



**Cisco UCS Integrated Infrastructure
for Big Data (Cisco UCS CPA v2)
with 16 Cisco UCS C240M3 Servers**

TPCx-HS Rev. 1.2.0
TPC-Pricing Rev. 2.0.0

Report Date:
January 8, 2015

Total System Cost

TPCx-HS Performance Metric

Price/Performance

614,645 USD

5.07
HSph@1TB

121,231.76 USD
\$/HSph@1TB

Scale Factor

Apache Hadoop
Compatible Software

Operating System

Other Software

Availability Date

1TB

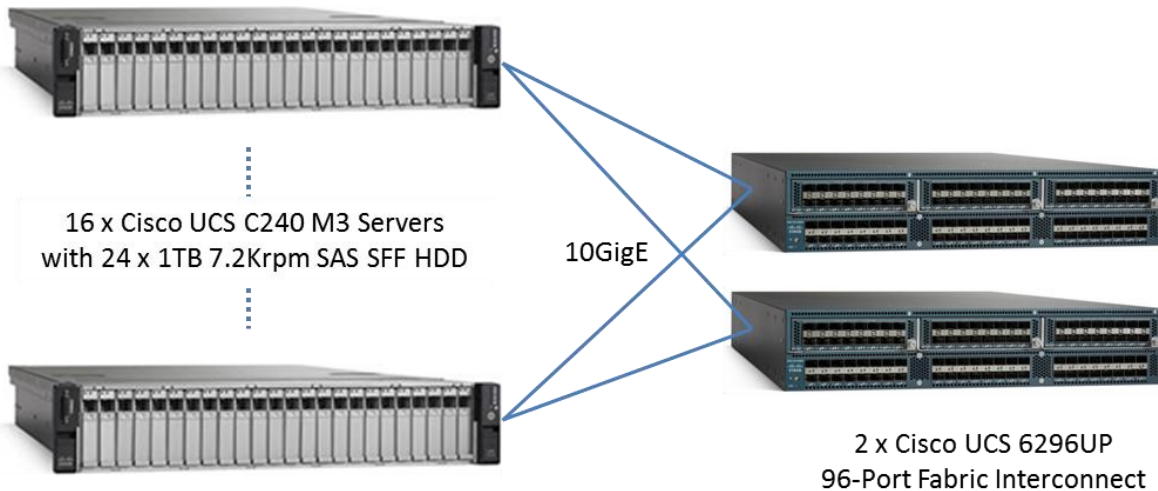
MapR M5 Edition

Red Hat
Enterprise Linux Server 6.4

None

January 8, 2015

System Configuration



Physical Storage/Scale Factor: 384.0

Scale Factor/Physical Memory: 0.25

Servers: 16 x Cisco UCS C240 M3 Server
Total Processors/Cores/Threads 32/320/640

Server Configuration:

Processors 2 x Intel® Xeon® Processor E5-2660 v2, 2.20 GHz, 25M L3
Memory 256GB
Storage Controller 1 x MegaRAID 9271CV
Storage Device 24 x 1TB 7.2K SAS SFF HDD (internal)
Network 1 x Cisco VIC 1225 Dual Port 10Gb SFP+ CNA

Connectivity: 2 x Cisco UCS 6296UP 96-Port Fabric Interconnect



**Cisco UCS Integrated Infrastructure
for Big Data (Cisco UCS CPA v2)
with 16 Cisco UCS C240M3 Servers**

TPCx-HS Rev. 1.2.0
TPC-Pricing Rev. 2.0.0

Report Date:
January 8, 2015

Description	Part Number	Source	Unit Price	Qty	Extended Price	3 Year Maint. Price
UCS C240 M3 SFF w/o CPU mem HD PCIe w/ rail kit expdr	UCSC-C240-M3S	1	3,600.00	16	\$57,600	
2.20 GHz E5-2660 v2/95W 10C/25MB Cache/DDR3 1866MHz	CON-SNTP-C240M3SF	1	3,949.00	32	\$126,368	
16GB DDR3-1866-MHz RDIMM/PC3-14900/dual rank/x4/1.5v	UCS-CPU-E52660B	1	741.00	256	\$189,696	
1TB SAS 7.2K RPM 2.5 inch HDD/hot plug/drive sled mounted	UCS-MR-1X162RZ-A	1	975.00	384	\$374,400	
Cisco VIC 1225 Dual Port 10Gb SFP+ CNA	UCS-HD1T7KS2-E	1	1,594.00	16	\$25,504	
1200W 2u Power Supply For UCS	UCSC-PCIE-CSC-02	1	652.00	32	\$20,864	
Power Cord 125VAC 13A NEMA 5-15 Plug North America	UCSC-PSU2-1200	1	0.00	32	\$0	
Full height PCIe filler for C-Series	CAB-9K12A-NA	1	0.00	48	\$0	
Heat Sink for UCS C240 M3 Rack Server	UCSC-PCIF-01F	1	0.00	32	\$0	
2U Rail Kit for UCS C-Series servers	UCSC-HS-C240M3	1	0.00	16	\$0	
Cisco M3 - v2 CPU asset tab ID label (Auto-Expand)	UCSC-RAIL-2U	1	0.00	16	\$0	
MegaRAID 9271CV with 8 internal SAS/SATA ports with Supercap	UCS-M3-V2-LBL	1	1,686.00	16	\$26,976	
SMARTNET 24X7X4 UCS C240 M3 SFF w/o	UCS-RAID9271CV-8I	1	1,521.00	16		\$24,336
UCS 6296UP 2RU Fabric Int/No PSU/48 UP/ 18p LIC	UCS-FI-6296UP-UPG	1	48,000.00	2	\$96,000	
10GBASE-CU SFP+ Cable 3 Meter	CON-SNTP-FI6296UP	1	210.00	32	\$6,720	
UCS 6296UP Chassis Accessory Kit	SFP-H10GB-CU3M	1	0.00	2	\$0	
UCS 6296UP Power Supply/100-240VAC	UCS-ACC-6296UP	1	2,000.00	4	\$8,000	
UCS Manager v2.2	UCS-PSU-6296UP-AC	1	0.00	2	\$0	
UCS 6200 Series Expansion Module Blank	N10-MGT012	1	0.00	6	\$0	
UCS 6296UP Fan Module	UCS-BLKE-6200	1	0.00	8	\$0	
Power Cord 125VAC 13A NEMA 5-15 Plug North America	UCS-FAN-6296UP	1	0.00	4	\$0	
SMARTNET 24X7X4 UCS 6296UP 2RU Fabric Int/2 PSU/4 Fans	CAB-9K12A-NA	1	5,505.00	2		\$11,010
Red Hat Enterprise Linux Server, 3Y 24x7	CON-ISV1-RH2SUG3A	1	2,397.00	16	\$38,352	Inc.
MapR M5 Edition, 3Y 24x7	UCS-BD-M5SL-3YR	1	25,083.00	16	\$401,328	Inc.
Cisco R42610 standard rack w/side panels	RACK-UCS2	1	3,429	1	\$3,429	
Total:					\$1,375,237	\$35,346
Large Purchase Discount		1			-\$783,885	-\$12,371
Acer - LED monitor - 18.5" (Inc 2 spares)	UM.XV6AA.A01	2	\$88	3	\$264	
Logitech USB KB/Mouse (Inc 2 spares)	920-002565	2	\$18	3	\$54	

1 = Cisco, 2= CDW.com

Three-Year Cost of Ownership: \$614,645

Discounts: 57% for products and 35% for service. All discounts are based on US list prices and for similar quantities and configurations. The discounts are based on the overall specific

HSpH@1TB 5.07

Audited by Doug Johnson, InfoSizing Inc.

\$/HSpH@1TB \$121,231.76

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.



**Cisco UCS Integrated Infrastructure
for Big Data (Cisco UCS CPA v2)
with 16 Cisco UCS C240M3 Servers**

TPCx-HS Rev. 1.2.0
TPC-Pricing Rev. 2.0.0

Report Date:
January 8, 2015

Measurement Results for Performance Run

Scale Factor	1TB
Run Start Time	2014-12-19 17:07:40
Run End Time	2014-12-19 17:19:26
Run Elapsed Time	709.000
HSGen Start Time	2014-12-19 17:07:40
HSGen End Time	2014-12-19 17:10:10
HSGen Elapsed Time	150.610
HSSort Start Time	2014-12-19 17:10:14
HSSort End Time	2014-12-19 17:17:40
HSSort Elapsed Time	447.352
HSValidate Start Time	2014-12-19 17:17:44
HSValidate End Time	2014-12-19 17:19:26
HSValidate Elapsed Time	103.555

Measurement Results for Repeatability Run

Run Start Time	2014-12-19 17:20:35
Run End Time	2014-12-19 17:31:55
Run Elapsed Time	683.000
HSGen Start Time	2014-12-19 17:20:35
HSGen End Time	2014-12-19 17:23:06
HSGen Elapsed Time	152.184
HSSort Start Time	2014-12-19 17:23:10
HSSort End Time	2014-12-19 17:30:22
HSSort Elapsed Time	432.979
HSValidate Start Time	2014-12-19 17:30:25
HSValidate End Time	2014-12-19 17:31:55
HSValidate Elapsed Time	91.503



Run Report for Performance Run

=====
TPCx-HS Performance Metric (HSph@SF) Report

Test Run 1 details: Total Time = 709
Total Size = 10000000000
Scale-Factor = 1.0000

TPCx-HS Performance Metric (HSph@SF): 5.0787
=====

Run Report for Repeatability Run

=====
TPCx-HS Performance Metric (HSph@SF) Report

Test Run 2 details: Total Time = 683
Total Size = 10000000000
Scale-Factor = 1.0000

TPCx-HS Performance Metric (HSph@SF): 5.2714
=====