SPC Benchmark 1™

Executive Summary

Fujitsu Limited
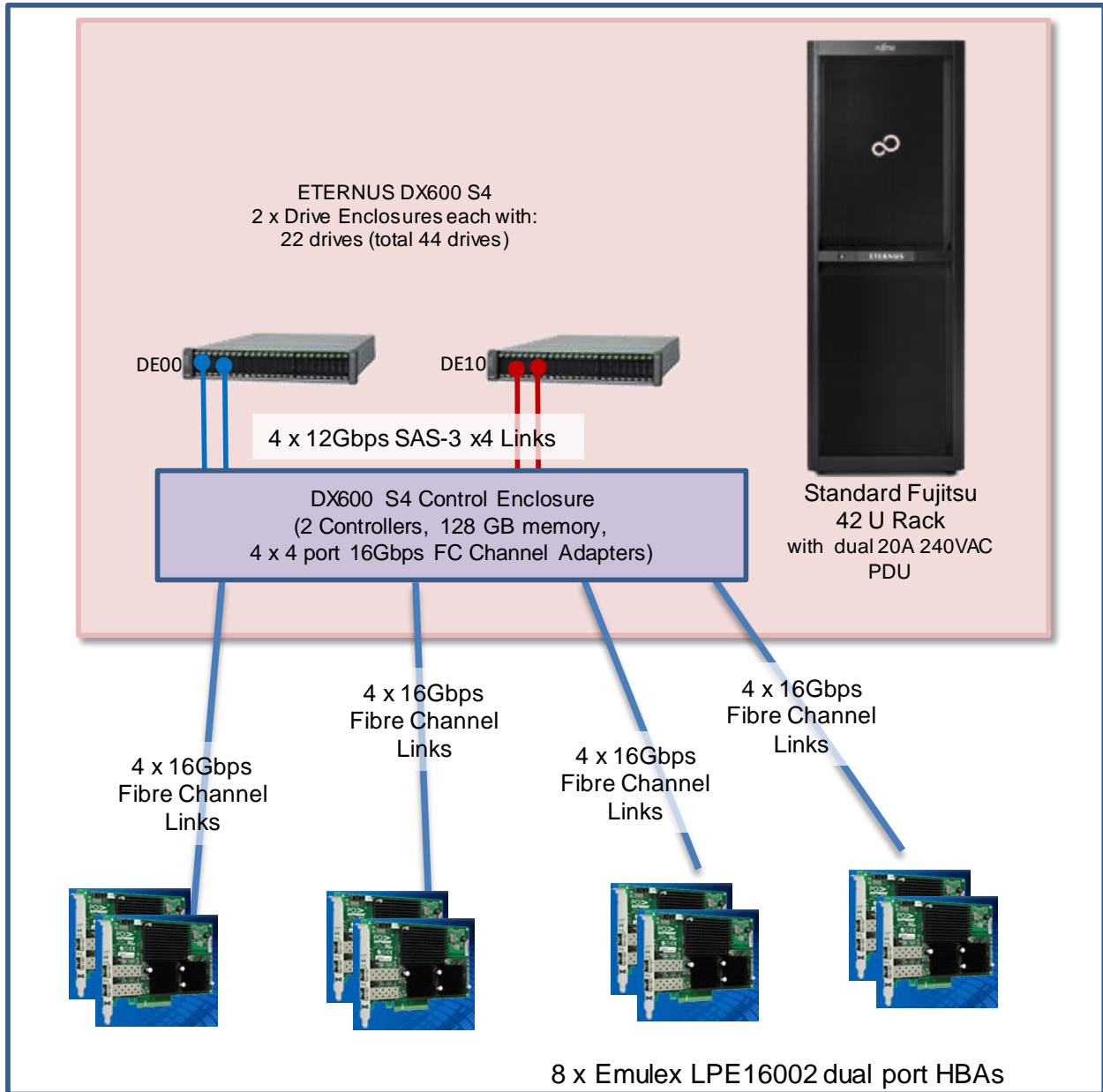## Eternus DX600 S4

SPC-1 IOPS™	560,037
SPC-1 Price-Performance™	**$295.68/SPC-1 KIOPS™**
SPC-1 IOPS™ Response Time	0.478 ms
SPC-1 Overall Response Time	0.297 ms
SPC-1 ASU Capacity	6,251 GB
SPC-1 ASU Price	$26.49/GB
SPC-1 Total System Price	$165,586.70
Data Protection Level	Protected 2 (RAID1)
Physical Storage Capacity	17,600 GB
Pricing Currency / Target Country	U.S. Dollars / USA

SPC-1 V3.6.0

Submission Identifier: A32005

Submitted For Review: April 4, 2018

Benchmark Configuration Diagram

ETERNUS DX600 S4
2 x Drive Enclosures each with:
22 drives (total 44 drives)

DE00

DE10

4 x 12Gbps SAS-3 x4 Links

DX600 S4 Control Enclosure
(2 Controllers, 128 GB memory,
4 x 4 port 16Gbps FC Channel Adapters)

Standard Fujitsu
42 U Rack
with dual 20A 240VAC
PDU

4 x 16Gbps
Fibre Channel
Links

4 x 16Gbps
Fibre Channel
Links

4 x 16Gbps
Fibre Channel
Links

4 x 16Gbps
Fibre Channel
Links

8 x Emulex LPE16002 dual port HBAs

Tested Storage Product Description

The ETERNUS DX600 S4 is the ideal choice for application scenarios with demanding data and performance requirements. The system delivers impressive IOPS performance with lowest latency even at full load. Thus, it offers a solution that resolves all performance issues in critical applications – such as real-time business analytics or VDI environments - without requiring any complicated tuning. It also fits best as general-purpose storage for all Tier-1 applications in small and mid-sized companies.

Priced Storage Configuration Components

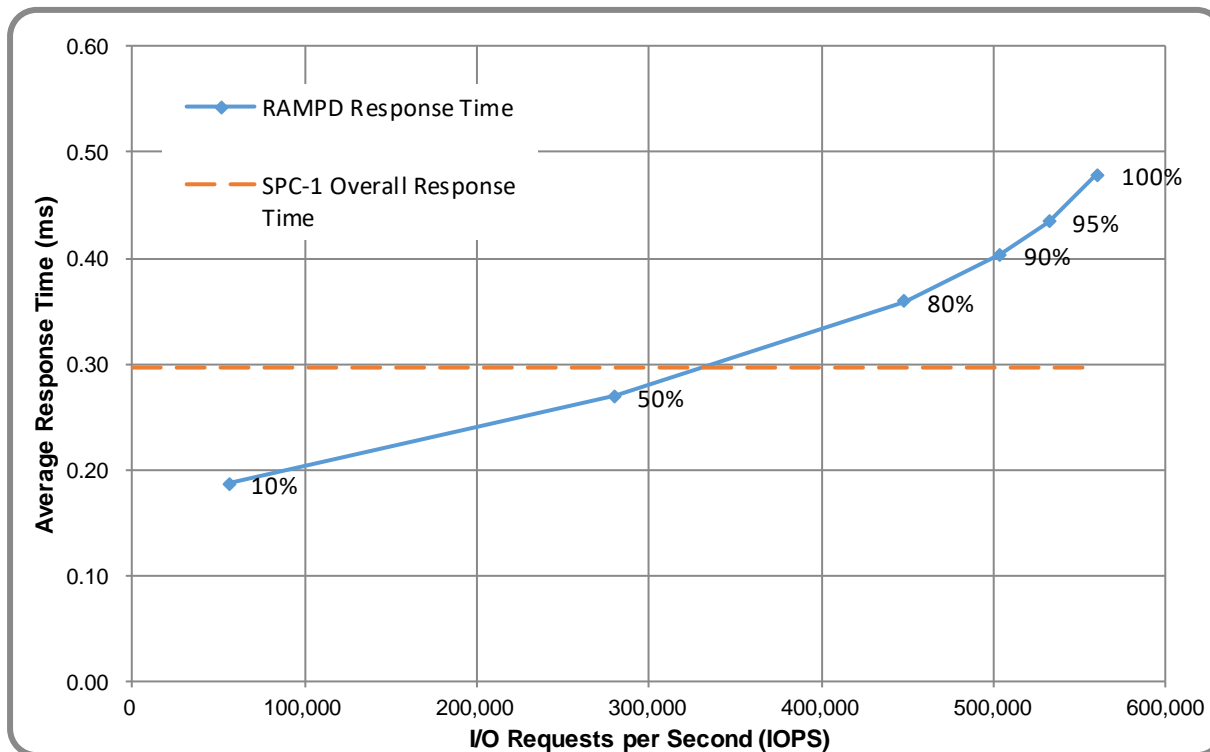| |
|---|
| 8 x Emulex LPE16002 dual port 16 Gb Fibre Channel HBAs |
| 1 x DX600 S4, with:
2 x Controller Modules (CM) each with:
      64 GB cache (128 GB total)
      2 x Channel Adapter (CA) each with:
            4 x 16Gbps Fibre Channel Host Ports
44 x 400GB SSD Storage Devices (without Hot Spare) |

Storage Configuration Pricing

Part No.	Description	Source	Qty	Unit Price	Ext. Price	Disc.	Disc. Price
	Hardware & Software						
ET604SAU	ETERNUS DX600 S4	1	1	47,220.00	47,220.00	50%	23,610.00
ETQM8H	128GB cache memory for DX600	1	1	8,770.00	8,770.00	50%	4,385.00
ETQEADU	Drive enclosure for DX500/DX600(2.5inch)	1	2	4,470.00	8,940.00	50%	4,470.00
ETQHH8E	Host interface for DX500/DX600(16Gbit/s, FC, 8port)	1	2	6,080.00	12,160.00	50%	6,080.00
ETQSAF	Value SSD(2.5inch) 400GB x1 for DX500/DX600	1	30	3,060.00	91,800.00	50%	45,900.00
ETQSA4A	SSD(2.5inch) 400GB x1 for DX500/DX600	1	14	5,880.00	82,320.00	50%	41,160.00
S26361-F4994-L502	PFC EP LPe16002	1	8	1,373.00	10,984.00	50%	5,492.00
ETPKC10U	AC100/200V Power Cable for DX500 S3/DX600 S3(IEC60320 C14, 1.0m)	1	3	130.00	390.00	50%	195.00
ETPP12U-L	Power distribution unit for DX500 S3/DX600 S3 (AC200-240V, 2U, 12Outlets)	1	1	2,170.00	2,170.00	50%	1,085.00
PYRACK_S26361-K827-V340_206528-02	PRIMECENTER M1 RACK 642S (42U, 1050x600mm) with Front & Rear Doors, side panels	1	1	3,157.00	3,157.00	50%	1,578.50
61-343827-003	LC-LC 10 GIGABIT MULTIMODE OM3 LASER OPTIMIZED DUPLEX 50/125 FIBER PATCH CABLE RISER RATED AQUA - 5M	1	16	140.00	2,240.00	50%	1,120.00
					Hardware & Software Subtotal		**135,075.50**
	Support & Maintenance						
	Provide 24 hour per day / 7days per week 4 hour response maintenance for 36 months						
ETD600-W059360-ATR	ETERNUS DX600 S4 Warranty, 36 Months, Basic Level, 12x5 Phone Support, 9x5 NBD Onsite	1	1	0.00	0.00	20%	0.00
ETD600-U004361-ATR	ETERNUS DX600 S4 Warranty Uplift, 36 Months, Enhanced Plus Level, 24x7 4hr Onsite, Prepaid billing	1	1	38,139.00	38,139.00	20%	30,511.20
					Support & Maintenance Subtotal		**30,511.20**
	SPC-1 Total System Price						**165,586.70**
	SPC-1 IOPS™						560,037
	SPC-1 Price-Performance™ ($/SPC-1 KIOPS™)						**295.68**
	SPC-1 ASU Capacity (GB)						6,251
	SPC-1 ASU Price ($/GB)						**26.49**

Discount Details: The discounts shown are based on the storage capacity purchased and are generally available.

Warranty: The 3-year maintenance and support included in the above pricing meets or exceeds a 24x7 coverage with a 4-hour response time.

Availability Date: Currently available.

SPC Benchmark 1™ V3.6.0
Fujitsu Limited
Eternus DX600 S4

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Submission Identifier: A32005
Submitted for Review: April 4, 2018

Response Time and Throughput Graph

Contact Information	
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Revision Information	
SPC Benchmark 1™ Revision	V3.6.0
SPC-1 Workload Generator Revision	V 03.00.2551
Publication Revision History	Initial Publication