**PowerEdge R7515**

<table>
<thead>
<tr>
<th>Availability Date</th>
<th>TPCx-HS Performance</th>
<th>Price/Performance</th>
<th>Total System Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 15, 2019</td>
<td>11.73 HSph@1TB</td>
<td>$38,182.70 $ / HSph@1TB</td>
<td>$447,883 USD</td>
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</tbody>
</table>

**System Under Test Configuration Overview**

<table>
<thead>
<tr>
<th>Scale Factor</th>
<th>Hadoop Software</th>
<th>Operating System</th>
<th>Other Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cloudera Enterprise Edition 6.3</td>
<td>Red Hat Enterprise Linux Server 7.6</td>
<td>N/A</td>
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</tbody>
</table>

**Physical Storage/Scale Factor: 48.00**

**Scale Factor/Physical Memory: 0.20**

**Server Configuration:**

- **Processors:**
  - Per PowerEdge R7515
    - 1x AMD EPYC 7542 32-Core Processor
    - 512 GiB
    - Perc H740P
    - 2x 240GB SATA SSD m.2
    - 3x Dell 1.6TB NVMe
    - Mellanox Dual Port 100GbE
  - Per PowerEdge R6525
    - 2x AMD EPYC 7502 32-Core Processor
    - 512 GiB
    - Perc H740P
    - 2x 240GB SATA SSD m.2
    - Broadcom Adv. Dual 25Gb Ethernet NIC (cluster connectivity)
    - 1x Embedded Broadcom Gigabit NIC (external connectivity)

- **Memory:**
  - 512 GB (8x 64GB RDIMM 3200MT/s, Dual Rank)

- **Storage Controller:**
  - Perc H740P

- **Storage Device:**
  - 2x 240GB SATA SSD m.2

- **Network:**
  - Mellanox Dual Port 100GbE
  - Broadcom Adv. Dual 25Gb Ethernet NIC

- **Connectivity:**
  - Mellanox SN2700 (32-port, 100GbE)

**Total Rack Units:**

\[(9xR7515)+(1xR6525)+(1xMSN2700) = 18 + 1 + 1 = 20RU\]
## EXECUTIVE SUMMARY

PowerEdge R7515

TPC Pricing 2.4.0

Report Date Sep. 17, 2019

### HARDWARE COMPONENTS

<table>
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<tr>
<th>Description</th>
<th>Part Number</th>
<th>Source</th>
<th>Unit Price</th>
<th>Qty</th>
<th>Extended Price</th>
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<td>3 Years ProSupport Plus Mission Critical 4Hr Onsite Service</td>
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Subtotal $414,805.48 $47,691.00

(continued on next page)
### EXECUTIVE SUMMARY

**PowerEdge R7515**

<table>
<thead>
<tr>
<th>Hardware Components</th>
<th>Subtotal</th>
</tr>
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<tbody>
<tr>
<td>Cloudera Enterprise Data Engineering (CDH 6.3), 3yr Node License</td>
<td>$147,652.40</td>
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<tr>
<td>Red Hat Linux Registration Document, No Subscription</td>
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<td>No Systems Documentation, No OpenManage DVD Kit</td>
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<tr>
<td>US Order</td>
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<td>ProSupport and 4Hr Mission Critical, 36 Month(s)</td>
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<table>
<thead>
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<th>Software Components</th>
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<td>No Trusted Platform Module</td>
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<tr>
<td>PowerEdge R6525 Shipping Label, FCC2, PSU, 800W, w/o BIS</td>
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<td>AMD EPYC 7502 2.00GHz/12 355Ghs, 32C/64T, 64K Cache (180W) DDR4-2666</td>
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<td>HeatSink for 2nd CPU, greater than or equal to 180W</td>
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<td>Unconfigured RAID</td>
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<td>PERC H745 for Chassis up to 10 drives</td>
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<td>iDRAC9,Enterprise</td>
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<td>iDRAC, Factory Generated Password</td>
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<tr>
<td>Dell EMC Luggage Tag (x8 or x10 chassis)</td>
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<td>Performance BIOS Settings</td>
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<tr>
<td>UEFI BIOS Boot Mode with GPT Partition</td>
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<tr>
<td>ReadyRails Sliding Rails With Cable Management Arm</td>
<td>$412.461</td>
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<tr>
<td>No Systems Documentation, No OpenManage DVD Kit</td>
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<td>US Order</td>
<td>$412.461</td>
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<tr>
<td>ProSupport and 4Hr Mission Critical, 36 Month(s)</td>
<td>$412.461</td>
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<tr>
<td>No Installation</td>
<td>$412.461</td>
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<tr>
<td>NEMA 5-15P to C13 Wall Plug, 125 Volt, 15 AMP, 10 Feet (3m), Power Cord, North America</td>
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**Three-Year Cost of Ownership:**

- **HSPh@1TB:** $447,883
- **$ / HSPh@1TB:** $38,182.70

**Prices used in TPC benchmarks reflect the actual prices a customer would pay for a one-time purchase of the stated Line Items. 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 Line Items. For complete details, see the pricing section of the TPC Benchmark Standard. If you find that the stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.**
# PowerEdge R7515

## Executives Summary

**PowerEdge R7515 TPCx-HS 2.0.3**

**Report Date** Sep. 17, 2019

### Numerical Quantities

#### Performance Run – Run 1

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<th>Scale Factor</th>
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<td>Run End Time</td>
<td>2019-09-09 20:25:03.000</td>
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<td>Run Elapsed Time</td>
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<td>HSGen Start Time</td>
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<td>HSGen End Time</td>
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#### Repeatability Run – Run 2

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<tr>
<td>Run Elapsed Time</td>
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<td>HSGen Start Time</td>
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<td>HSGen End Time</td>
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Run Reports

Run Report for Performance Run – Run 1
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TPCx-HS Performance Metric (HSph@SF) Report

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                    Total Size = 10000000000
                    Scale-Factor = 1

TPCx-HS Performance Metric (HSph@SF): 11.7370

============================================

Run Report for Repeatability Run – Run 2
============================================
TPCx-HS Performance Metric (HSph@SF) Report

Test Run 2 Details  Total Time = 307
                    Total Size = 10000000000
                    Scale-Factor = 1

TPCx-HS Performance Metric (HSph@SF): 11.7370

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REVISION HISTORY

<table>
<thead>
<tr>
<th>Date</th>
<th>Edition</th>
<th>Description</th>
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<tbody>
<tr>
<td>September 17, 2019</td>
<td>First</td>
<td>Initial Publication</td>
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