            |                               |                                      |                    |
| Base System with 1 x Xeon DP 3.2Ghz/2M  | B7ZJQ          | Itautec                  | 1       | 12.156     | 1                             | 12.156                               | -                  |
| 2 GB DDR266 PC1600 ECC Reg memory   | F7880          | Itautec                  | 1       | 10.099     | 6                             | 60.594                               | -                  |
| 36GB Ultra320 15K rpm   | F4637          | Itautec                  | 1       | 2.209      | 1                             | 2.209                                | -                  |
| DAT Drive (12/24 GB)  | G4688          | Itautec                  | 1       | 2.738      | 1                             | 2.738                                | -                  |
| On-Board Intel PRO1000XT LAN  | Included       | Itautec                  | 1       | -          | 1                             | -                                    | -                  |
| On-Board Intel PRO100+ LAN  | Included       | Itautec                  | 1       | -          | 1                             | -                                    | -                  |
| CD-ROM, Internal SCSI Adapter   | Included       | Itautec                  | 1       | -          | 1                             | -                                    | -                  |
| Upgrade to 3-year / 4-hour response / 7days - 24hrs                               | 2803_04        | Itautec                  | 1       | 451        | 1                             | -                                    | 451                |
| Monitor 15" SYNC MASTER 551S  | E9801          | Itautec                  | 1       | 450        | 1                             | 450                                  | -                  |
| UPS SMART APC 1   | 92759          | Itautec                  | 1       | 3.469      | 1                             | 3.469                                | -                  |
| <b>Subtotal</b>   |                |                          |         |            |                               | 81.616                               | 451                |
| <b>Disk Subsystem</b>   |                |                          |         |            |                               |                                      |                    |
| Extreme RAID 2000 4 Channel Controller  | A4805          | Itautec                  | 1       | 15.323     | 3                             | 45.969                               | -                  |
| Itautec Storage Ultrab SC2100CTR-AC   | F1390          | Itautec                  | 1       | 20.283     | 5                             | 101.415                              | -                  |
| 36GB Ultra320 15K rpm   | F6853          | Itautec                  | 1       | 2.728      | 64                            | 174.592                              | -                  |
| 36GB Ultra320 15K rpm (10% spare)   | F6853          | Itautec                  | 1       | 2.728      | 7                             | -                                    | 19.096             |
| EXT SCSI Cable Eurou VHDCI68P   | E8158          | Itautec                  | 1       | 611        | 5                             | 3.055                                | -                  |
| Kit Rack for Storage  | F1781          | Itautec                  | 1       | 813        | 5                             | 4.065                                | -                  |
| Rack Itautec F2400  | F2400          | Itautec                  | 1       | 5.175      | 1                             | 5.175                                | -                  |
| <b>Subtotal</b>   |                |                          |         |            |                               | 334.271                              | 19.096             |
| <b>Server Software</b>  |                |                          |         |            |                               |                                      |                    |
| Microsoft Windows 2003 Enterprise Edition   | G1178          | Microsoft                | 1       | 15.067     | 1                             | 15.067                               | -                  |
| SQL SVR 2000 ENT/1 PROCES LICENSE CD ING  | H0138          | Microsoft                | 1       | 80.355     | 1                             | 80.355                               | -                  |
| <b>Subtotal</b>   |                |                          |         |            |                               | 95.422                               | -                  |
| <b>Client Hardware</b>  |                |                          |         |            |                               |                                      |                    |
| Servidor Itautec 3254   |                |                          |         |            |                               |                                      |                    |
| Base System with 1 x Xeon DP 2,66GHz  | B7PLV          | Itautec                  | 1       | 10.790     | 2                             | 21.581                               | -                  |
| 1 x Xeon 2,66Ghz BTO Option   | F8273          | Itautec                  | 1       | 1.515      | 2                             | 3.031                                | -                  |
| 2 x 512MB Memory  | F9283          | Itautec                  | 1       | 1.679      | 2                             | 3.358                                | -                  |
| 1 x 36GB 10K rpm  | F3656          | Itautec                  | 1       | 1.063      | 2                             | 2.126                                | -                  |
| Intel 1000 Base TX Ethernet Controller  | Included       | Itautec                  | 1       | -          | 2                             | -                                    | -                  |
| CD-ROM, On-Board LAN  | Included       | Itautec                  | 1       | -          | 2                             | -                                    | -                  |
| Upgrade to 3-year / 4-hour response / 7days - 24hrs                               | 2803_04        | Itautec                  | 1       | 532        | 2                             | -                                    | 1.063              |
| Monitor 15" SYNC MASTER 551S  | E9801          | Itautec                  | 1       | 410        | 2                             | 820                                  | -                  |
| <b>Subtotal</b>   |                |                          |         |            |                               | 30.916                               | 1.063              |
| <b>Client Software</b>  |                |                          |         |            |                               |                                      |                    |
| Microsoft Windows 2000 Server   | C11-00821      | Microsoft                | 1       | 3.956      | 2                             | 7.911                                | -                  |
| Visual C++ .NET 2003 CD Ing   | 254-00170      | Microsoft                | 1       | 423        | 1                             | 423                                  | -                  |
| <b>Subtotal</b>   |                |                          |         |            |                               | 8.334                                | -                  |
| <b>Network components</b>   |                |                          |         |            |                               |                                      |                    |
| SWITCH 8P BASELINE 10/100/1000  | 3C16477-ME     | Itautec                  | 1       | 2.148      | 1                             | 2.148                                | -                  |
| SWITCH 8P BASELINE 10/100/1000 (2 spares)   | 3C16477-ME     | Itautec                  | 1       | 2.148      | 2                             | -                                    | 4.296              |
| <b>Subtotal</b>   |                |                          |         |            |                               | 2.148                                | 4.296              |
| <b>TOTAL</b>  |                |                          |         |            |                               | 552.707                              | 24.906             |
| Large volume purchase with cash in advance Discount on Itautec Hardware (11.58%)  |                |                          |         |            |                               | 51.989                               |                    |
| <b>TOTAL</b>  |                |                          |         |            |                               | 500.718                              | 24.906             |
| Pricing: 1 - Itautec  |                |                          |         |            |                               | 3-Yr. Cost of Ownership: R\$ 525.625 | BRL                |
|   |                |                          |         |            |                               | tpmC Rating:                         | 32464              |
|   |                |                          |         |            |                               | <b>R\$ / tpmC: R\$ 16,19</b>         | <b>BRL</b>         |

Prices used in TPC benchmarks reflect the actual prices a customer would pay for a one-time purchase of the stated components. Individually negotiated discounts are not permitted. Special prices based on assumptions about past or future purchases are not permitted. All discounts reflect standard pricing policies for the listed components. For complete details, see the pricing sections of the TPC benchmark specifications. If you find that the stated prices are not available according to these items, please inform the TPC at [pricing@tpc.org](mailto:pricing@tpc.org).