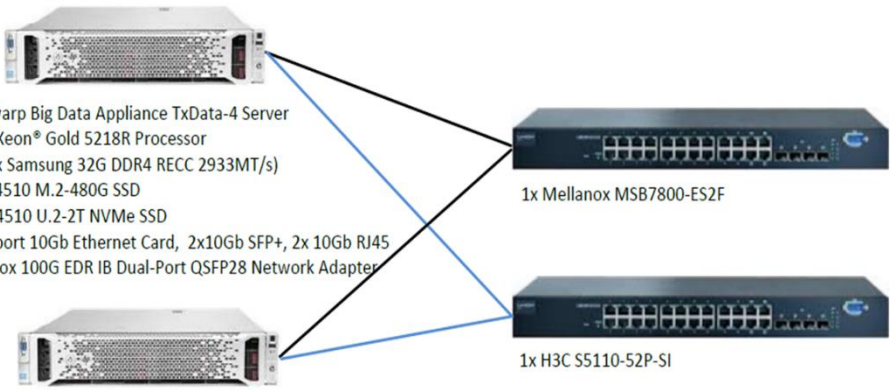


	<h1 style="text-align: center;">Transwarp Data Hub</h1>		TPCx-HS 2.0.3
			TPC Pricing 2.8.0
			Report Date Jan. 04, 2023
Availability Date January 4, 2023	TPCx-HS Performance 34.01 HSp@1TB	Price/Performance ¥96,016.62 / HSp@1TB	Total System Cost ¥3,265,525 RMB
System Under Test Configuration Overview			
Scale Factor 1	Hadoop Software TDH 7.0.1	Operating System CentOS Linux 8	Other Software None
			
<p>4 x Transwarp Big Data Appliance TxData-4 Server</p> <ul style="list-style-type: none"> 2 x Intel® Xeon® Gold 5218R Processor 256GB (8 x Samsung 32G DDR4 RECC 2933MT/s) 1 x Intel S4510 M.2-480G SSD 4 x Intel P4510 U.2-2T NVMe SSD 1 x Quad-port 10Gb Ethernet Card, 2x10Gb SFP+, 2x 10Gb RJ45 1 x Mellanox 100G EDR IB Dual-Port QSFP28 Network Adapter 		<p>1x Mellanox MSB7800-ES2F</p>	
<p>6 x Transwarp Big Data Appliance TxData-2G server</p> <ul style="list-style-type: none"> 2 x Intel® Xeon® Gold 6330 Processor 256GB (8 x Samsung 32G DDR4 RECC 3200MT/s) 2 x Intel P4510 U.2 1T SSD 6 x Intel P5510 U.2-3.84T NVMe SSD 1 x Intel I350 2-port 1Gb Network Adapter 1 x Mellanox 100G EDR IB Dual-Port QSFP28 Network Adapter 		<p>1x H3C S5110-52P-SI</p>	
Physical Storage/Scale Factor: 285.92		Scale Factor/Physical Memory: 0.18	
Total Number of Servers:		22 (16x PRO-983; 6x PRO-995)	
Total Processors/Cores/Threads:		44/976/1,952	
Server Configuration:	Per PRO-983	Per PRO-995	
Processors	2x Intel® Xeon® Gold 5218R CPU @ 2.10GHz	2x Intel® Xeon® Gold 6330 CPU @ 2.00GHz	
Memory	256 GiB	256 GiB	
Storage Controller	On Board	On Board	
Storage Device	1x 480 GB M.2 SSD 4x 2 TB NVMe SSD	2x 1 TB SSD 6x 3.84 TB NVMe SSD	
Network	1x Mellanox 100G EDR IB Dual-Port QSFP28 1x Quad-port 10GB (2x SFP+, 2x RJ45)	1x Mellanox 100G EDR IB Dual-Port QSFP28 1x Intel I350 2-port 1 Gb	
Connectivity:	1x Mellanox MSB7800-ES2F, 1x H3C S5110-520-Si		
Total Rack Units:	(4x3U) + (6x3U) + (1x1U) + (1x1U) = 12U + 18U + 1U + 1U = 32U		

		<h1>Transwarp Data Hub</h1>			TPCx-HS	2.0.3	
					TPC Pricing	2.8.0	
					Report Date	Jan. 04, 2023	
Description		Part Number	Source	Qty	Unit Price	Extended Price	3 Yr. Maint. Price
Hardware							
Transwarp Big Data Appliance TxData-4 Server							
Transwarp Big Data Appliance TxData-4 Server, 2U, 4 Nodes		PRO-983		1	4 ¥ 47,450.00	¥ 189,800.00	
Intel® Xeon® Gold 5218R Processor 27.5M Cache, 2.10 GHz, 20C/40T		PRO-872		1	32 ¥ 13,390.00	¥ 428,480.00	
Samsung 32G DDR4 RECC 2933MT/s		PRO-754		1	128 ¥ 1,570.00	¥ 200,960.00	
Intel S4510 M.2-480G SSD		PRO-632		1	16 ¥ 1,350.00	¥ 21,600.00	
Intel P4510 U.2-2T NVMe SSD		PRO-667		1	64 ¥ 4,200.00	¥ 268,800.00	
Mellanox 100G EDR IB Dual-Port QSFP28 Network Adapter		PRO-556		1	16 ¥ 8,400.00	¥ 134,400.00	
Quad-port 10Gb Ethernet Card, 2x10Gb SFP+, 2x 10Gb RJ45 Network Adapter		PRO-554		1	16 ¥ 4,950.00	¥ 79,200.00	
Transwarp 4-hour 7x24 On-site Service, 3 years		PRO-100		1	1 ¥ 66,162.00		¥ 66,162.00
Transwarp Big Data Appliance TxData-2G server							
Transwarp Big Data Appliance TxData-2G server, 2U, single node		PRO-995		1	6 ¥ 24,450.00	¥ 146,700.00	
Intel® Xeon® Gold 6330 Processor, 42M Cache, 2.00 GHz, 28C, 56T		PRO-881		1	12 ¥ 22,560.00	¥ 270,720.00	
Samsung 32G DDR4 RECC 3200MT/s		PRO-764		1	48 ¥ 1,670.00	¥ 80,160.00	
Intel P4510 U.2 1T SSD		PRO-633		1	12 ¥ 2,100.00	¥ 25,200.00	
Intel P5510 U.2 3.84T NVMe SSD		PRO-668		1	36 ¥ 6,200.00	¥ 223,200.00	
Intel I350 2-port 1Gb Network Adapter		PRO-518		1	6 ¥ 700.00	¥ 4,200.00	
Mellanox 100G EDR IB Dual-Port QSFP28 Network Adapter		PRO-556		1	6 ¥ 8,400.00	¥ 50,400.00	
Transwarp 4-hour 7x24 On-site Service, 3 years		PRO-100		1	1 ¥ 40,029.00		¥ 40,029.00
Network and Cables							
Mellanox MSB7800-ES2F Switch-IB 2 Based EDR InfiniBand 1U Switch 36 QSFP28 Ports		MSB7800-ES2F		1	1 ¥ 159,840.00	¥ 159,840.00	
Support and Warranty - 3 Year for MSB7800-ES2F		SUP-MSB7800-ES2F		1	1 ¥ 15,984.00		¥ 15,984.00
Mellanox® Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 5m, Black, 26AWG				1	22 ¥ 2,795.00	¥ 61,490.00	
H3C S5110-52P-SI 52-port Gigabit Ethernet Switch,with 1 year Support and Warranty		S5110-52P-SI		1	3 ¥ 2,800.00	¥ 8,400.00	
Infrastructure							
42U Enclosure system				1	1 ¥ 4,000.00	¥ 4,000.00	
24" LED Monitor				1	3 ¥ 1,500.00	¥ 4,500.00	
Keyboard and Mouse				1	3 ¥ 100.00	¥ 300.00	
Software							
Transwarp Data Hub 7.0.1 Subscription Edition - 3 Years				1	22 ¥ 30,000.00		¥ 660,000.00
Support Service - 3 Years for CentOS 8				1	22 ¥ 5,500.00		¥ 121,000.00
Subtotals						¥ 2,362,350.00	¥ 903,175.00
Pricing: 1 = Transwarp * 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				Three-Year Cost of Ownership: ¥3,265,525 HSph@1TB: 34.01 ¥ / HSph@1TB: ¥96,016.62			
<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>							

 <p>星 环 科 技</p>	<h1>Transwarp Data Hub</h1>	TPCx-HS 2.0.3 TPC Pricing 2.8.0 Report Date Jan. 04, 2023
<h2>Numerical Quantities</h2>		
<h3>Performance Run – Run 1</h3>		
Scale Factor	1TB	
Run Start Time	2022-11-11 18:08:06.000	
Run End Time	2022-11-11 18:09:49.000	
Run Elapsed Time	106.000	
HSGen Start Time	2022-11-11 18:08:07.000	
HSGen End Time	2022-11-11 18:08:25.000	
HSGen Elapsed Time	19.665	
HSSort Start Time	2022-11-11 18:08:29.000	
HSSort End Time	2022-11-11 18:09:32.000	
HSSort Elapsed Time	64.110	
HSValidate Start Time	2022-11-11 18:09:37.000	
HSValidate End Time	2022-11-11 18:09:49.000	
HSValidate Elapsed Time	14.494	
<h3>Repeatability Run – Run 2</h3>		
Scale Factor	1TB	
Run Start Time	2022-11-11 18:10:55.000	
Run End Time	2022-11-11 18:12:38.000	
Run Elapsed Time	106.000	
HSGen Start Time	2022-11-11 18:10:56.000	
HSGen End Time	2022-11-11 18:11:14.000	
HSGen Elapsed Time	19.358	
HSSort Start Time	2022-11-11 18:11:18.000	
HSSort End Time	2022-11-11 18:12:20.000	
HSSort Elapsed Time	63.569	
HSValidate Start Time	2022-11-11 18:12:26.000	
HSValidate End Time	2022-11-11 18:12:38.000	
HSValidate Elapsed Time	14.813	



Transwarp Data Hub

TPCx-HS	2.0.3
TPC Pricing	2.8.0
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Run Reports

Run Report for Performance Run – Run 1

TPCx-HS Performance Metric (HSph@SF) Report

Test Run 1 Details	Total Time =	106
	Total Size =	10000000000
	Scale-Factor =	1

TPCx-HS Performance Metric (HSph@SF): 34.0136

Run Report for Repeatability Run – Run 2

TPCx-HS Performance Metric (HSph@SF) Report

Test Run 2 Details	Total Time =	106
	Total Size =	10000000000
	Scale-Factor =	1

TPCx-HS Performance Metric (HSph@SF): 34.0136



Transwarp Data Hub

TPCx-HS	2.0.3
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Revision History

Date	Edition	Description
January 4, 2023	First	Initial Publication