**TPC-H Rev. 2.7.0**

**PRIMERGY RX300 S4 using EXASolution 2.1**

**Report Date**
June 2, 2008

**Total System Cost**
$1,200,544

**Composite Query per Hour Metric Price / Performance**
$1,018,321.9
QphH@1000GB
$1.18
$ / QphH@1000GB

**Database Size**
1000 GB

**Database Manager**
EXASolution 2.1

**Operating System**
EXACluster OS 2.1

**Other Software**
C++ Compiler

**Availability Date**
August 1, 2008

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**Query Times in seconds**

- **Q1**
- **Q2**
- **Q3**
- **Q4**
- **Q5**
- **Q6**
- **Q7**
- **Q8**
- **Q9**
- **Q10**
- **Q11**
- **Q12**
- **Q13**
- **Q14**
- **Q15**
- **Q16**
- **Q17**
- **Q18**
- **Q19**
- **Q20**
- **Q21**
- **Q22**
- **Q23**
- **Q24**
- **Q25**
- **Q26**
- **Q27**
- **Q28**
- **Q29**
- **Q30**
- **Q31**
- **Q32**
- **Q33**
- **Q34**
- **Q35**
- **Q36**
- **Q37**
- **Q38**
- **Q39**
- **Q40**
- **Q41**
- **Q42**
- **Q43**
- **Q44**
- **Q45**
- **Q46**
- **Q47**
- **Q48**
- **Q49**
- **Q50**
- **Q51**
- **Q52**
- **Q53**
- **Q54**
- **Q55**
- **Q56**
- **Q57**
- **Q58**
- **Q59**
- **Q60**
- **Q61**
- **Q62**
- **Q63**
- **Q64**
- **Q65**
- **Q66**
- **Q67**
- **Q68**
- **Q69**
- **Q70**
- **Q71**
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- **Q73**
- **Q74**
- **Q75**
- **Q76**
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- **Q78**
- **Q79**
- **Q80**
- **Q81**
- **Q82**
- **Q83**
- **Q84**
- **Q85**
- **Q86**
- **Q87**
- **Q88**
- **Q89**
- **Q90**
- **Q91**
- **Q92**
- **Q93**
- **Q94**
- **Q95**
- **Q96**
- **Q97**
- **Q98**
- **Q99**
- **Q100**

**Database Load Time**
1.06

**Included Backup**
N

**Data Storage / Database Size**
13.05

**RAID (Base tables only)**
Y

**RAID (Base tables and auxiliary data structures)**
Y

**RAID (All)**
Y

**System Configuration**

- 48 x PRIMERGY RX300 S4 Server, each with:
  - 2 Intel XEON X5460 QC 3.16 GHz processors (each is 1 chip, 4 cores, 4 threads)
  - 16 GB RAM
  - 2x 146 GB (15k rpm) internal SAS disks

**Total Storage**

13,053 GB

(1 GB = 1024 * 1024 * 1024 bytes)
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<th>Part Number</th>
<th>Pricing</th>
<th>Qty</th>
<th>Extended Price</th>
<th>3 yr. Maint. Price</th>
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Price Key: 1-FSC, contact: Julian Sayer, Julian.Sayer@fujitsu-siemens.com
2-EXASOL, contact: Olga Sapozhnykova, sales@exasol.com

All discounts are based on list prices and for similar quantities and configurations.

Results independently audited by: Francois Raab of InfoSizing, Inc. (www.sizing.com)

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 terms please inform the TPC at pricing@tpc.org.
Numerical Quantities

Measurement Results

Database Scale Factor: 1000 GB
Total Data Storage / Database Size: 13.05
Start of Database Load: 22:49:44
End of Database Load: 23:53:26
Database Load Time: 1h 03m 42 s

Query Streams for Throughput Test: 11
TPC-H Power: 726,076.1
TPC-H Throughput: 1,428,196.7
TPC-H Composite Query-per-Hour Metric (QphH@1000GB): 1,018,321.9
Total System Price Over 3 Years: $1,200,544
TPC-H Price/ Performance Metric ($/QphH@1000GB): $1.18

Measurement Interval

Measurement Interval in Throughput Test (Ts): 598 seconds

Duration of Stream Execution

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### TPC-H Timing Intervals (in seconds)

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<th>Stream 2</th>
<th>Stream 3</th>
<th>Stream 4</th>
<th>Stream 5</th>
<th>Stream 6</th>
<th>Stream 7</th>
<th>Stream 8</th>
<th>Stream 9</th>
<th>Stream 10</th>
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