DØLLEMC	Dell PowerE	TPCx-V TPC Pricin Report Date	2.1.5 g 2.4.0 te Sep. 17, 2019					
Availability Date	TPCx-V Throughput	Price/Performance		Total S	ystem Cost			
September 17, 2019	1,520.00 tpsV	20.00 tpsV \$35.50 USD / tpsV		\$53	946 USD			
System Under Test Configuration Overview								
Virtualization Software	Guest VM OS Processor I		Processor Descriptio		Memory Size			
VMware vSphere 6.7	Red Hat Enterprise Linux 7.6		AMD EPYC 7742 2.25GHz, 256MB L3		512 GB			



1x Dell PowerEdge R7515 with:

1x AMD EPYC 7742 2.25 GHz (1 Procs/64 Cores/128 Threads)
16x 32GB DDR4 3200 MHz RDIMM
16x Dell 1.92TB SATA SSD (DATA)
1x Dell 1TB NVMe (OS)
1x Dell PERC H740P Mini RAID controller
1x Broadcom Gigabit Ethernet BCM5720 (Embedded NIC)

1x Dell PowerEdge R7515 with:

- 1x AMD EPYC 7742 2.25 GHz (1 Proc/64 Cores/128 Threads)
- 16x 32GB DDR4 3200 MHz RDIMM
- 16x Dell 1.92TB SATA SSD (Data)
- 1x Dell 1TB NVMe (OS)
- 1x Dell PERC H740P Mini RAID controller
- 1x Broadcom Gigabit Ethernet BCM5720 (Embedded NIC)

EXECUTIVE SUMMARY Page 2 of 4



Dell PowerEdge R7515

TPCx-V 2.1.5 TPC Pricing 2.4.0

Report Date Sep. 17, 2019

				,		
Description	Part Number	Key	Unit Price	Qty	Extended Price	3 yr. Maint. Price
HARDWARE COMPONENTS						
PowerEdge R7515 Server	[210-ASVQ]	1	\$58,196.00	1	\$58,196.00	
No Trusted Platform Module	[461-AADZ]	1		1		
Chassis with up to 24x2.5" Drives	[379-BDTF]	1		1		
SAS/SATA/NVMe Capable Backplane	[379-BDSW]	1		1		
Chassis with up to 24 x 2.5" Hard Drives Including Max of 12 NVME						
Drives	[321-BERS]	1		1		
PowerEdge R7515 Shipping	[340-CMZG]	1		1		
PowerEdge R7515 Shipping Material,DAO w/CCC Marking	[340-CODN], [343-BBNT]	1		1		
AMD EPYC 7742 2.25GHz, 64C/128T, 256M Cache (225W) DDR4-3200	[338-BSWN]	1		1		
Standard Heatsink	[412-AASE]	1		1		
3200MT/s RDIMMs	[370-AEVR]	1		1		
Performance Optimized	[370-AAIP]	1		1		
32GB RDIMM, 3200MT/s, Dual Rank	[370-AEVN]	1		16		
C7, Unconfigured RAID for HDDs or SSDs (Mixed Drive Types Allowed)	[780-BCDS]	1		1		
PERC H740P RAID Controller, 8Gb NV Cache, Minicard	[405-AAMS]	1		1		
1.92TB SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1						
OWPD, 3504 TBW	[400-AXSD]	1		16		
Dell 1TB, NVMe, Read Intensive Express Flash, 2.5 SFF Drive, U.2, P4510 with Carrier	[400-BELY]	1		1		
No Media Required	[605-BBFN]	1		1		
DRAC9, Express X5	[385-BBOU]	1		1		
DRAC Group Manager, Enabled	[379-BCQV]	1		1		
DRAC,Legacy Password	[379-BCSG]	1		1		
Riser Config 2, 2 x 16 FH + 2 x 16 LP PCIe slot	[330-BBNL]	1		1		
	-					
No Internal Optical Drive for x10 or greater HDD Chassis	[429-AAIQ]	1		1		
High Performance Fan	[750-AAWT]	1		1		
Dual, Hot-plug, Redundant Power Supply (1+1), 1100W NEMA 5-15P to C13 Wall Plug, 125 Volt, 15 AMP, 10 Feet (3m), Power Cord,	[450-ADWM]	1		1		
North America	[450-AALV]	1		2		
No Bezel	[350-BBWQ]	1		1		
No Quick Sync	[350-BBKU]	1		1		
Performance BIOS Setting	[384-BBBL]	1		1		
JEFI BIOS Boot Mode with GPT Partition	[800-BBDM]	1		1		
No Rack Rails or Cable Management Arm	[770-BBBS]	1		1		
No Systems Documentation, No OpenManage DVD Kit	[631-AACK]	1		1		
No Installation	[900-9997]	1		1		
Keyboard and Optical Mouse, USB, Black	[570-AAKV], [580-ADJC]	1		1		
ProSupport and 4Hr Mission Critical, 36 Month(s)	[865-BBNB]	1	\$6,982.82	1		\$6,982.
Dell E2417H 24 Monitor	[210-AIWG]	1	\$169.99	3	\$509.97	
HARDWARE COMPONENTS				Subtotal	\$58,705.97	\$6,982.8

(continued on the next page)

EXECUTIVE SUMMARY Page 3 of 4



Dell PowerEdge R7515

TPCx-V 2.1.5
TPC Pricing 2.4.0

Report Date Sep. 17, 2019

continued		

Description	Part Number	Key	Unit Price	Qty	Extended Price	3 yr. Maint. Price
SOFTWARE COMPONENTS						
VMware vSphere 6 Standard for 1 processor		2	\$995.00	1	\$995.00	
3 year VMware vSphere Standard support		2	\$852.72	1		\$852.72
Red Hat Enterprise Linux,1-2 SKT,Unlimited VMs,						
3 Year Subs/Lic,High Av ailability Add- On	[528- BDXY] [822-8493]	1	\$5,462	1	\$5,462.00	
Red Hat Enterprise Linux,1-2S,3yr Premium Subscription, Virtual						
Datacenters	[605-BBHQ]	1	\$8,999	1	\$8,999.00	
SOFTWARE COMPONENTS				Subtotal	\$15,456.00	\$852.72
Total					\$74,161.97	\$7,835.54
Large Purchase Discount (35%)*					-25,608.44	-2,443.99

Pricing: 1 = Dell; 2 = VMware

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

Three-Year Cost of Ownership: \$53,946

TPCx-V Throughput: 1,520.00

\$ USD/tpsV: \$35.50

Audited by Doug Johnson, InfoSizing

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.

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TPCx-V 2.1.5

DØLLEI	MC	De	II Power	Edge R7	7515	TPC Price	ng	2.4.0
						Report Da	ate Se	ep. 17, 2019
Guest VM Details								
Database Manager	VM Me (Tota	-	vCPUs (Total)	DB Initial Size	2	9		Active stomers
PostgreSQL 10.6	486.5	GiB	198	10,124.54 GE	760	,000	0 760,000	
		Transa	action Respons	se Times (in s	econds)			
	Transactio	on Type		Min	Avg	90	th%	Max
Broker-Volume				0.001	0.006	0.0)11	1.310
Customer-Posit	tion			0.001	0.012	0.0)23	1.616
Market-Watch				0.000	0.008	0.0)13	1.662
Security-Detail				0.002	0.018	0.0)32	1.258
Trade-Lookup				0.001	0.059	0.0)94	1.430
Trade-Order				0.001	0.018	0.031		3.717
Trade-Result				0.002	0.025		0.043	
Trade-Status				0.001	0.007)13	1.322
Trade-Update			0.006	0.098		145	1.005	
Data-Maintenance			0.001	0.009)17	0.085	
Market-Feed			0.001	0.005	0.0)10	0.231	
			Transac	ction Mix				
Transaction Type			Transact	ion Count		Mix F	Percentage	
Broker-Volume			4	,285,576			3.900%	
Customer-Posit	tion			16	,483,230			15.001%
Market-Watch				18	,680,775			17.000%
Security-Detail				17,582,078				16.001%
Trade-Lookup				9,889,871				9.000%
Trade-Order				11,098,605			10.100%	
Trade-Result				10,985,626			9.997%	
Trade-Status			19,779,549			18.000%		
Trade-Update			1,098,936 1.0				1.000%	
Data-Maintenance			960 N/A					
Market-Feed			57,600 N/A					
Transaction Total				109,884,246				
Measurement Interval			02:00:00					
Business Recovery Time				00:10:12				
Redundancy Level Details				R	edundand	y Level	1 (via	RAID 10)