





 Hewlett Packard Enterprise	<h1>HPE DL 325 Gen10</h1>		TPCx-HS 2.0.3 TPC Pricing 2.4.0 Report Date Feb. 06, 2019
Availability Date February 6, 2019	TPCx-HS Performance 18.60 HSph@30TB	Price/Performance \$39,276.99 \$/ HSph@30TB	Total System Cost \$730,552 USD
System Under Test Configuration Overview			
Scale Factor 30	Hadoop Software Hortonworks Data Platform 3.0	Operating System Red Hat Enterprise Linux Server 7.5	Other Software N/A
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  ... 16x ProLiant HPE DL325 Gen10 Servers (Data Nodes) <ul style="list-style-type: none"> • 1x AMD EPYC 7551P 32-Core Processor • 256 GB (8x 32GB RDIMM 2666MT/s Dual Rank) • 1x240GB m.2 (O/S) • 1x HPE 631FLR 2-Port 25GbE SFP28 NIC • 5x HPE 1.6TB, NVMe, 2.5 SFF Drive (DataNode VM storage) ... </div> <div style="text-align: center;">  HPE FlexFabric 5945 (JQ074A) 48x25GbE and 8x100GbE Network Switch. </div> <div style="text-align: center;">  HPE 1620-24G Switch </div> </div> <div style="margin-top: 20px;"> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  ... 1x HPE ProLiant DL325 Gen10 (Master Node) <ul style="list-style-type: none"> • 1x AMD EPYC 7551P 32-Core Processor • 256 GB (8x 32GB RDIMM 2666MT/s Dual Rank) • 1x240GB m.2 (O/S) • 1x HPE 631FLR 2-Port 25GbE SFP28 NIC </div> </div> </div>			
Physical Storage/Scale Factor: 4.40		Scale Factor/Physical Memory: 7.06	
Total Number of Servers: Total Processors/Cores/Threads:		17x ProLiant DL325 Gen10 17/544/1,088	
Server Configuration: Processors Memory Storage Controller Storage Device		Per ProLiant DL325 Gen10 1x AMD EPYC 7551P 32-Core 256 GiB Dual m.2 SATA, NVM Express 1x 240 GB m.2 SATA (all nodes) 5x HPE 1.6 TB NVMe (data nodes) 1x HPE 631FLR 2-Port 25GbE SFP28 NIC	
Network Connectivity: Total Rack Units:		HPE FlexFabric 5945 Switch (JQ074A)	

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Price	Server Hardware							HPE DL325 Gen10 8SFF CTO Server	1	P04654-B21	\$1,350	17	\$22,950		HPE DL325 Gen10 8SFF (NVM e backplane) CTO Server, EPYC 1x7551P	1	P04852-L21	\$3,499	17	\$59,483		HPE 32GB 2Rx4 PC4-2666V-R Smart Kit	1	838083-B21	\$1,230	136	\$167,280		HPE 800W CS Platinum Plus AC Power Supply	1	865414-B21	\$379	17	\$6,443		HPE DL325 Gen10 8SFF (NVM e backplane) CTO Server	1	P04662-B21	\$1,699	17	\$28,883		HPE Dual M.2 SSD enablement option DL/ML	1	878783-B21	\$159	17	\$2,703		HPE 240GB m.2 SATA SSD	1	P04556-B21	\$379	17	\$6,443		HPE 1.6 TB NVMe	1	877994-B21	\$3,899	80	\$311,920		HPE Ethernet 10/25G Network Adapter 631FLR-SFP28	1	817709-B21	\$749	17	\$12,733		HPE 3Y FC 24x7 DL325 Gen10 SVC	1	HB4G8E	\$1,355	17		\$23,035	HPE iLO Adv incl 3yr TS U E-LTU	1	E6U64ABE	\$469	17		\$7,973	HP V194 18.5" HD 1366x768 LED Monitor (1 + 2 spare)	3	V5E94A6#ABA	\$81	3	\$243		HP PS/2 Keyboard And Mouse Bundle (1 + 2 spare)	3	H3C53AA#ABA	\$25	3	\$75				Subtotal			\$619,156	\$31,008	Network							HPE 1620-24G Switch + 2 spare	1	JG913A	\$299	3	\$897		5ft (1.5m) Cat6 Snagless Unshielded (UTP) PVC CM 17 + 2 spares	2	C6-UTPSGPVCBE	\$2	19	\$38		HPE 5945 48SFP28 8QSFP28 Switch	1	JQ074A	\$30,970	1	\$30,970		HPE 100Gb QSFP28 to 4x25Gb SFP28 3m DAC	1	845416-B21	\$699	7	\$4,893		HPE 3Y FC 24x7 FF 5945 Switch SVC	1	HB4S3E	\$8,003	1		\$8,003			Subtotal			\$36,798	\$8,003	Rack							HPE 42U 600x1075mm Adv G2 Kit Pllt Rack	1	P9K07A	\$1,179	1	\$1,179		HPE 24A High Voltage Core Only Corded PDU + 2 spares	1	252663-D74	\$259	4	\$1,036				Subtotal			\$2,215	\$0
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Pricing: 1 = HPE; 2 = fs.com; 3 = hp.factoryoutletstore.com *All discounts are based on US list prices and for similar quantities and configurations. A 20% discount was based on the overall specific components pricing from Source 1 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. Sales contact: HPE WW Headquarters, 3000 Hanover St., Palo Alto, CA 94304-1185 (650) 857-1501 or HPE: 855-472-5233 Audited by Doug Johnson, InfoSizing	Three-Year Cost of Ownership: \$730,552 HSpH@30TB: 18.60 \$ / HSpH@30TB: \$39,276.99																																																									
<i>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.</i>																																																										

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<h2>Numerical Quantities</h2>		
Performance Run – Run 2		
Scale Factor	30TB	
Run Start Time	2019-01-15 15:53:34.000	
Run End Time	2019-01-15 17:30:14.000	
Run Elapsed Time	5,805.000	
HSGen Start Time	2019-01-15 15:53:36.000	
HSGen End Time	2019-01-15 16:13:32.000	
HSGen Elapsed Time	1,198.258	
HSSort Start Time	2019-01-15 16:13:39.000	
HSSort End Time	2019-01-15 17:14:03.000	
HSSort Elapsed Time	3,624.847	
HSValidate Start Time	2019-01-15 17:14:12.000	
HSValidate End Time	2019-01-15 17:30:14.000	
HSValidate Elapsed Time	964.239	
Repeatability Run – Run 1		
Scale Factor	30TB	
Run Start Time	2019-01-15 14:14:06.000	
Run End Time	2019-01-15 15:50:26.000	
Run Elapsed Time	5,784.000	
HSGen Start Time	2019-01-15 14:14:07.000	
HSGen End Time	2019-01-15 14:33:45.000	
HSGen Elapsed Time	1,179.322	
HSSort Start Time	2019-01-15 14:33:52.000	
HSSort End Time	2019-01-15 15:34:05.000	
HSSort Elapsed Time	3,613.661	
HSValidate Start Time	2019-01-15 15:34:15.000	
HSValidate End Time	2019-01-15 15:50:26.000	
HSValidate Elapsed Time	972.924	

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Run Reports

Run Report for Performance Run – Run 2

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TPCx-HS Performance Metric (HSph@SF) Report

Test Run 2 Details	Total Time =	5805
	Total Size =	300000000000
	Scale-Factor =	30

TPCx-HS Performance Metric (HSph@SF): 18.6046

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Run Report for Repeatability Run – Run 1


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TPCx-HS Performance Metric (HSph@SF) Report

Test Run 1 Details	Total Time =	5784
	Total Size =	300000000000
	Scale-Factor =	30

TPCx-HS Performance Metric (HSph@SF): 18.6729

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Revision History		
Date	Edition	Description
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