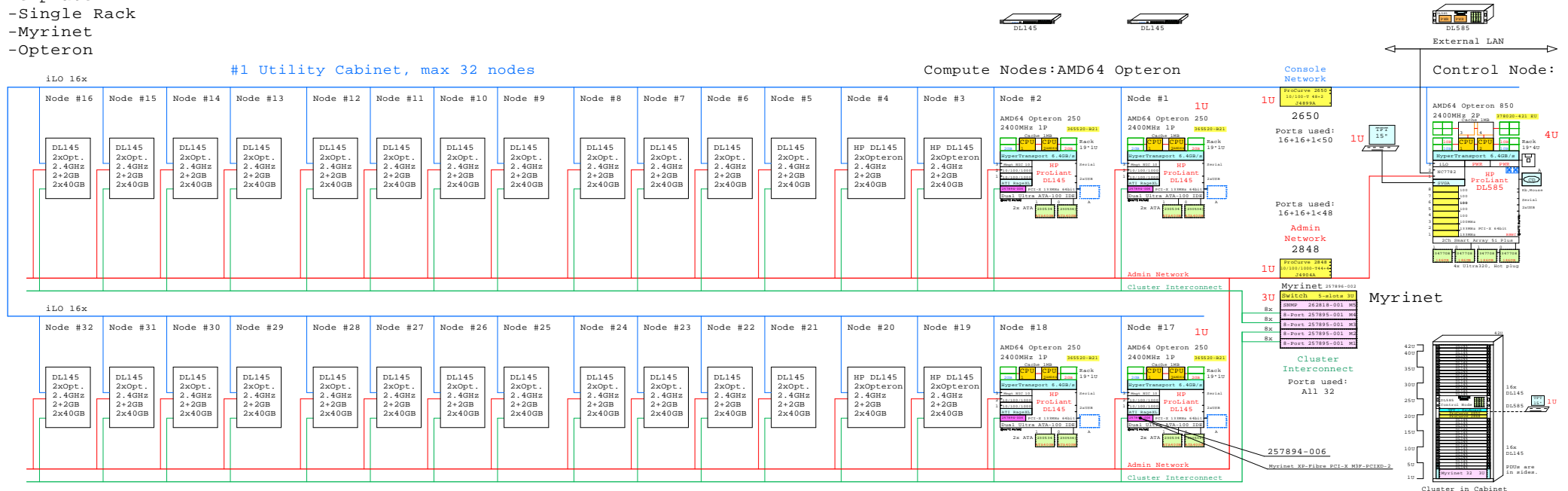


HP Unified
Cluster
Platform
4000

Planning
Template
-Single Rack
-Myrinet
-Opteron

HP Cluster Platform 4000, Single Cabinets, Myrinet, 32x ProLiant DL145 Opteron 2.4GHz



BOM for one Compute Node DL145

Part Number	Qty	Description
1	365520-B21	1 HP ProLiant DL145 1P 2.4GHz 2GB 40GB ATA
1.1	230534-B21	1 40-GB ATA/100 7200r disk drive 1"
1.2	257894-006	1 Myrinet XP-Fibre PCI-X M3P-PCIXD-2
1.3	361038-B21	1 PC2700 2GB Memory option kit 2x1GB
1.4	366619-B21	1 DL145 2.4GHz AMD64 250 CPU option kit

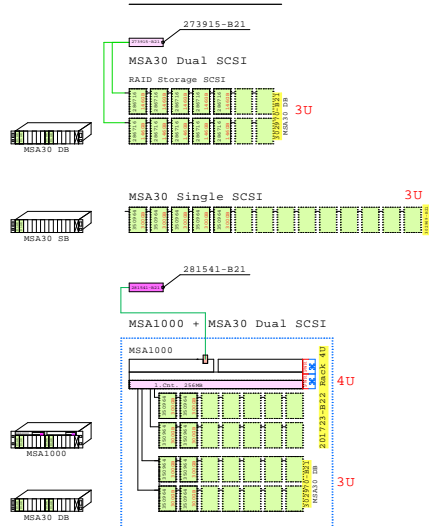
BOM for the Control Node DL585 and Switches

Part Number	Qty	Description
1	378020-421	1 HP ProLiant DL585 2.4GHz 1MB 2GB 2P AMD6
1.1	347708-B21	4 146.8GB 15000r U320 disk 1"
1.2	371047-B21	2 PC2700 1GB DDR SDRAM DIMM kit 2x512MB
2	257896-002	1 Myrinet 5-slot Switch Frame M3-E32 3U
2.1	257895-001	4 Myrinet 8-port FS Card M3-SW16-8F
2.2	262818-001	1 Myrinet SNMP Monitor Card M3-M
3	J4899A	1 ProCurve 2650 10/100-T 48+2=50 Port 1U
4	J4904A	1 ProCurve 2848 10/100/1000-T 44+4=48 Port

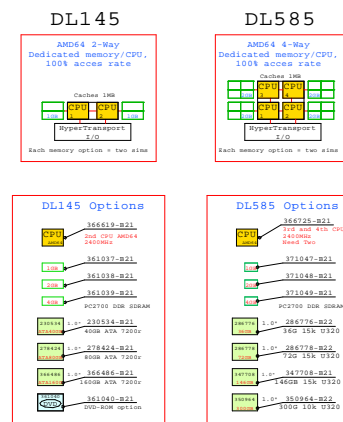
BOM for Optional Storage

Part Number	Qty	Description
1	201723-B22	1 MSA1000 RAID Array 256MB Rack 4U
1.1	302970-B21	1 MSA30 Dual Bus Ultra320 7+7 1"
1.1.1	350964-B22	4 300GB 10000r U320 disk 1"
1.2	350964-B22	4 300GB 10000r U320 disk 1"
2	302969-B21	1 MSA30 Single Bus Ultra320 14x1"
2.1	350964-B22	5 300GB 10000r U320 disk 1"
3	302970-B21	1 MSA30 Dual Bus Ultra320 7+7 1"
3.1	286716-B22	10 146.8GB 10000r U320 disk 1"
4	273915-B21	1 Smart Array 6402/128 Ultra320 2-chan
5	281541-B21	1 HBA 2Gb/s PCI FCA2214 for Linux

Optional Storage



Compute and Control Node Options



For Golden Eggs:
<http://www.LinuxHPC.org>

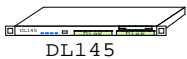
When this diagram has influenced on your purchase decision, please let me know. Matti.Patari@linuxhpc.fi OS-Architect.

Date: 14-Mar-2005

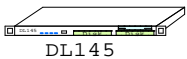
©2005 Matti Patari. All rights reserved.

GOLDEN EGGS 14-Mar-2005 CP4000Myr132

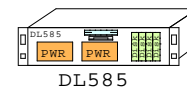
HP Cluster Platform 4000 AMD64 GOLDEN EGGS Visuals, Helsinki



DL145



DL145



DL585

Compute Nodes: AMD64 Opteron

Console Network

Control Node:

External LAN

45
ron

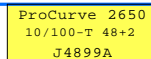
Node #3

Node #2

Node #1

1U

1U



2650

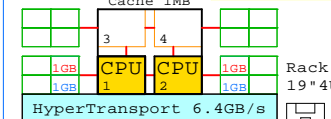
Ports used:
16+16+1<50



1U

AMD64 Opteron 850

2400MHz 2P
Cache 1MB 378020-421 EU



4U

HyperTransport 6.4GB/s

1GB CPU 1 1GB CPU 2

1GB CPU 1 1GB CPU 2

1GB CPU 1 1GB CPU 2

1GB CPU 1 1GB CPU 2

1GB CPU 1 1GB CPU 2

1GB CPU 1 1GB CPU 2

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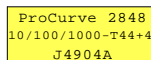
1GB CPU 1 1GB CPU 2

Ports used:
16+16+1<48

Admin Network

2848

1U



Myrinet 257896-002

Switch 5-slots 3U

SNMP 262818-001 M5

8-Port 257895-001 M4

8-Port 257895-001 M3

8-Port 257895-001 M2

8-Port 257895-001 M1

3U

Cluster Interconnect

Ports used:
All 32

257894-006

Myrinet XP-Fibre PCI-X M3F-PCIXD-2

Myrinet

45
ron

Node #19

Node #18

Node #17

1U

AMD64 Opteron 250

2400MHz 1P 365520-B21

Cache 1MB

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

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2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

AMD64 Opteron 250

2400MHz 1P 365520-B21

Cache 1MB

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

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2GB CPU 1 2GB CPU 2

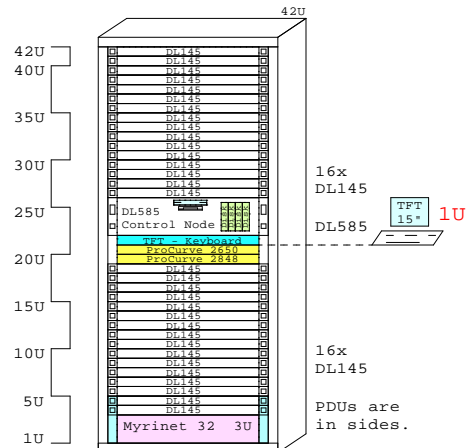
2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2

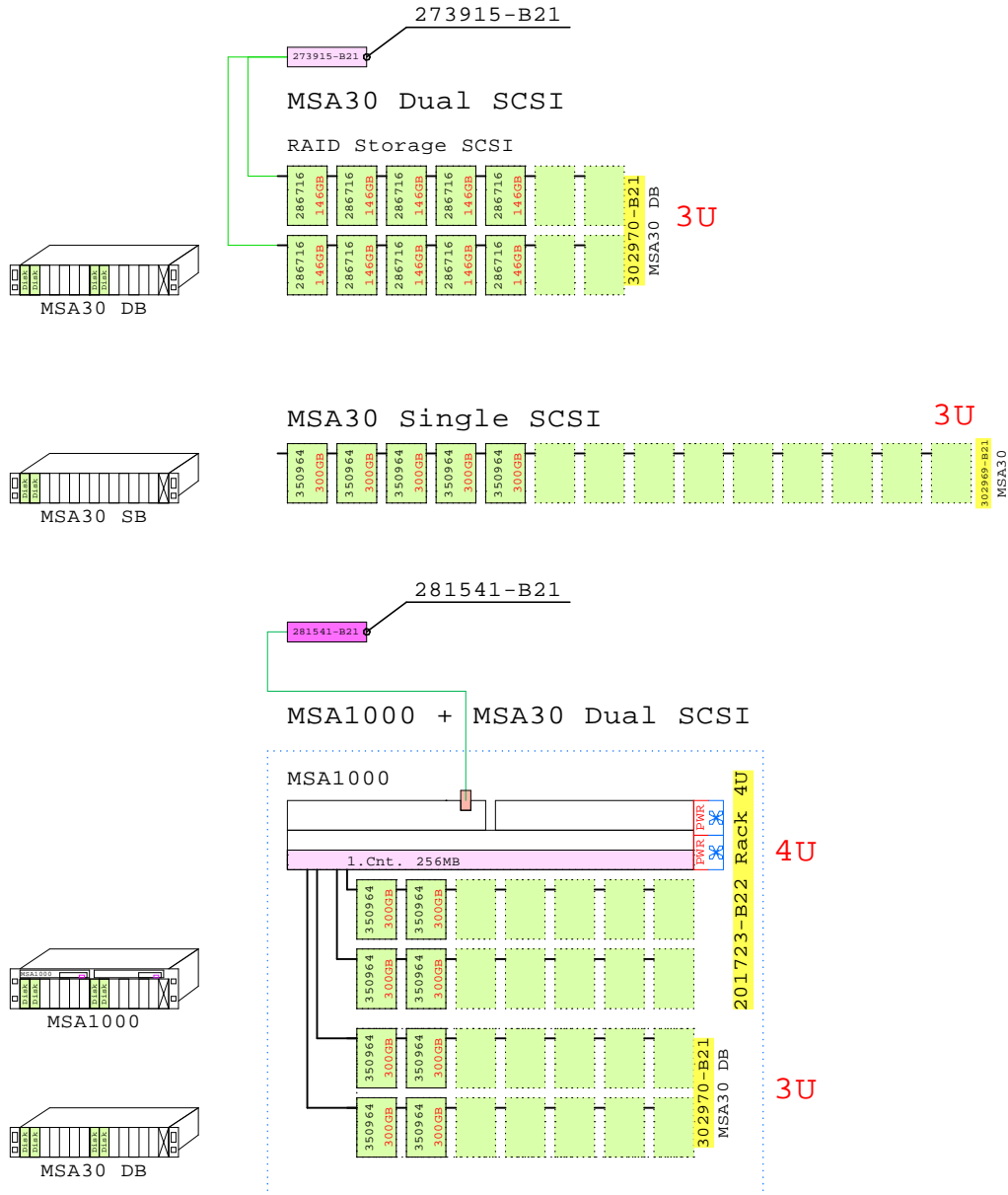
2GB CPU 1 2GB CPU 2

2GB CPU 1 2GB CPU 2



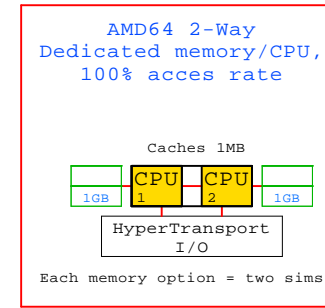
Cluster in Cabinet Myrinet

Optional Storage

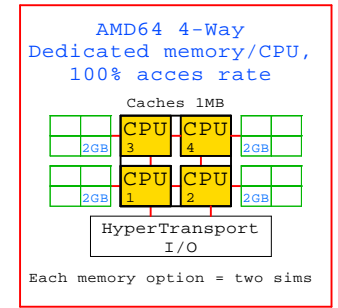


Compute and Control Node Options

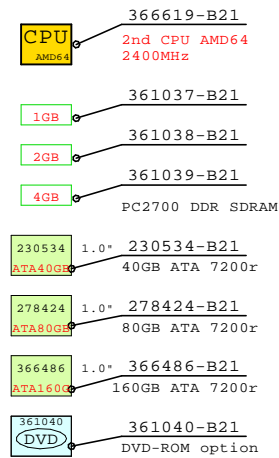
DL145



DL585



DL145 Options



DL585 Options

