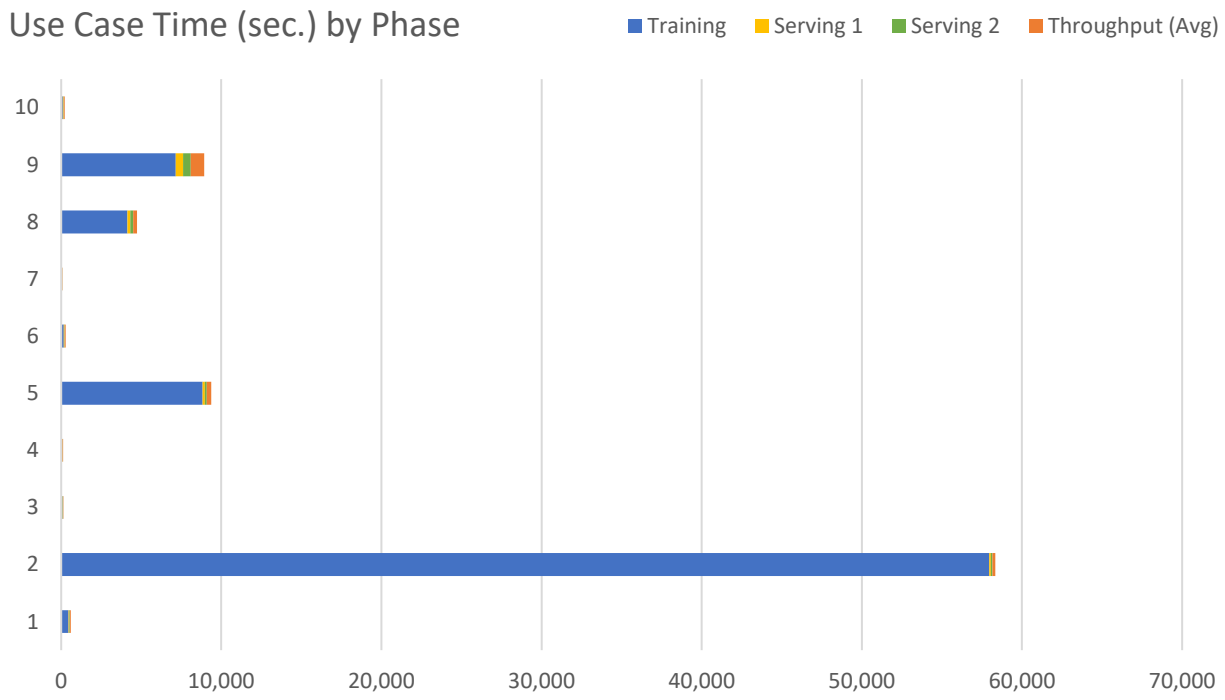
DELL EMC	PowerEdge R6625		TPCx-AI 1.0.2 TPC Pricing 2.8.0 Report Date Nov. 10, 2022
TPCx-AI Performance **972.07 AIUCpm@300**	Total System Cost **$309,091 USD**	Price/Performance **$317.98 USD/AIUCpm@300**	Availability Date **February 22, 2023**

Framework	Operating System	Other Software	Scale Factor	Streams
Cloudera SEL Data Platform Private Cloud Base Edition	Red Hat Enterprise Linux 8.6	N/A	300	6



Physical Storage / Scale Factor	Scale Factor / Physical Memory	Main Data Redundancy Model
262.40	0.11	Replication 3, RAID 1

Servers: Total Processors/Cores/Threads	4 8 / 256 / 512

Server Type	1x PowerEdge R6625 (Primary)	3x PowerEdge R6625 (Worker)
Processors	2x AMD EPYC 9354 32-Core Processor GHz	2x AMD EPYC 9354 32-Core Processor GHz
Memory	384 GiB	768 GiB
Storage Controller	1x PERC H965i	1x PERC H965i
Storage Device	2x 240 GB M.2 SSD; 2x 3.84 TB NVMe	2x 240 GB M.2 SSD; 6x 3.84 TB NVMe
Network Controller	1x Mellanox ConnectX-4, 25GbE, 2-port	1x Mellanox ConnectX-4, 25GbE, 2-port
Connectivity	1x Mellanox SN2400 100/25 GbE (Switch)	

DELL EMC

PowerEdge R6625

TPCx-AI	1.0.2
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Description	Part Number	Source	List Price	Qty	Extended Price	1-Yr. Maintenance
Hardware						
PowerEdge R6625 Server - Primary Node	210-ATCF	1	$67,602.00	1	$67,602.00	
2.5 Chassis	379-BDTF	1	0	1		
NVMe Backplane	379-BDSX	1	0	1		
Trusted Platform Module 2.0 V3	461-AAIG	1	0	1		
C03-03 : 8x U.2 G4 RAID - Low Z (FPERC 12)	321-BIIN	1	0	1		
MOD,PRC,9354,2.7,GOA,32C,XXX,QB	338-CGMZ	1	0	1		
MOD,PRC,9354,2.7,GOA,32C,XXX,QB	338-CGMZ	1	0	1		
Performance Optimized	370-AAIP	1	0	1		
4800MT/s RDIMMs	370-AHCL	1	0	1		
16GB RDIMM, 4800MT/s Single Rank	370-AGZO	1	0	24		
C31, No RAID with NVMe and front PERC	379-BEGI	1	0	1		
PERC H965i with floating brackets for lowz	405-ABDN	1	0	1		
Front PERC Mechanical Parts,rear load	750-ACFQ	1	0	1		
No Hard Drive	400-ABHL	1	0	1		
3.84TB Enterprise NVMe Read Intensive AG Drive U.2 Gen4 wit	400-BKGL	1	0	2		
Performance BIOS Settings	384-BBBL	1	0	1		
UEFI BIOS Boot Mode with GPTPartition	800-BBDM	1	0	1		
High Performance Fan for CPUgreater than or equal to 180W(2	750-ADJI	1	0	1		
Dual, Hot-plug, Fully Redundant Power Supply (1+1), 1400W, N	450-AIQX	1	0	2		
Power Cord - C13, 3M, 125V, 15A (North America, Guam, North	450-AALV	1	0	1		
Riser Config 2, 1 x 16 LP PCIe slot (CPU1), 2 x 16 LP PCIeslot (CP	330-BBNR	1	0	1		
PowerEdge R6625 Motherboard	384-BCWP	1	0	1		
Broadcom 5720 Dual Port 1GbE Optional LOM	540-BDKD	1	0	1		
Mellanox Technologies MT27710 Family [ConnectX-4 Lx], 25 G	540-BBVV	1	0	1		
iDRAC9,Enterprise 15G	385-BBOT	1	0	1		
Dell EMC Luggage Tag (x8 or x10 chassis)	350-BBXP	1	0	1		
Standard Bezel	325-BCHH	1	0	1		
No Quick Sync	350-BBXM	1	0	1		
iDRAC,Factory Generated Password	379-BCSF	1	0	1		
Red Hat Enterprise Linux 8.6 (Ootpa), kernel 4.18.0-372.9.1.el8	605-BBFL	1	0	1		
ReadyRails Sliding Rails Without Cable Management Arm or St	770-BECD	1	0	1		
Cable Management Arm	770-BDMT	1	0	1		
BOSS-S2 controller card + with 2 M.2 240GB (RAID 1)	403-BCMG	1	0	1		
No Systems Documentation, NoOpenManage DVD Kit	631-AACK	1	0	1		
PowerEdge R6625 Shipping Material 4	340-COXQ	1	0	1		
PowerEdge R6625 CCC Marking, No CE Marking	389-DTIQ	1	0	1		
US Order	332-1286	1	0	1		
Dell Hardware Limited Warranty Plus On-Site Service	828-3901	1	$200.00	1		$200.00
ProSupport Mission Critical:4-Hour 7x24 On-Site Service with En	828-3855	1	$940.00	1		$940.00
ProSupport Mission Critical:7x24 HW / SW Technical Support an	828-3847	1	$1,816.00	1		$1,816.00

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DELL EMC

PowerEdge R6625

TPCx-AI	1.0.2
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(continued from the previous page)

Description	Part Number	Source	List Price	Qty	Extended Price	1-Yr. Maintenance
PowerEdge R6625 Server - Worker Nodes	210-ATCF	1	$103,571.00	3	$310,713.00	
2.5 Chassis	379-BDTF	1	0	3		
NVMe Backplane	379-BDSX	1	0	3		
Trusted Platform Module 2.0 V3	461-AAIG	1	0	3		
C03-03 : 8x U.2 G4 RAID - Low Z (FPERC 12)	321-BIIN	1	0	3		
MOD,PRC,9354,2.7,GOA,32C,XXX,QB	338-CGMZ	1	0	3		
MOD,PRC,9354,2.7,GOA,32C,XXX,QB	338-CGMZ	1	0	3		
Performance Optimized	370-AAIP	1	0	3		
4800MT/s RDIMMs	370-AHCL	1	0	3		
32GB RDIMM, 4800MT/s Dual Rank	370-AGZP	1	0	72		
C31, No RAID with NVMe and front PERC	379-BEGI	1	0	3		
PERC H965i with floating brackets for lowz	405-ABDN	1	0	3		
Front PERC Mechanical Parts,rear load	750-ACFQ	1	0	3		
No Hard Drive	400-ABHL	1	0	3		
3.84TB Enterprise NVMe Read Intensive AG Drive U.2 Gen4 wit	400-BKGL	1	0	18		
Performance BIOS Settings	384-BBBL	1	0	3		
UEFI BIOS Boot Mode with GPTPartition	800-BBDM	1	0	3		
High Performance Fan for CPUgreater than or equal to 180W(2	750-ADJI	1	0	3		
Dual, Hot-plug, Fully Redundant Power Supply (1+1), 1400W, M	450-AIQX	1	0	3		
Power Cord - C13, 3M, 125V, 15A (North America, Guam, North	450-AALV	1	0	6		
Riser Config 2, 1 x 16 LP PCIe slot (CPU1), 2 x 16 LP PCIeslot (CP	330-BBNR	1	0	3		
PowerEdge R6625 Motherboard	384-BCWP	1	0	3		
Broadcom 5720 Dual Port 1GbE Optional LOM	540-BDKD	1	0	3		
Mellanox Technologies MT27710 Family [ConnectX-4 Lx], 25 G	540-BBVV	1	0	3		
iDRAC9,Enterprise 15G	385-BBOT	1	0	3		
Dell EMC Luggage Tag (x8 or x10 chassis)	350-BBXP	1	0	3		
Standard Bezel	325-BCHH	1	0	3		
No Quick Sync	350-BBXM	1	0	3		
iDRAC,Factory Generated Password	379-BCSF	1	0	3		
Red Hat Enterprise Linux 8.6 (Ootpa), kernel 4.18.0-372.9.1.el8	605-BBFL	1	0	3		
ReadyRails Sliding Rails Without Cable Management Arm or St	770-BECD	1	0	3		
Cable Management Arm	770-BDMT	1	0	3		
BOSS-S2 controller card + with 2 M.2 240GB (RAID 1)	403-BCMG	1	0	3		
No Systems Documentation, NoOpenManage DVD Kit	631-AACK	1	0	3		
PowerEdge R6625 Shipping Material 4	340-COXQ	1	0	3		
PowerEdge R6625 CCC Marking, No CE Marking	389-DTIQ	1	0	3		
US Order	332-1286	1	0	3		
Dell Hardware Limited Warranty Plus On-Site Service	828-3901	1	$200.00	3		$600.00
ProSupport Mission Critical:4-Hour 7x24 On-Site Service with En	828-3855	1	$940.00	3		$2,820.00
ProSupport Mission Critical:7x24 HW / SW Technical Support an	828-3847	1	$1,816.00	3		$5,448.00
Keyboard and Optical Mouse, USB, Black, English	570-AAKV, 580-ADJC	1	$12.00	1	$12.00	
Dell 24 Monitor	210-AIWG	1	$169.99	1	$169.99	
Mellanox MSN2410-CB2F 25GbE/100GbE Switch	920-9N112-00F7-0X2	2	$14,242.00	1	$14,242.00	
NVIDIA ENT Business Critical Support Services for SN2000 - 12 M	780-C20N0Z+P2CMI12	2	$1,140.00	1		$1,140.00
				Subtotal	$392,738.99	$12,964.00
Software						
Cloudera SEL Data Platform Private Cloud Base Edition Annual S	AB352445	1	$15,384.62	4		$61,538.48
				Subtotal	$0.00	$61,538.48
Large Purchase Discount (35%)*					-$132,473.95	-$25,676.87
				Total	$260,265.04	$48,825.61

Pricing: 1 = Dell; 2 = Nvidia

* Discount applies to all line items where Key = 1. Discount based upon total system cost as purchased by a regular customer.

Audited by Doug Johnson, InfoSizing

Total System Cost (USD):	**$309,091**
AIUCpm@300:	**972.07**
$/AIUCpm@300:	**$317.98**

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.

DELL EMC	PowerEdge R6625	TPCx-AI	1.0.2
		TPC Pricing	2.8.0
		Report Date	Nov. 10, 2022

Numerical Quantities

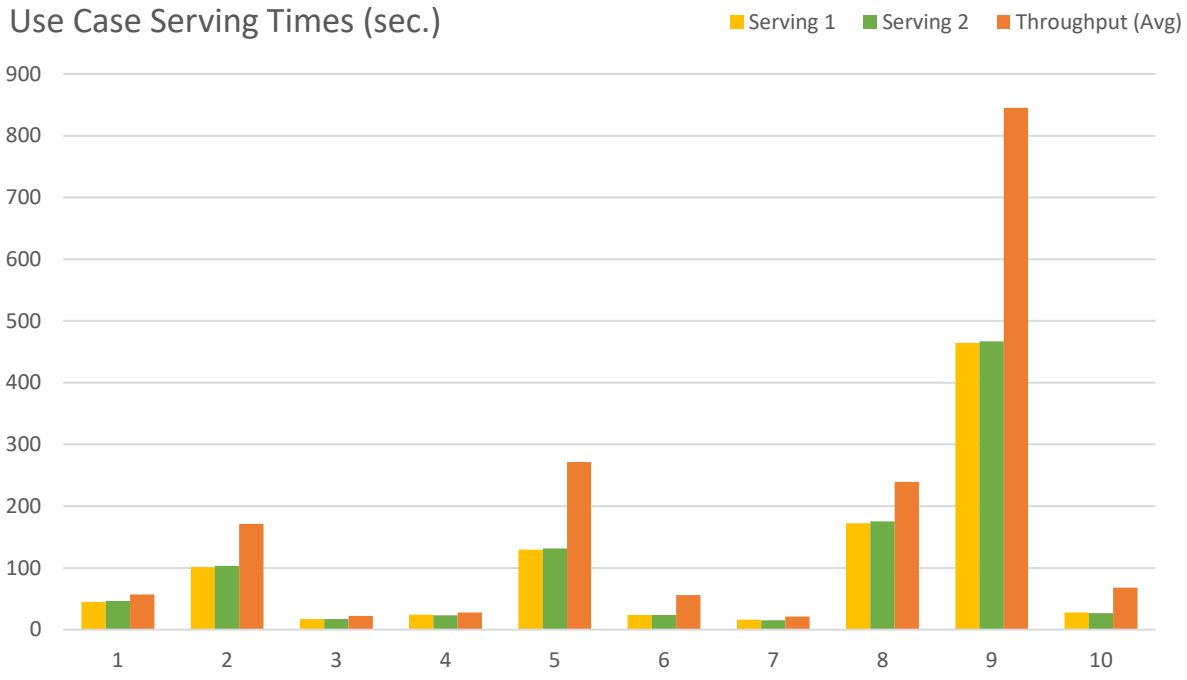
AIUCpm@300	**972.07**	T_{Load}	607.47
Scale Factor	300	T_{LD}	607.47
Streams	6	T_{PTT}	657.72
		T_{PST1}	53.79
Kit Version	1.0.2	T_{PST2}	53.47
Execution Status	Pass	T_{PST}	53.79
Accuracy Status	Pass	T_{TT}	54.70

Test Times

Overall Run Start Time	2022-10-30 22:34:44.957
Overall Run End Time	2022-10-31 22:40:05.160
Overall Run Elapsed Time	86,720.203
Load Test Start Time	2022-10-30 22:54:34.570
Load Test End Time	2022-10-30 23:04:44.092
Load Test Elapsed Time	609.522
Power Training Start Time	2022-10-30 23:04:44.093
Power Training End Time	2022-10-31 21:01:30.458
Power Training Elapsed Time	79,006.365
Power Serving 1 Start Time	2022-10-31 21:01:30.459
Power Serving 1 End Time	2022-10-31 21:18:41.324
Power Serving 1 Elapsed Time	1,030.865
Power Serving 2 Start Time	2022-10-31 21:18:41.325
Power Serving 2 End Time	2022-10-31 21:35:59.832
Power Serving 2 Elapsed Time	1,038.507
Scoring Start Time	2022-10-31 21:40:00.781
Scoring End Time	2022-10-31 21:45:12.338
Scoring Elapsed Time	311.557
Throughput Start Time	2022-10-31 21:45:12.342
Throughput End Time	2022-10-31 22:40:05.159
Throughput Elapsed Time	3,292.817

DELL EMC	PowerEdge R6625	TPCx-AI 1.0.2 TPC Pricing 2.8.0 Report Date Nov. 10, 2022

Numerical Quantities (continued)

Use Case Times & Accuracy

Use Case	Training (sec)	Serving 1 (sec)	Serving 2 (sec)	Throughput (avg)	Accuracy
UC01	456.989	45.045	46.162	56.930	0.000
UC02	57,955.108	101.124	103.028	171.167	0.154
UC03	90.870	17.251	17.079	22.418	4.389
UC04	40.589	24.092	23.203	27.492	0.705
UC05	8,836.639	129.379	131.566	271.719	0.023
UC06	174.807	23.509	23.450	55.848	0.216
UC07	30.085	15.968	15.115	21.101	1.429
UC08	4,143.933	172.495	175.113	239.194	0.759
UC09	7,154.498	464.190	466.875	845.173	1.000
UC10	112.558	27.563	26.602	68.054	0.816