
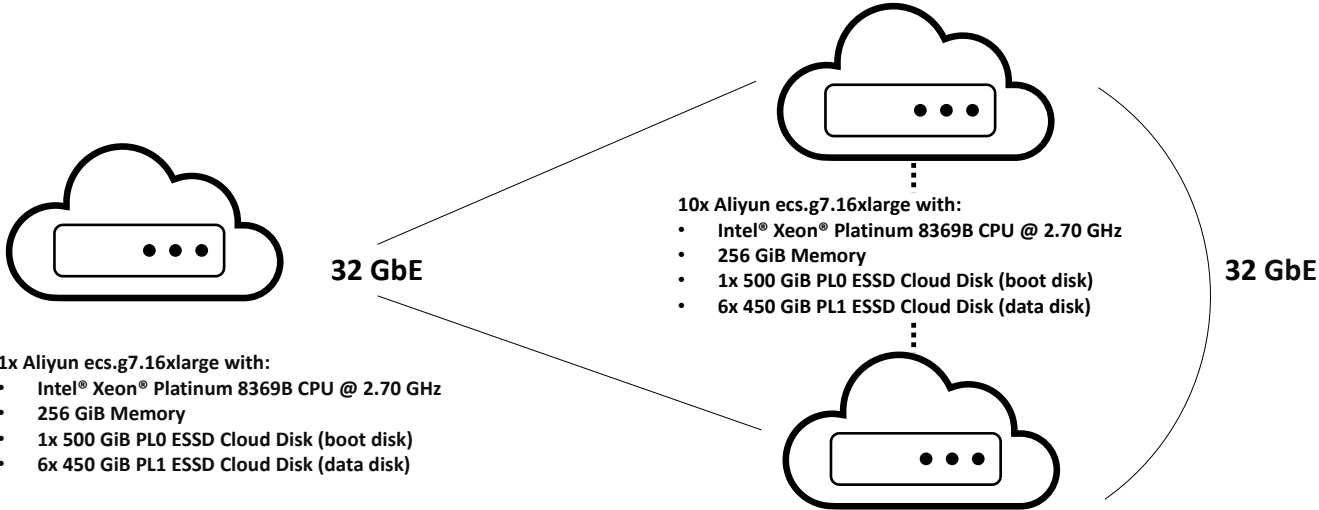


| | | | | | | |
|--|---|---|---|--------------|--|--|
|  | | Alibaba Cloud ApsaraCompute Big Data Accelerator | | | TPCx-BB Rev. v1.5.0 TPC-Pricing Rev. v2.7.0 | |
| | | | | | Report Date: October 19, 2021 | |
| Total System Cost | | TPCx-BB Performance Metric | | | Price/Performance | |
| 758,001 USD | | 2,187.42 BBQpm@3000 | | | 346.53 USD \$/BBQpm@3000 | |
| Framework | Operating System | Other Software | Availability Date | Scale Factor | Streams | |
| Horton Works HDP 3.0.1 | CentOS Linux release 7.7.1908 | None | October 19, 2021 | 3000 | 8 | |
| System Configuration | | | | | | |
|  <p> 1x Aliyun ecs.g7.16xlarge with: <ul style="list-style-type: none"> • Intel® Xeon® Platinum 8369B CPU @ 2.70 GHz • 256 GiB Memory • 1x 500 GiB PL0 ESSD Cloud Disk (boot disk) • 6x 450 GiB PL1 ESSD Cloud Disk (data disk) </p> <p> 10x Aliyun ecs.g7.16xlarge with: <ul style="list-style-type: none"> • Intel® Xeon® Platinum 8369B CPU @ 2.70 GHz • 256 GiB Memory • 1x 500 GiB PL0 ESSD Cloud Disk (boot disk) • 6x 450 GiB PL1 ESSD Cloud Disk (data disk) </p> | | | | | | |
| Physical Storage/Scale Factor: 12.60 Scale Factor/Physical Memory: 1.07 | | | Main Data Redundancy Model 3-Way Replication | | | |
| Servers: | | 1x Aliyun ecs.g7.16xlarge / 10x Aliyun ecs.g7.16xlarge | | | | |
| Total Processors/Cores/Threads | | 11/352/704 | | | | |
| Server Configuration: | 1x Aliyun ecs.g7.16xlarge (Admin): 1x Intel® Xeon® Platinum 8369B CPU @ 2.70GHz 256 GiB 1x 500 GiB PL0 ESSD Cloud Disk 6x 450 GiB PL1 ESSD Cloud Disk Bandwidth: 32 Gbps, Packet forwarding rate 12.000.000 | | 10x Aliyun ecs.g7.16xlarge (Worker): 1x Intel® Xeon® Platinum 8369B CPU @ 2.70GHz 256 GiB 1x 500 GiB PL0 ESSD Cloud Disk 6x 450 GiB PL1 ESSD Cloud Disk Bandwidth: 32 Gbps, Packet forwarding rate 12.000.000 | | | |
| Processors | | | | | | |
| Memory | | | | | | |
| Storage Device | | | | | | |
| Network Controller | | | | | | |
| Connectivity: | Cloud Infrastructure | | | | | |



Alibaba Cloud ApsaraCompute Big Data Accelerator

TPCx-BB Rev. v1.5.0
TPC-Pricing Rev. v2.7.0

Report Date:
October 19, 2021

| Description | Part Number | Source | Unit Price | Qty | Ext. Price | 3-Year Maint. |
|---|---------------------------------|--------|---------------|-----|-----------------------|---------------|
| Licensed Compute Services | | | | | | |
| ECS Instance ecs.g7.16xlarge | ecs.g7.16xlarge (China Beijing) | | 1 \$49,245.26 | 11 | \$541,697.86 | included |
| ECS System Disk (PL0 ESSD Cloud Disk 500 GiB) | Option | | 1 \$1,393.95 | 11 | \$15,333.45 | included |
| ECS Data Disk (PL1 ESSD Cloud Disk 450 GiB) | Option | | 1 \$2,509.10 | 66 | \$165,600.60 | included |
| Licensed Compute Services Subtotal | | | | | \$722,631.91 | |
| Software Components | | | | | | |
| Horton Works HDP Enterprise Plus, 24x7 1yr | N/A | | 2 \$11,200.00 | 33 | \$369,600.00 | |
| Software Components Subtotal | | | | | \$369,600.00 | |
| Total Cost | | | | | \$1,092,232.00 | |
| LCS Discount | | | | | -\$334,231.06 | |

Pricing: 1 = Alibaba; 2 = Cloudera

⁽¹⁾ All discounts are based on US list prices and for similar quantities and configurations. The discounts are based on the overall specific components pricing from respective vendors in this single quotation. Discounts for similarly sized configurations will be similar to those quoted here but may vary based on the components in the configuration.

Audited by Doug Johnson, InfoSizing

| | |
|-------------------------------------|------------------|
| Three-Year Cost of Ownership | \$758,001 |
| BBQpm@3000 | 2,187.42 |
| \$/BBQpm@3000 | \$ 346.53 |

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 at pricing@tpc.org. Thank you.

Numerical Quantities

| | |
|---------------------|------|
| Scale Factor | 3000 |
| Streams | 8 |
| SUT Validation Test | PASS |

Performance Run (Run 2)

| | |
|----------------------------------|-------------------------|
| Overall Run Start Time | 2021-10-05 19:32:01.748 |
| Overall Run End Time | 2021-10-06 01:29:23.181 |
| Overall Run Elapsed Time | 21,441.433 |
| Load Test Start Time | 2021-10-05 19:32:01.749 |
| Load Test End Time | 2021-10-05 19:44:29.009 |
| Load Test Elapsed Time | 747.260 |
| Power Test Start Time | 2021-10-05 19:44:29.010 |
| Power Test End Time | 2021-10-05 20:55:07.083 |
| Power Test Elapsed Time | 4,238.073 |
| Throughput Test Start Time | 2021-10-05 20:55:07.083 |
| Throughput Test End Time | 2021-10-06 01:29:23.181 |
| Throughput Test Elapsed Time | 16,456.098 |
| Performance Metric (BBQpm@ 3000) | 2,187.42 |

Repeatability Run (Run 1)

| | |
|----------------------------------|-------------------------|
| Overall Run Start Time | 2021-10-05 13:13:02.979 |
| Overall Run End Time | 2021-10-05 19:09:18.932 |
| Overall Run Elapsed Time | 21,375.953 |
| Load Test Start Time | 2021-10-05 13:13:02.980 |
| Load Test End Time | 2021-10-05 13:25:39.379 |
| Load Test Elapsed Time | 756.399 |
| Power Test Start Time | 2021-10-05 13:25:39.380 |
| Power Test End Time | 2021-10-05 14:35:51.122 |
| Power Test Elapsed Time | 4,211.742 |
| Throughput Test Start Time | 2021-10-05 14:35:51.122 |
| Throughput Test End Time | 2021-10-05 19:09:18.932 |
| Throughput Test Elapsed Time | 16,407.810 |
| Performance Metric (BBQpm@ 3000) | 2,196.83 |

Performance Run Report (Run 2)

```
*****
TPCx-BB
Result
v1.5.0
*****
INFO: T_LOAD = 747.26
INFO: T_LD = 0.1 * T_LOAD: 74.726
INFO: T_PT = 2786.02808204629
INFO: T_T_PUT = 16456.098
INFO: T_TT = 2057.01225
INFO: === Checking validity of the final result ===
INFO: OK: All required BigBench phases were performed.
INFO: OK: All 30 queries were running in the power test.
INFO: OK: All 30 queries were running in the first throughput test.
INFO: OK: Pretend mode was inactive. All commands were executed.
INFO: === Final result ===
INFO: VALID BBQpm@3000 = 2187.42634689913
```

Repeatability Run Report (Run 1)

```
*****
TPCx-BB
Result
v1.5.0
*****
INFO: T_LOAD = 756.399
INFO: T_LD = 0.1 * T_LOAD: 75.6399
INFO: T_PT = 2767.4761023159
INFO: T_T_PUT = 16407.81
INFO: T_TT = 2050.97625
INFO: === Checking validity of the final result ===
INFO: OK: All required BigBench phases were performed.
INFO: OK: All 30 queries were running in the power test.
INFO: OK: All 30 queries were running in the first throughput test.
INFO: OK: Pretend mode was inactive. All commands were executed.
INFO: === Final result ===
INFO: VALID BBQpm@3000 = 2196.83525587891
```

Summary details of the run reports are shown above. For the complete run reports, see the Support Files Archive.