

ProLiant Server Solution

Compaq Korea



Contents

- ProLiant Server Introduction
- ProLiant Server and Software
- ProLiant Leadership and Market share
- Compaq and Oracle Alliance
- Compaq Parallel Database Cluster Products
- Oracle Sizer

ProLiant[™] market leadership

#1 Worldwide

#1 Korea

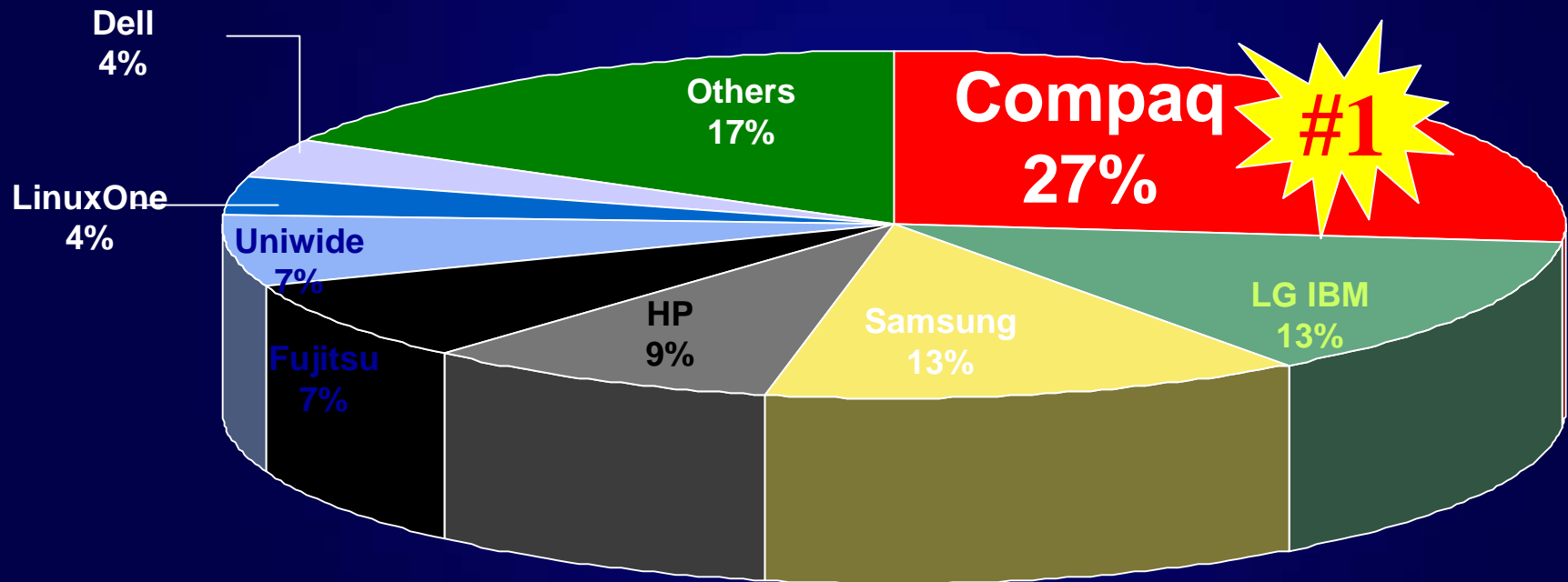
Density-Optimized at **35%**

1,2 Processor at **26%**

4/6 Processor at **32%**

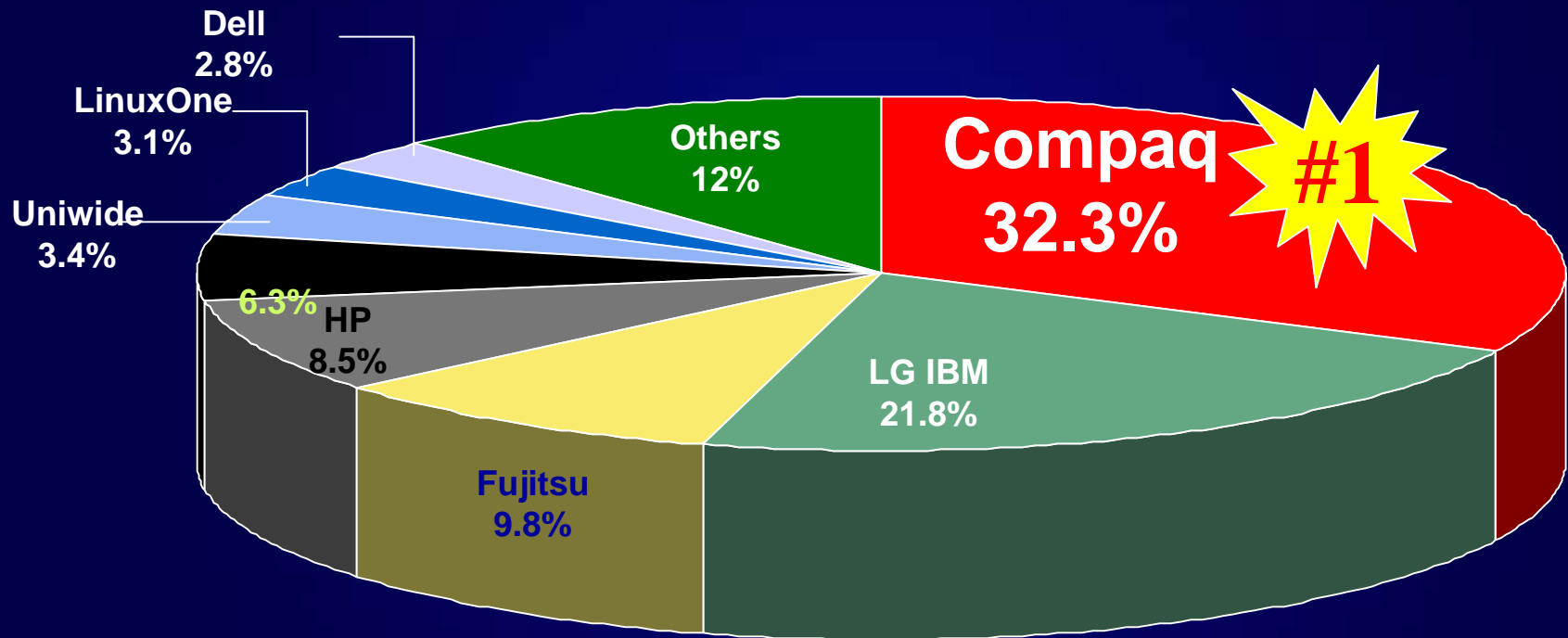
8 Processor at **47%**

2001 PC-Server Korea Market Leadership



Source : IDC 2002

2001 PC-Server Korea Market Leadership



Source : IDC 2002

Product Excellence for the Internet Age

Very large databases
Server consolidation

700 Series

ProLiant
DL 760

ProLiant
ML 750

Large databases
Complex web apps

ProLiant
DL 590/64

ProLiant
ML 570

500 Series

ProLiant
DL 580

ProLiant
ML 530

File and print
Small database

300 Series

ProLiant
DL 380

ProLiant
DL 360

ProLiant
ML 370

ProLiant
ML 350

ProLiant
DL 320

ProLiant
ML 330

ProLiant
ML 330e

ProLiant
CL 380

DL Line

Density
optimized for
rack-mount
environments

ML Line

maximized for
internal system
expansion

CL Line

packaged for
simplified clustering



Disk



Array controllers

ProLiant Delivers on Scalable Enterprise Data Center Servers

First 8-Way server



DL760



ML750



F8

Next-gen. IA32

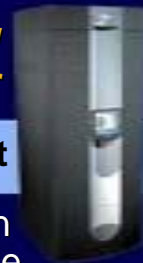
32-Bit

- Performance
- Scalability
- Availability
- Investment Protection
- Manageability

First Industry-Standard 64-bit server



32-Way 64-bit server



Itanium™ Server Deployment

64-Bit

Deploy on targeted apps that benefit immediately from Itanium

Deployment acceleration increases as Intel volume dynamics meet the needs of e-Business growth

1999 2001 2002 2003 2004

The next phase of 32-bit ProLiant 8-Way



- Unparalleled 32-bit performance
 - Unparalleled availability
 - Unparalleled investment protection
-
- Fosters 8-Way
 - Hot Plug RAID memory
 - PCI-X
 - Upgrade Kit



ProLiant : Server, Software and Storage

New

ProLiant Essentials Software Value Packs

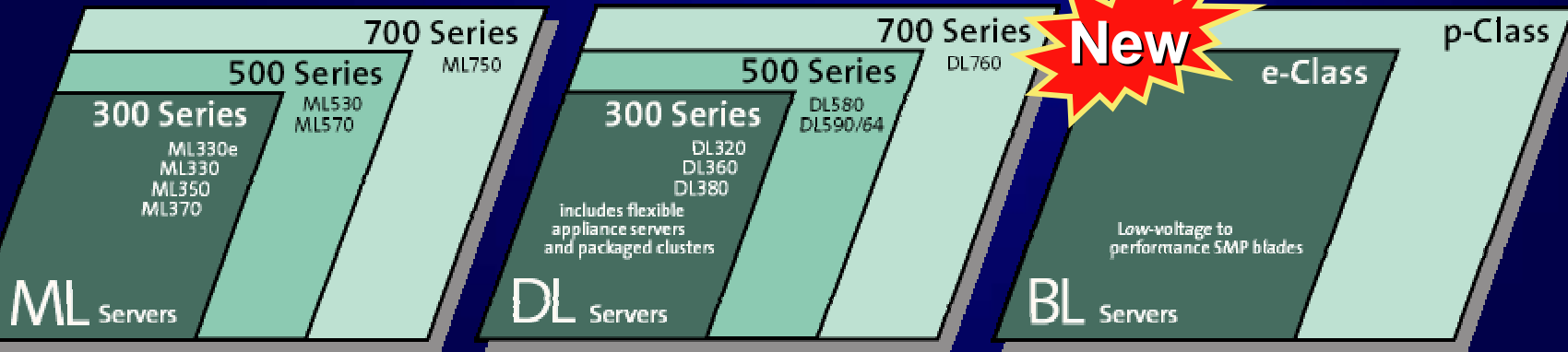
(Rapid Deployment, Integrated Lights-Out Advanced, Workload Management)

ProLiant Essentials Software Foundation Pack

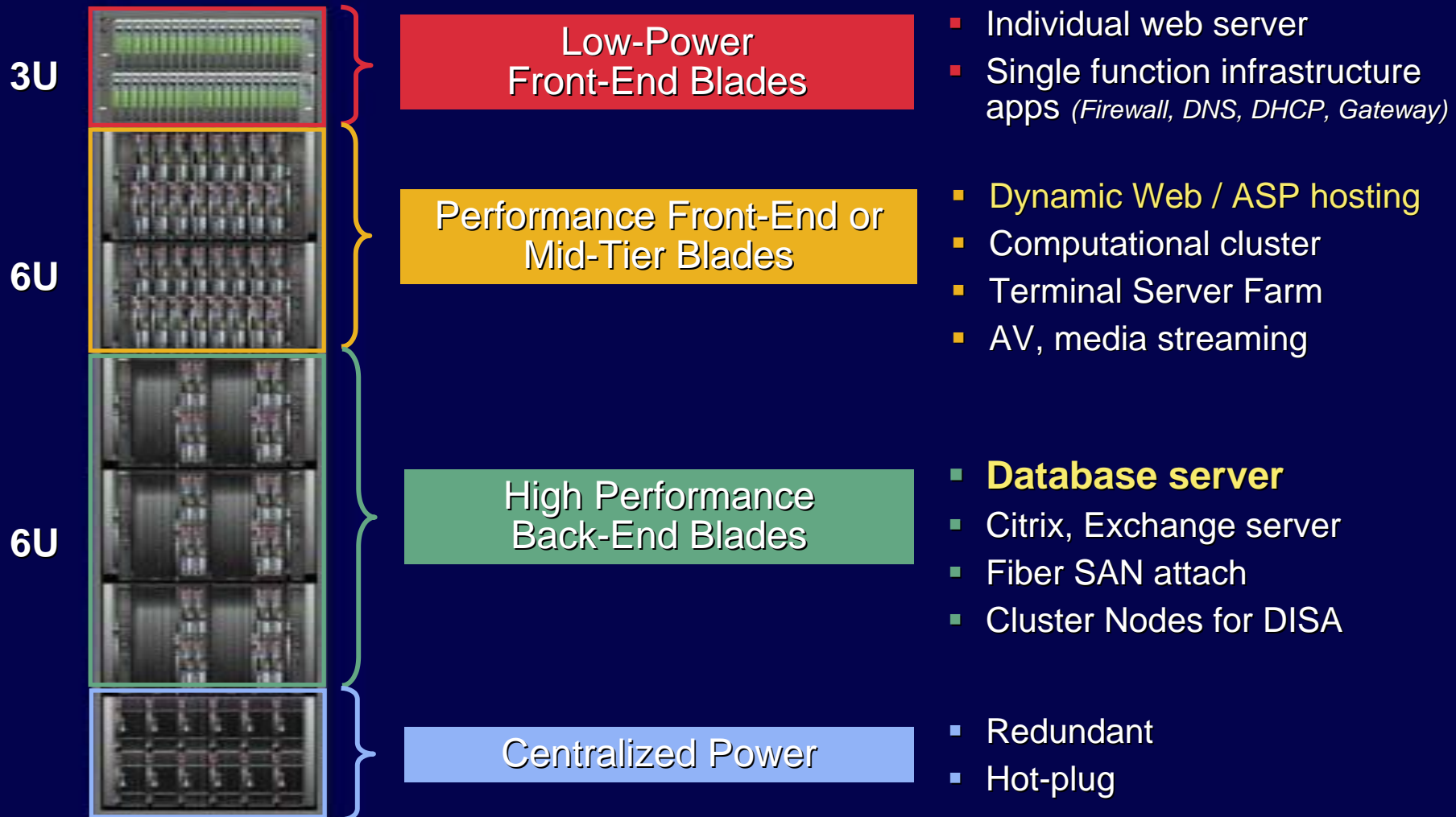
(Compaq Insight Manager 7, SmartStart, Insight Agents)

Smart Array Storage for ProLiant Servers

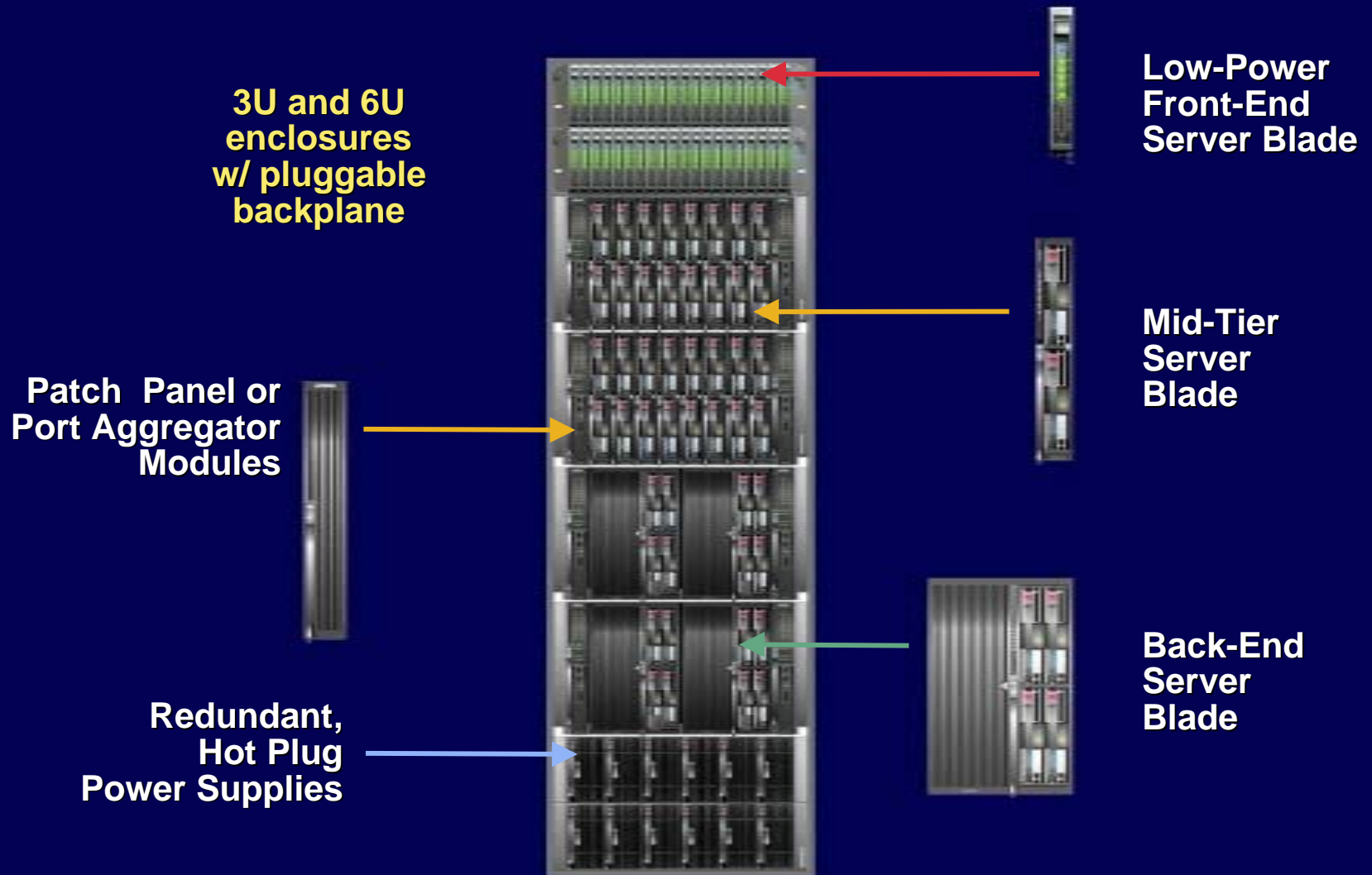
New



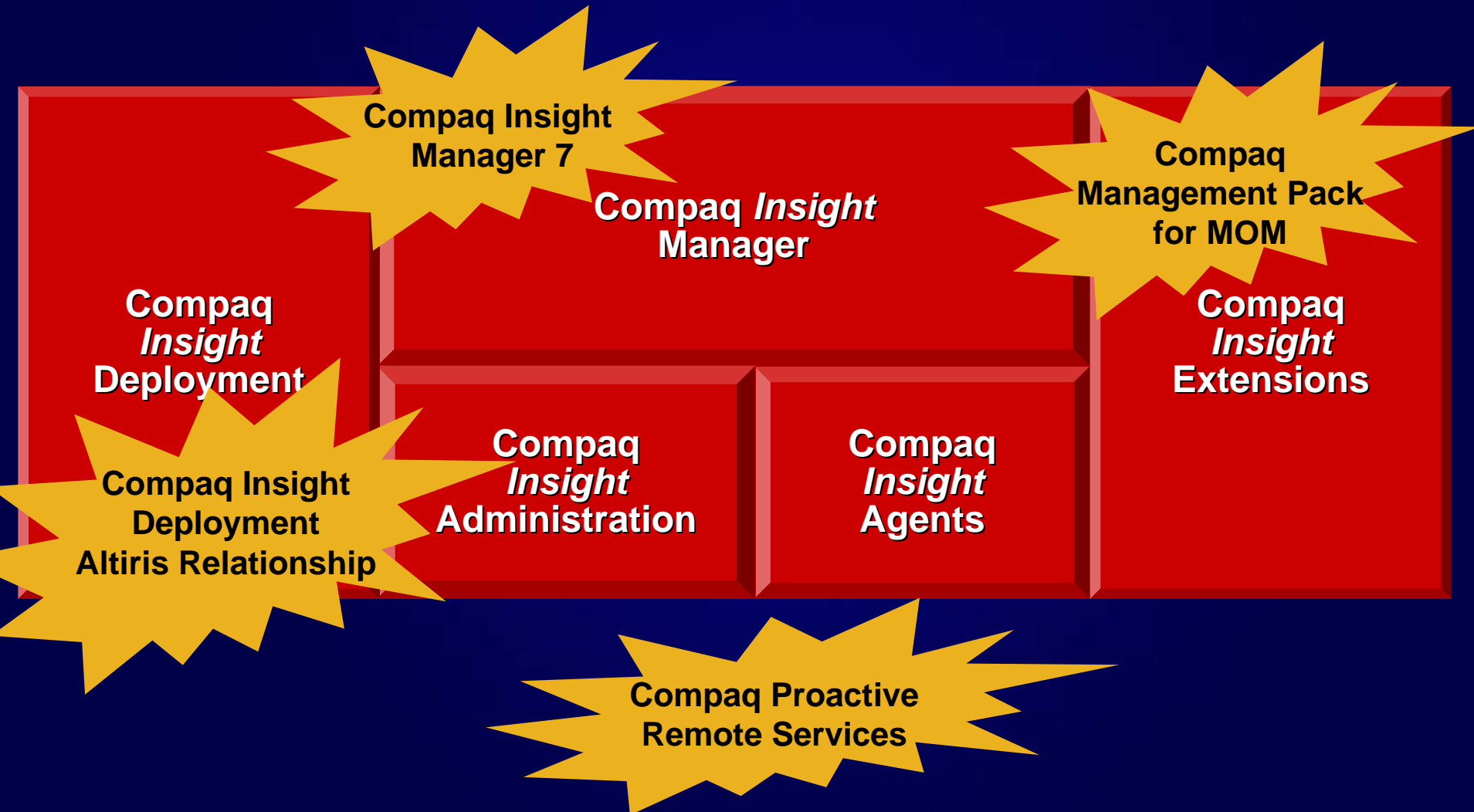
ProLiant BL e & BL p Class (1)



ProLiant BL e & BL p Class (2)



Compaq Insight Management Suite



Solutions Market Leadership



50% of IIS-based websites are hosted on Compaq



50% of WindowsNT installations on Compaq



#1 platform for Linux servers, 22% share

Source: IDC Quarterly Tracker June 2001



42% of WindowsNT licenses on Compaq



#1 Server Platform for Lotus Domino, 42% share



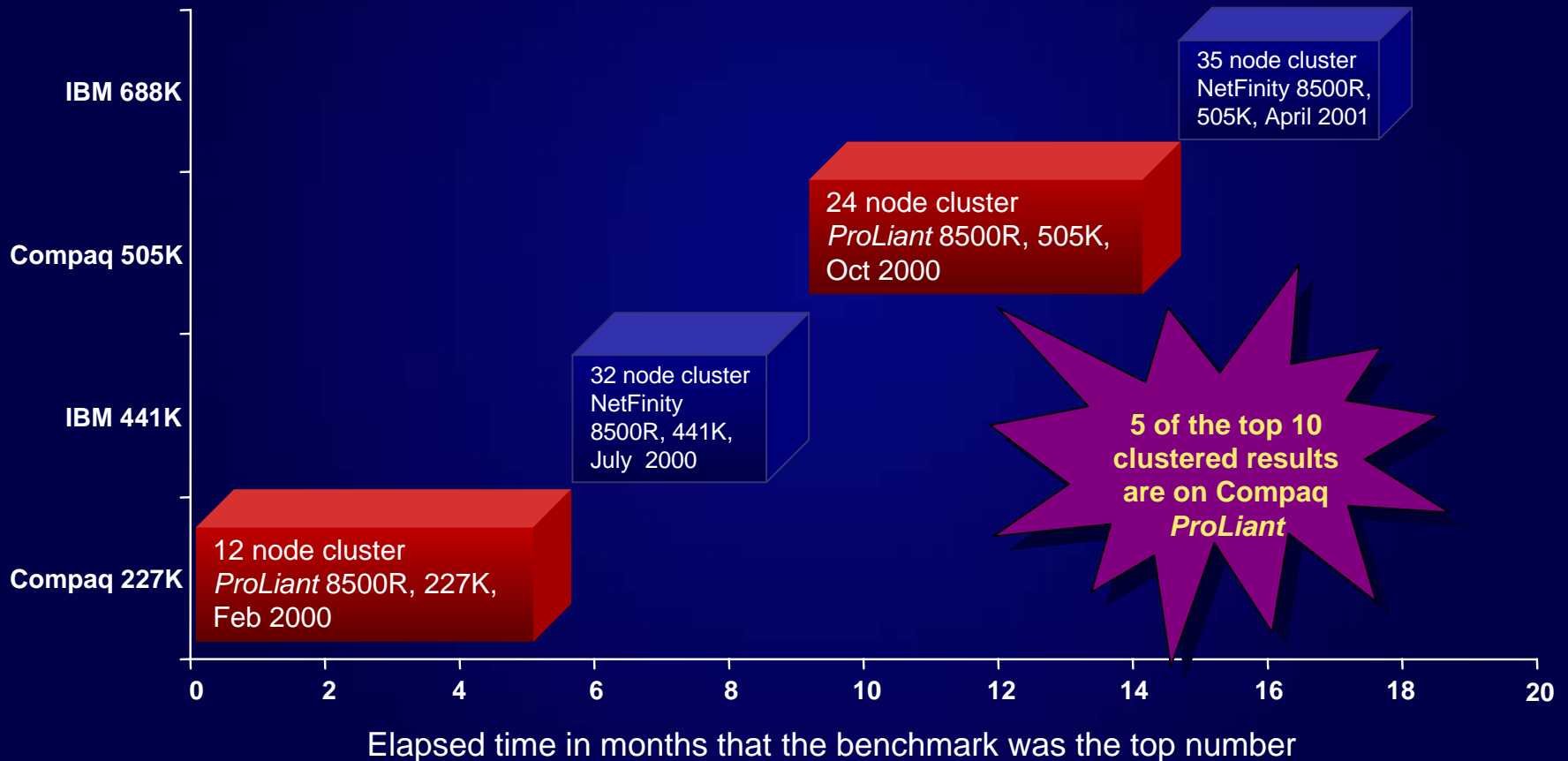
40+ e-Marketplaces on Compaq Servers



66% of NT license revenue on Compaq platforms

Database Performance Leadership

tpm-C Clustered Benchmarks



Clustered Compaq and IBM tpmC results shown by release date

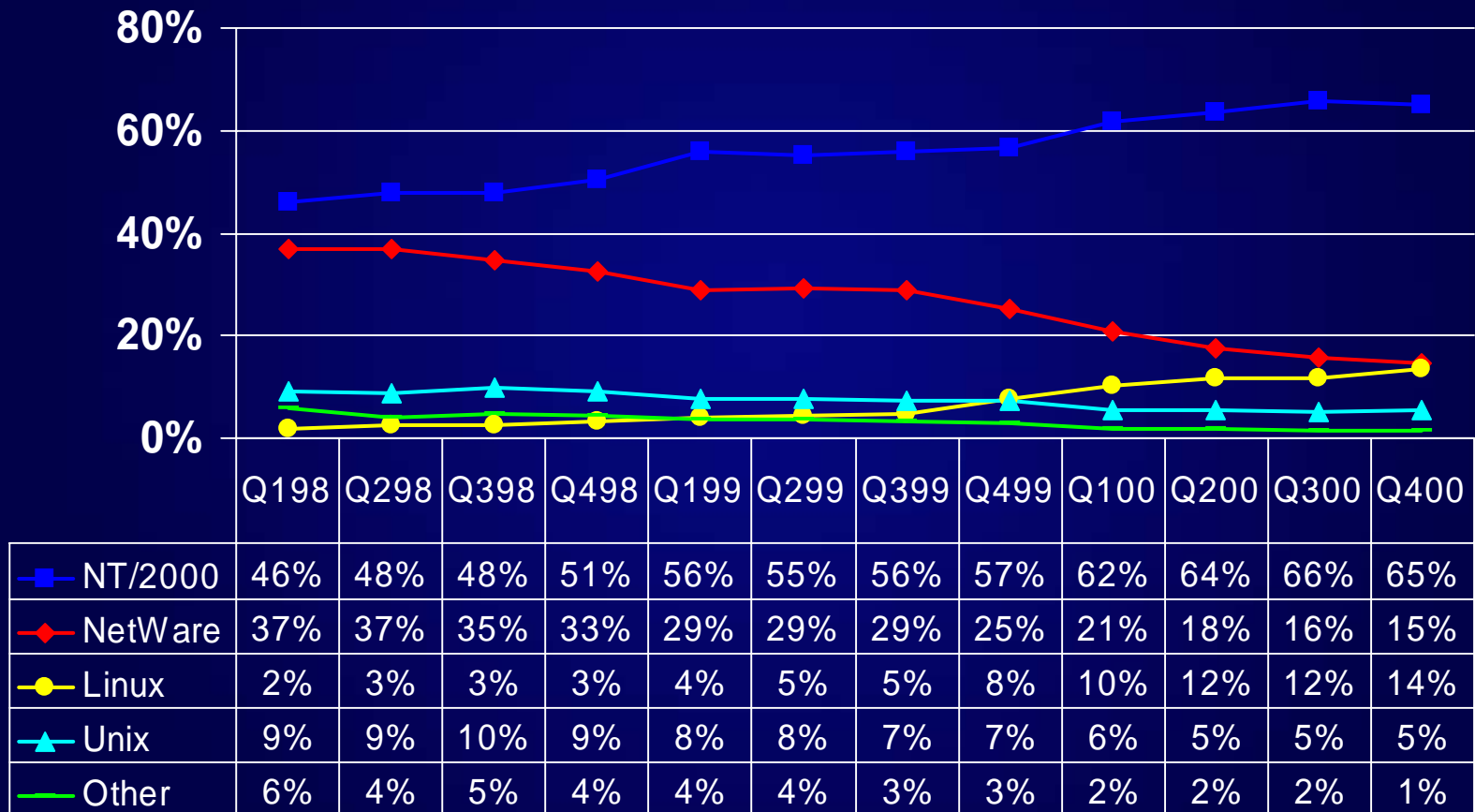
Application Performance Leadership

- Compaq *ProLiant* servers are the # 1 performance leaders for:
- SAP R/3 with SQL Server on 8-Way
- Peoplesoft: CRM, Financials, HR, and eBill with SQL Server
- JD Edwards with SQL Server
- Oracle Applications on 2-node OPS
- Lotus Domino on NT
- Microsoft Exchange 2000 on 1P, 2P and 4P



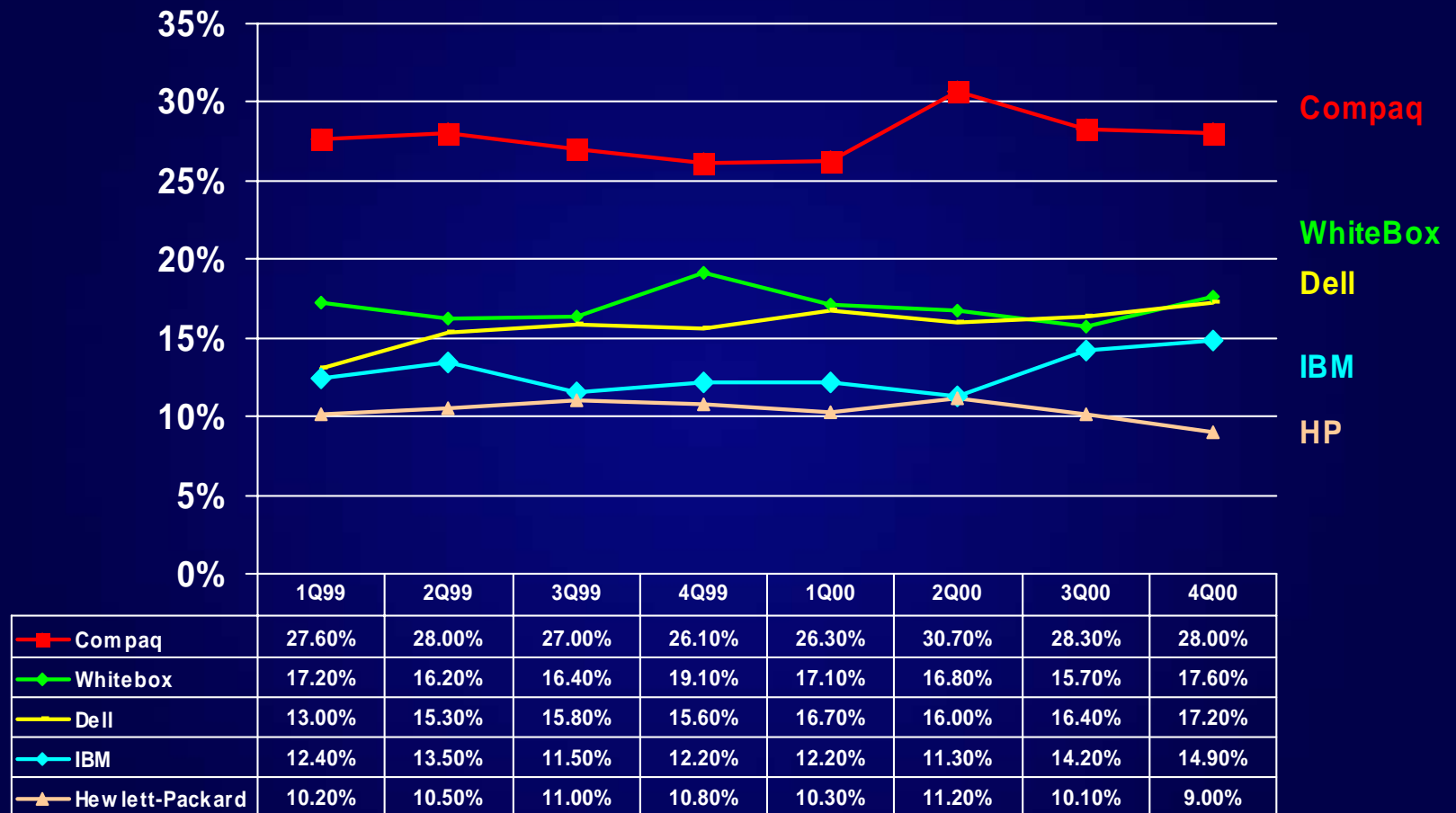
Compaq's has deep expertise on the entire solution stack

OS Share of Worldwide Intel Server Market (units)



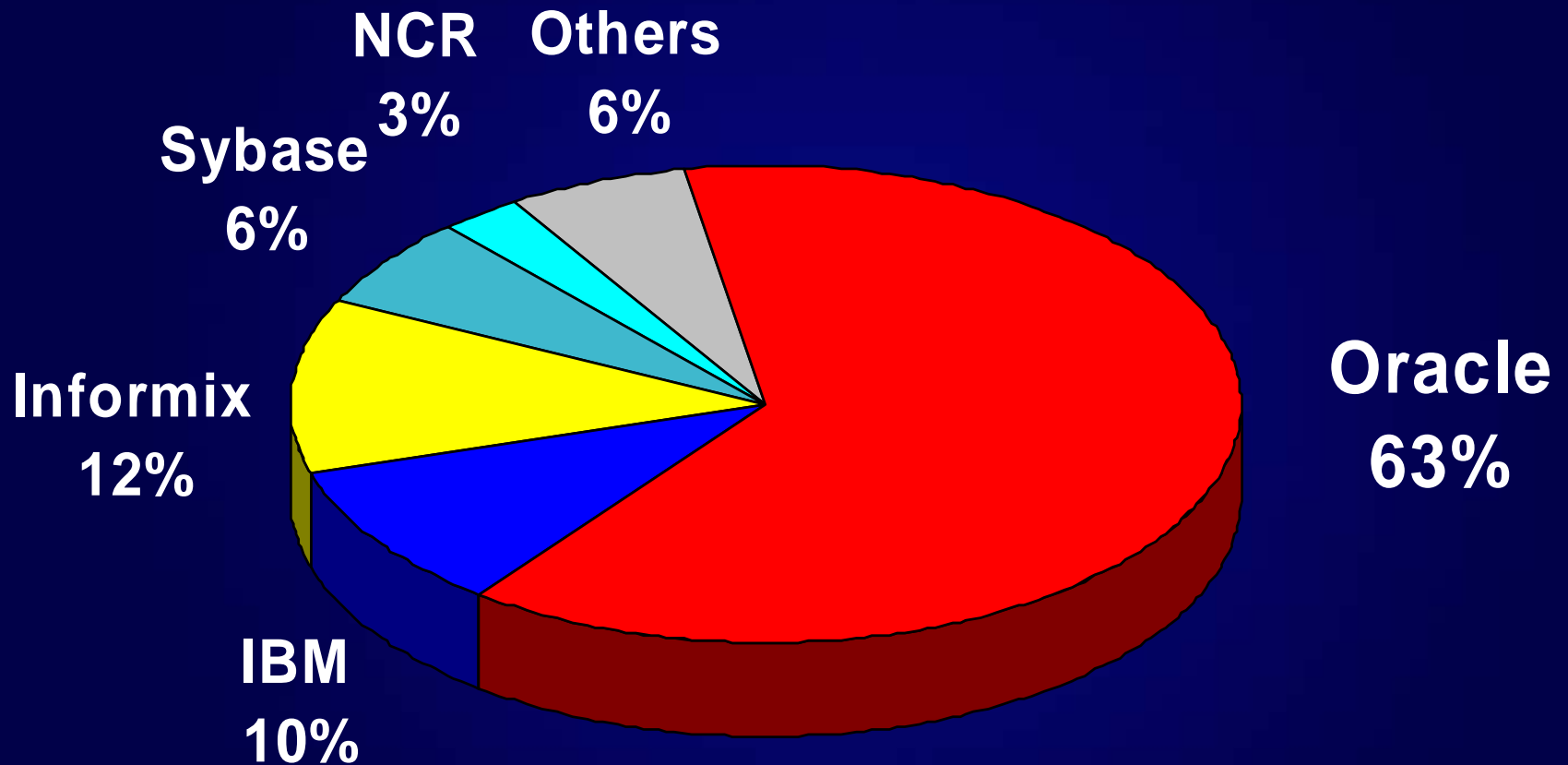
Source: Q400 IDC Server Market Tracker

NT OS Worldwide Units Market Share



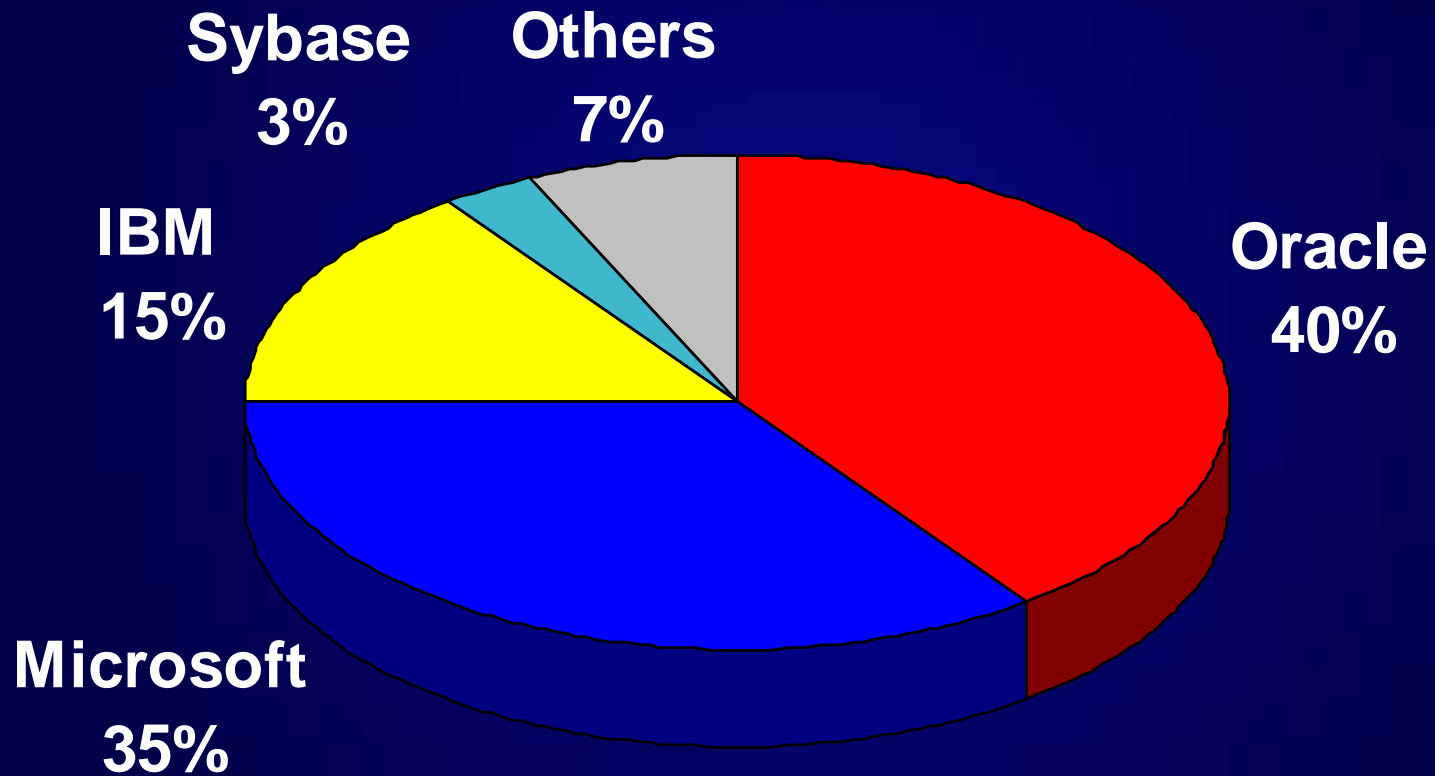
Source: IDC Quarterly Server Tracker Q400

Oracle Market Share on UNIX Platform



Source: Dataquest, May 2000

Oracle Market Share on Windows Platform



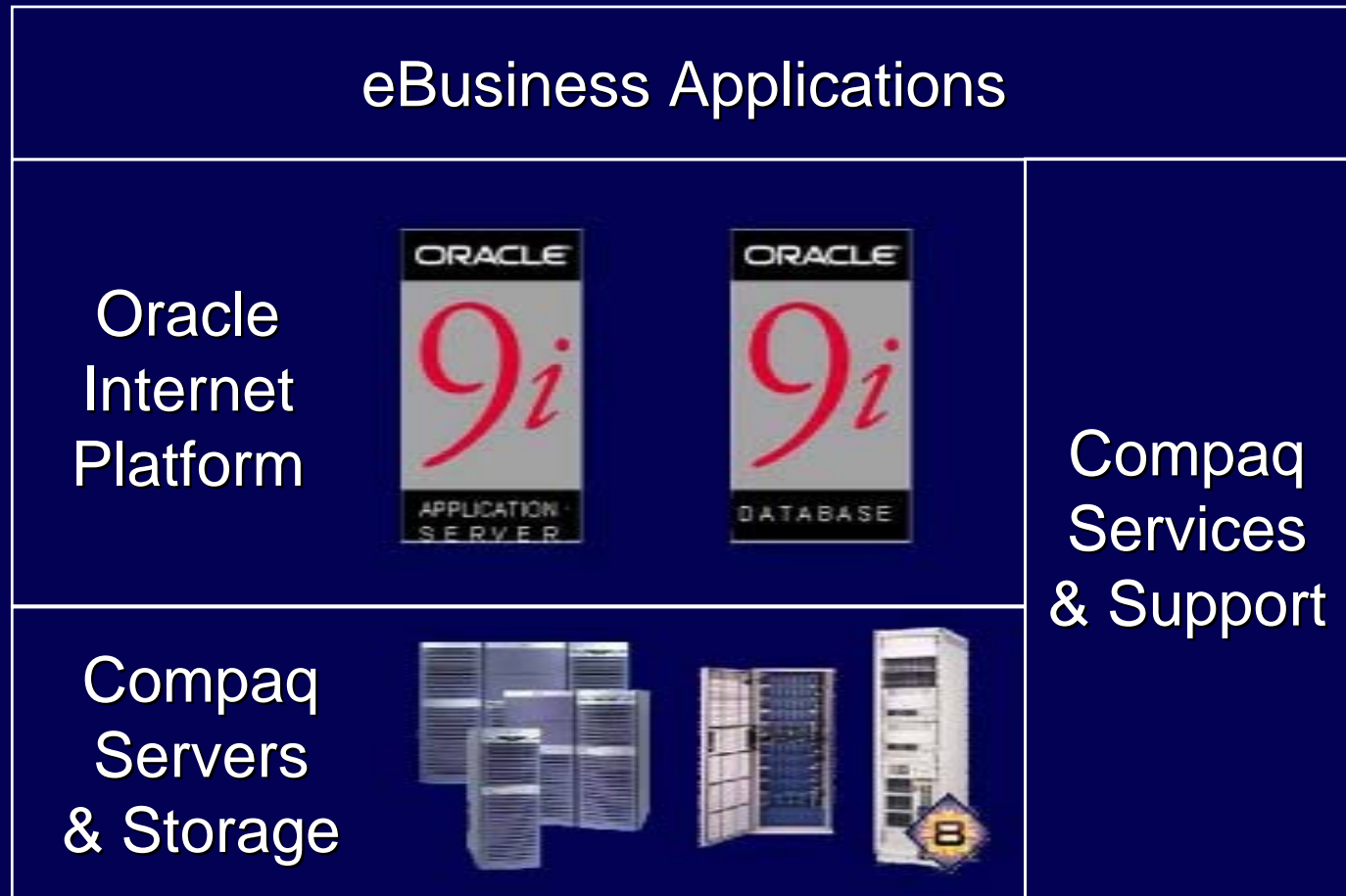
Source: Dataquest, May 2000

Compaq and Oracle

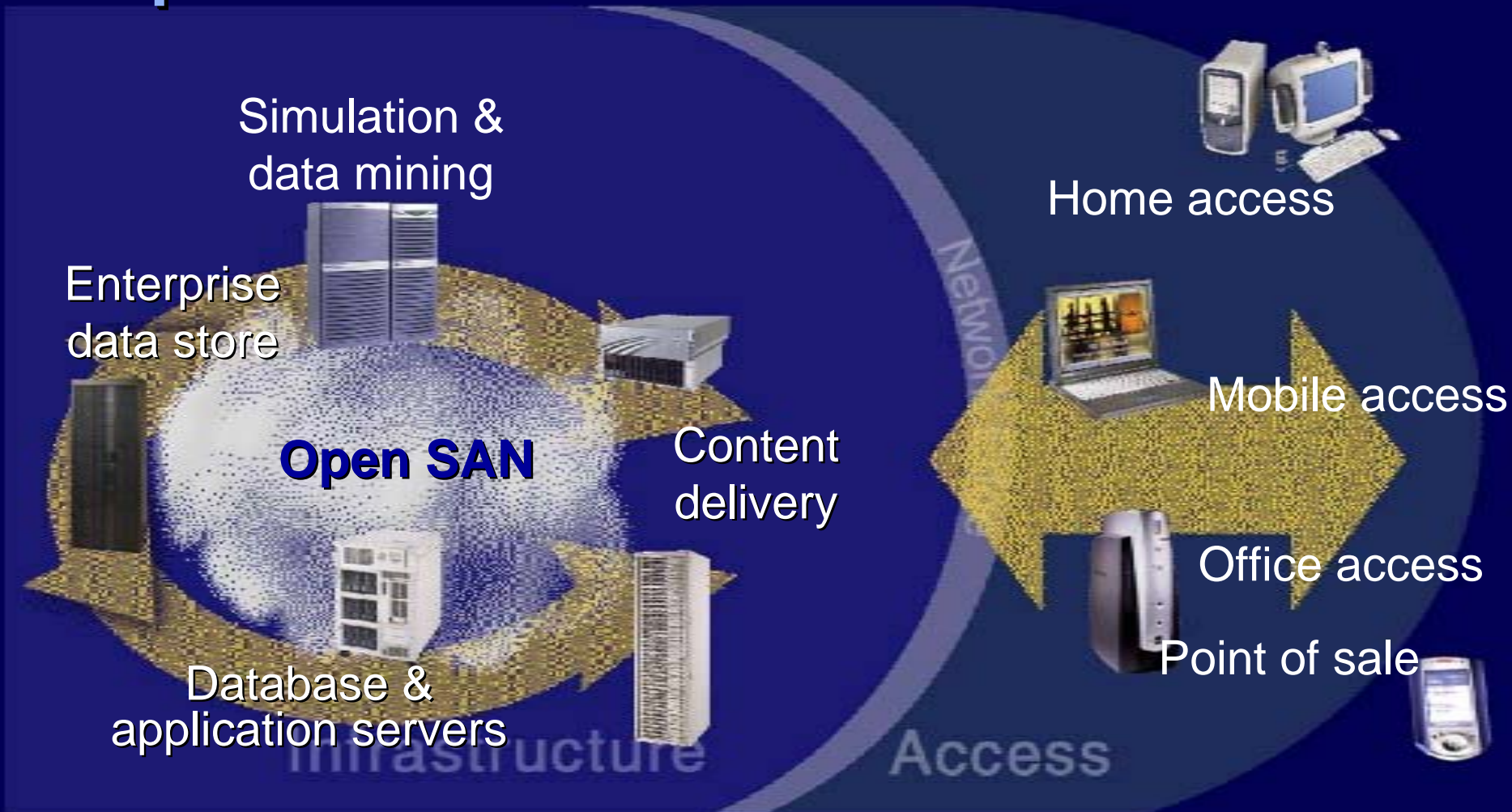
- A Global Alliance for 25 Years
- 90% of Fortune 500 run Oracle on Compaq
- 42% of Oracle on Windows NT is on Compaq
- ActiveAnswers sizing tools for Oracle Database
- More Oracle-certified configurations with Oracle Parallel Server than any other hardware manufacturer
- Compaq is the largest Oracle Tier 1 Platform Vendor
- Online test drive of Oracle 8i database, Oracle 9iAS, and Oracle Portal at:
<http://www.testdrive.compaq.com/software/#oracle8i>



An Integrated Offering: Compaq and Oracle eBusiness Infrastructure

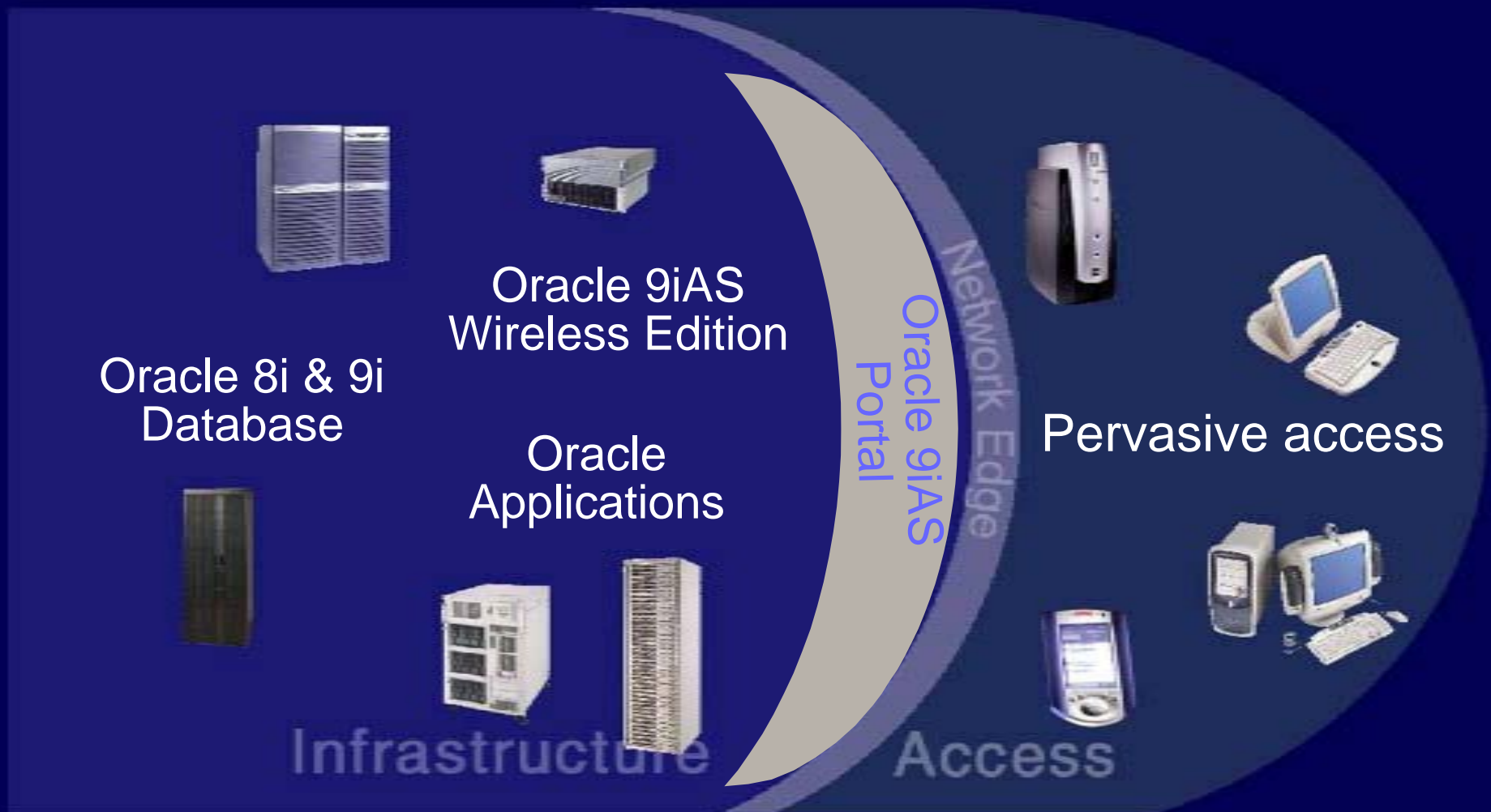


Depth and Breadth of the Product Line



Global Services and Solutions

Compaq Strategy and Oracle



Proof Points

**#1 in high performance
technical computing
6 of 7 supercomputing wins**

**Leader in high
availability
14 of 15 largest
exchanges**

**#1 in SANs
deployed
worldwide in
2000**

**#1 market share
in Web servers**

**Compaq servers
control 65% of the
world's electricity**

**Market leader in Windows
2000 deployment
60% market share with
8-way servers**

**PCs/Notebooks
Thin Clients
Pocket PCs**

Infrastructure

Access

38,000 services professionals worldwide

Compaq Advantages

- Engineering excellence
- Depth and breadth of the product line
- Best-in-class partnerships
- Broadest market reach

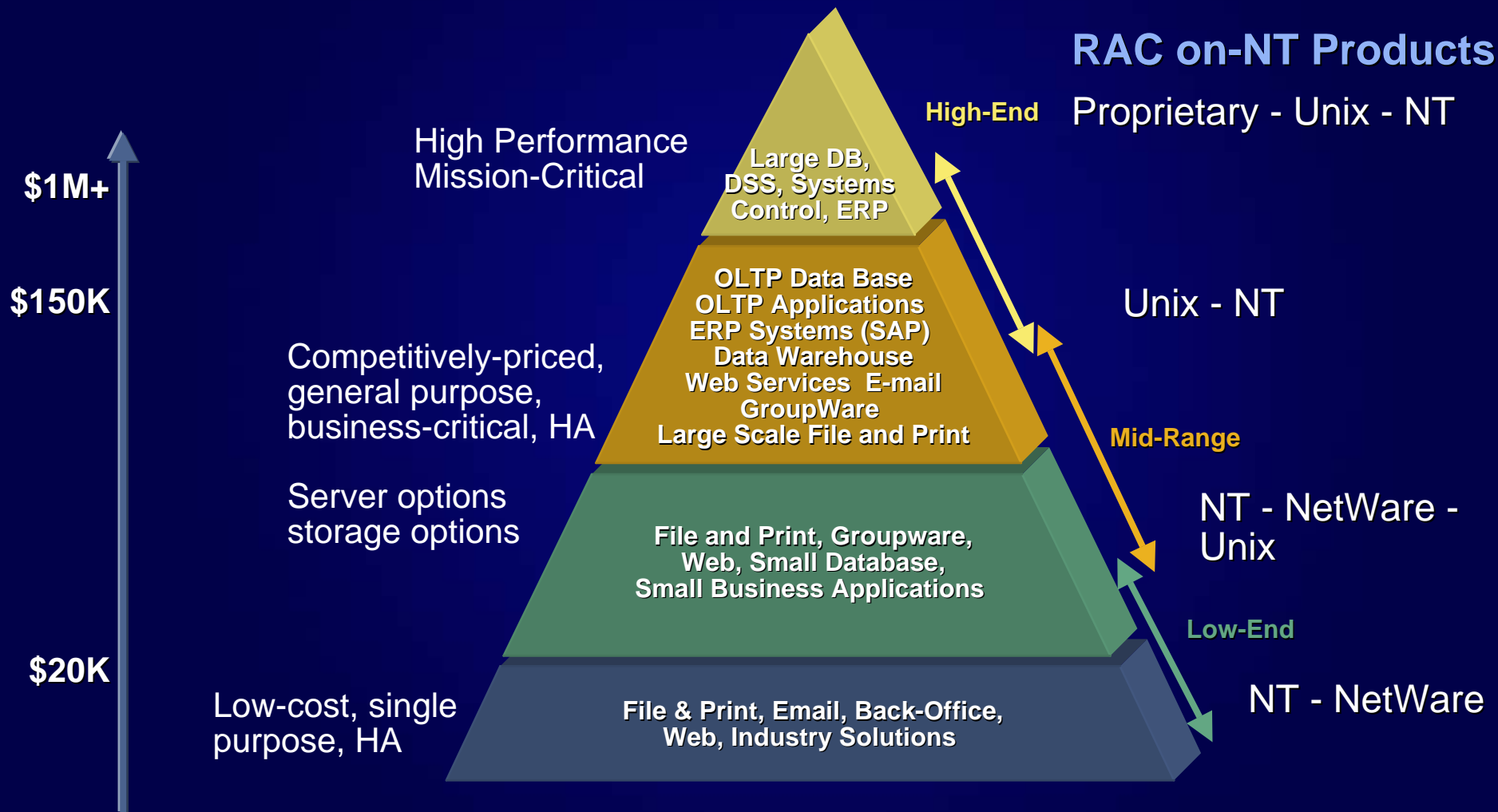
Compaq's Parallel Database Clusters

Oracle Parallel Server Target Applications

- Data warehouses
- Decision support systems
- Custom database applications
- Selected packaged applications



Cluster Market Segmentation



Positioning NT Cluster Solutions

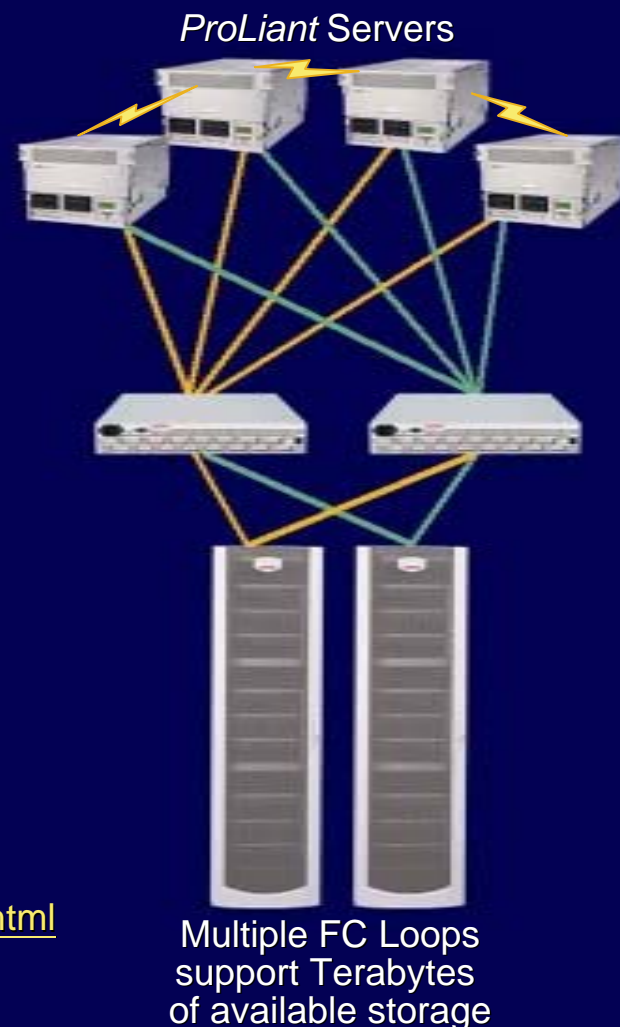
- PDC/O5000 - Mission Critical Availability and Scalability
 - 2 to 6 nodes Parallel Database Cluster based on Oracle8i and Oracle9i
 - Concurrent multi-node access to shared data on a No-Single-Point-Of-Failure StorageWorks MA8000/EMA12000 or RA8000/ESA12000 system
 - Application scalability across nodes and mission critical storage solution
- PDC/O2000 - Price Performance Scalable Database Cluster
 - 2 to 6 nodes Parallel Database Cluster for Oracle8i and Oracle9i
 - Concurrent multi-node access to shared Fiber Channel Storage system
 - Support for entry level and high end ProLiant servers for full range of OPS configurations
 - High availability and application scalability across nodes
- HA/F500 and HA/F100
 - Microsoft Cluster Server based two node high availability clustering for general purpose application availability
 - Full range of storage systems - RA8000/ESA12000 and Compaq Fibre channel
 - Availability, Performance, Capacity, Active / Active Scalability

What Is the Compaq PDC Cluster?

- 2 to 6 Node Clusters certified for Oracle8i Parallel Server and Oracle9i RAC support
- Select *ProLiant* Servers
- Windows NT, Windows 2000 support
- NSPoF RA4000/41000 or RA8000/ESA120000 or MA8000/ESA12000 Fiber Channel Storage System
- Compaq Cluster Kit Containing:
 - Compaq Redundancy Software
 - Comprehensive documentation

* See Linux Program for Details

URL: <http://www.compaq.com/solutions/enterprise/highavailability.html>

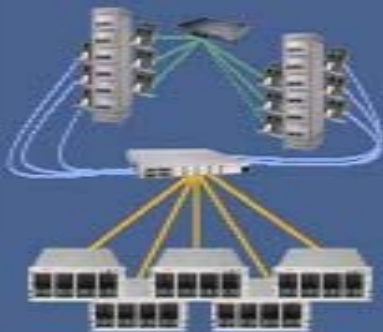


Compaq's Parallel Database Cluster Strategy

- Utilize industry standard hardware components for optimal price performance
- Offer a targeted selection of certified configurations to satisfy user requirements
- Cooperative development with Oracle to ensure tight integration
- Integrate proven, value-add, hardware and software components after thorough testing

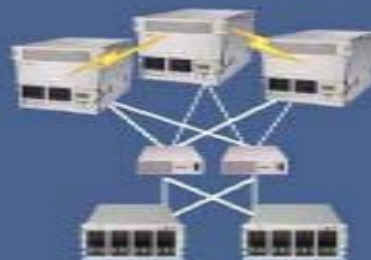
Compaq PDC Cluster Family

PDC/O1000



- 2 to 6 Node Clusters
Select *ProLiant* Servers
- WNT and W2K Support
- Compaq RA4000/RA4100 Fiber Channel Storage System with single I/O path
- Compaq Cluster Kit

PDC/O2000



- 2 to 6 Node Clusters
- Select *ProLiant* Servers
- WNT and W2K Support
- Compaq RA4000/RA4100 Fiber Channel Storage System with multiple redundant I/O paths
- Compaq Cluster Kit

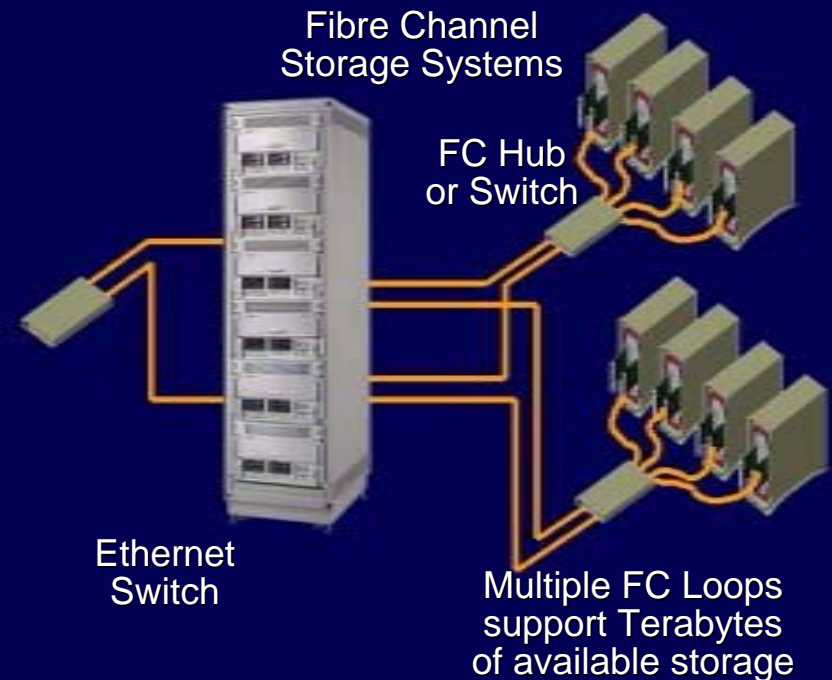
PDC/O5000



- 2 to 6 Node Clusters
- Select *ProLiant* Servers
- WNT and W2K Support
- NSPoF RA800/ESA12000 or MA8000/EMA12000 Fiber Channel Storage with multiple redundant I/O paths
- Compaq Cluster Kit

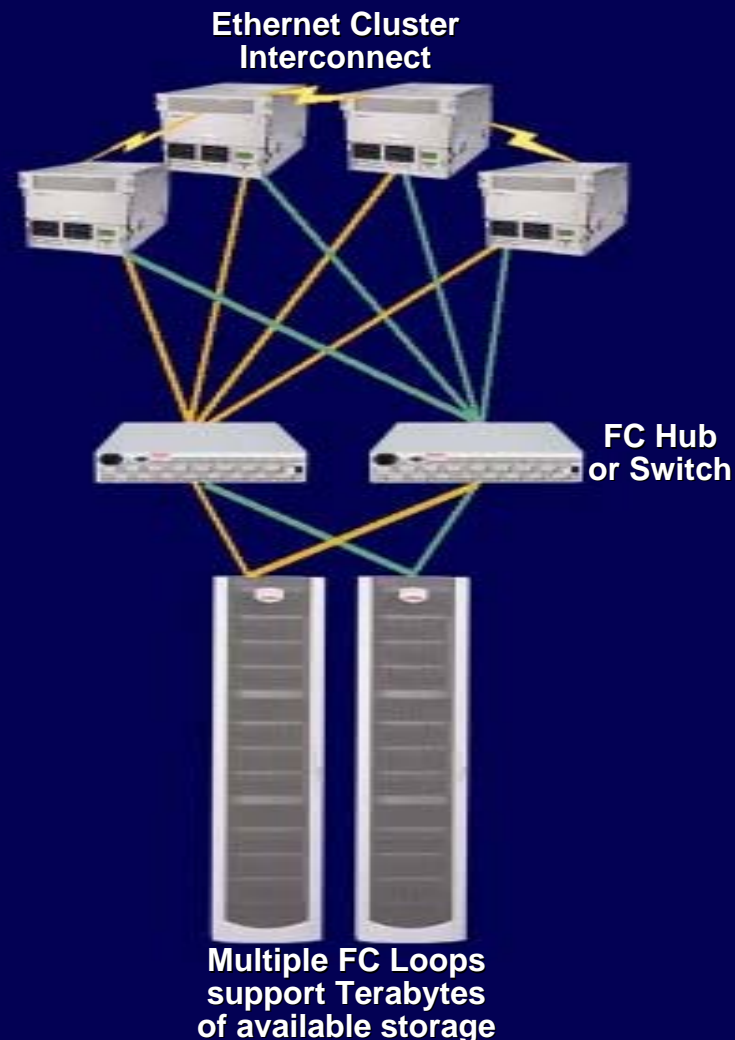
PDC/O2000 Product Description

- 2 to 6 Node Clusters certified for Oracle 8i Parallel Server and Oracle9i Real Application Cluster
- Select *ProLiant* Servers
- NSPoF RA4000/Ra4100 Fiber Channel Storage with multiple redundant path support
- Compaq Cluster Kit including:
 - *StorageWorks* Secure Path “multi-path” software
 - Compaq installation tools
 - Installation and Administration Guide



PDC/O5000 Product Description

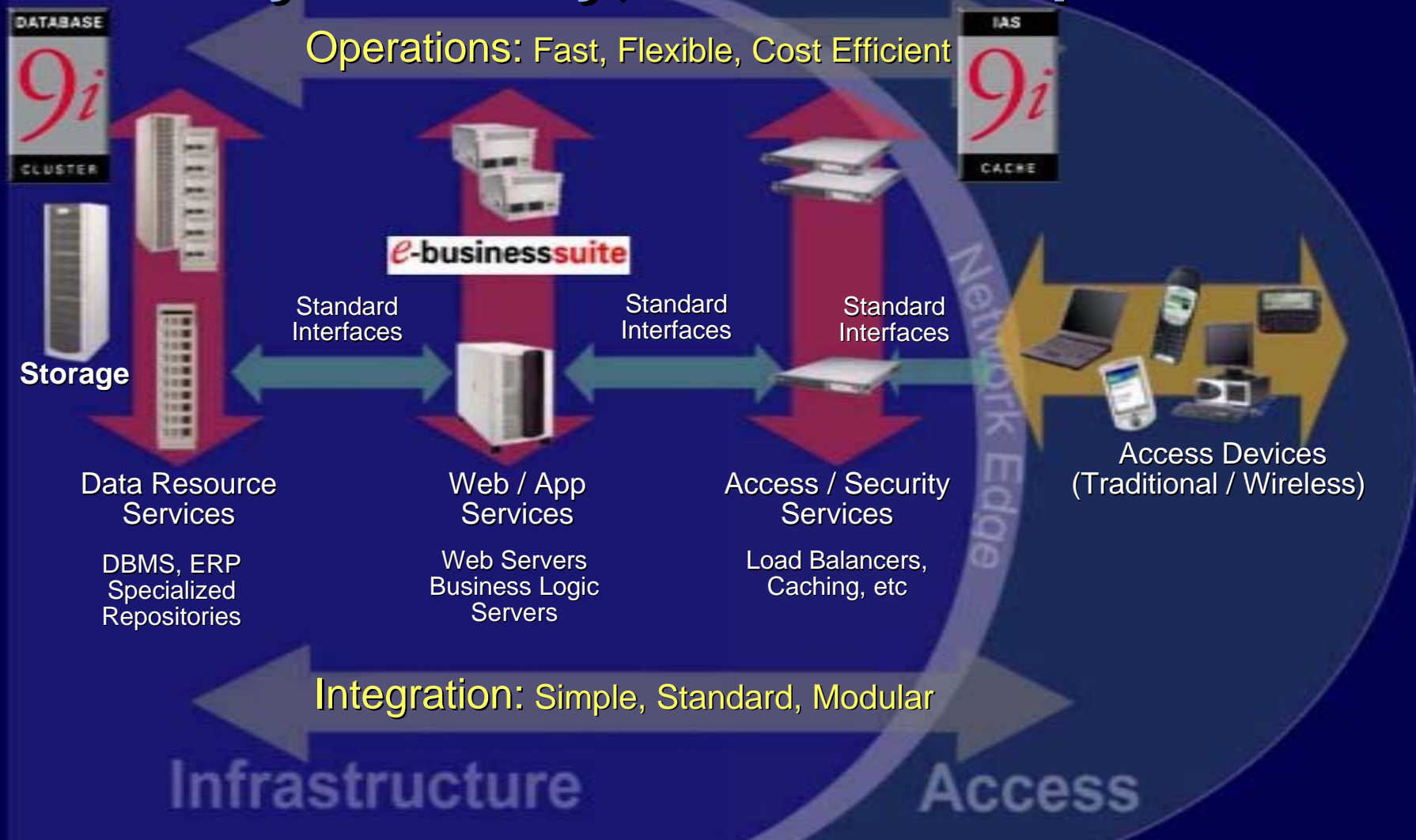
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Test Plan for 9i RAC Certification

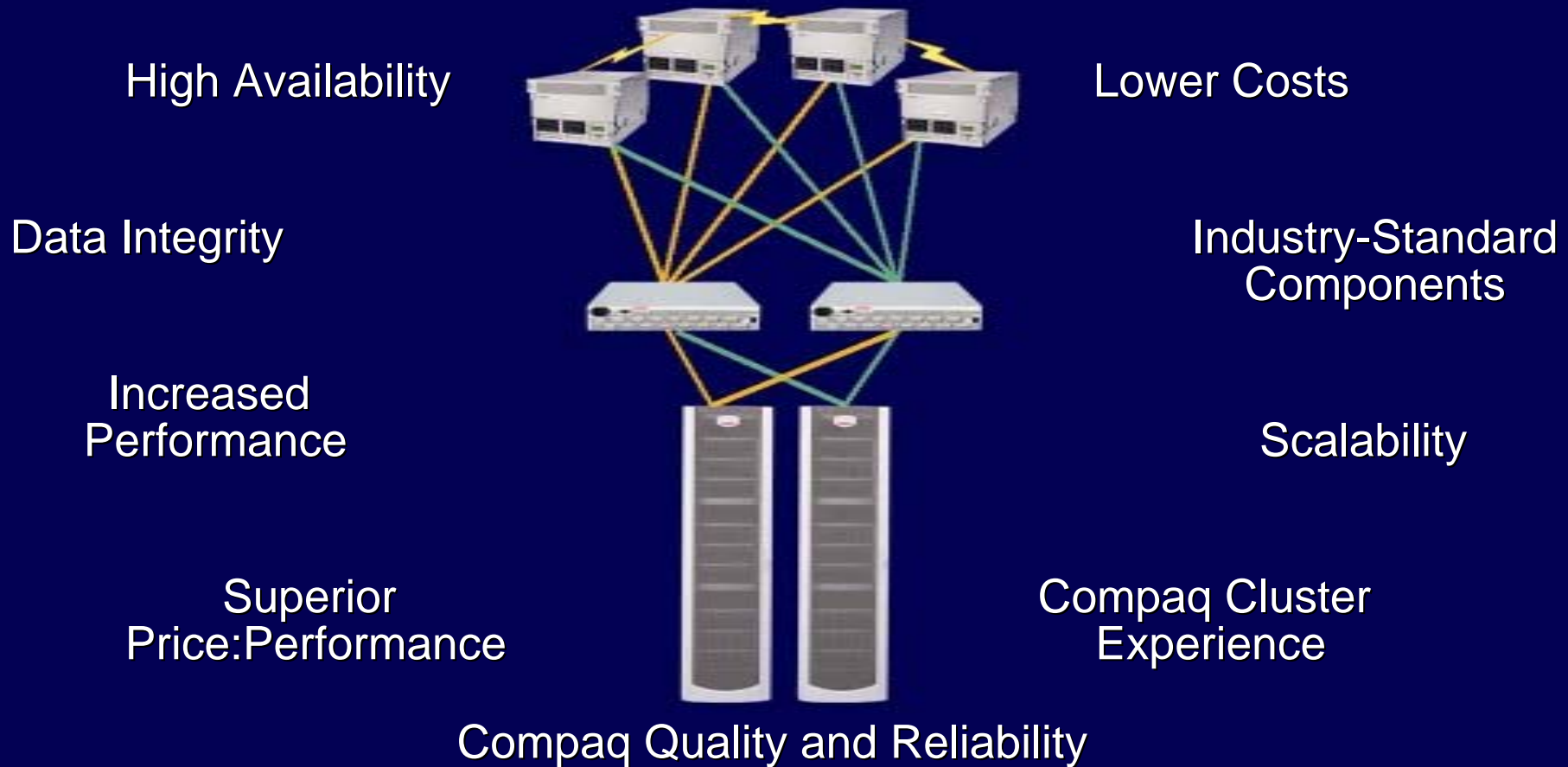
- Automatic fault Injection testing under load
 - TPC-C, TPC-H – up to 500 users
- Manual fault injection
 - IP fault injection, cables, switches
- Simulated server failure
 - Automated reboot on random servers
- Oracle instance failure
 - Repetitive random instance shutdown
 - Software injected failures
- Oracle Certification Test Suite
 - Audited, validated specific functionality load

Economic Challenge Simplify Integration, Automate Operations, Scale Dynamically, Guarantee Uptime



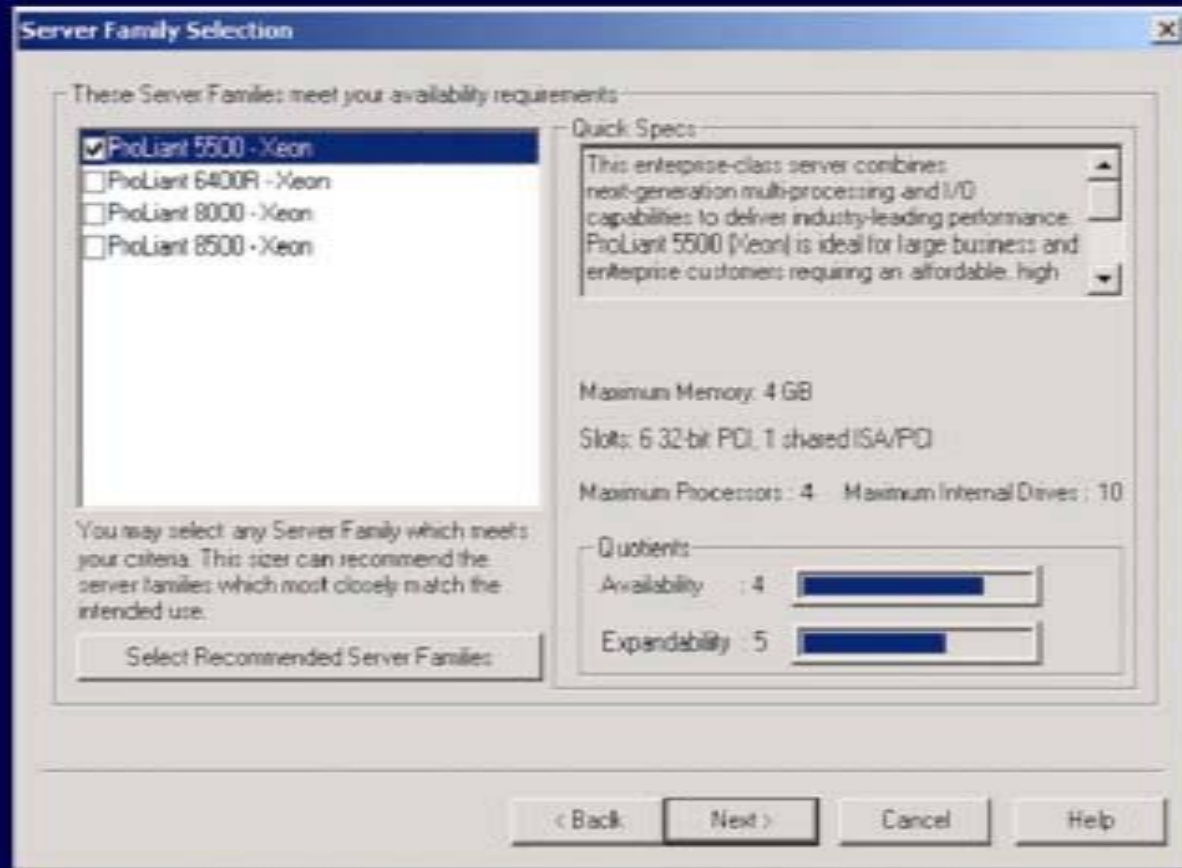
Summary

Compaq Parallel Database Clusters



Oracle 8i Sizer, Business Intelligence (1)

- Choose
Desired
- Levels of
Availability
- and
Expandability



Oracle 8i Sizer, Business Intelligence (2)

Enable fact-based decisions between price, performance, and expandability for specific situations

Save	Perf	Price	Server Model	Exp. Quotient
<input type="checkbox"/>	1.00	1.00	ProLiant 5500R Model 6/550-1 (512 KB cache)	5
<input type="checkbox"/>	1.00	1.10	ProLiant 6400R Model 6/550-1 (512 KB cache)	4
<input type="checkbox"/>	1.14	1.20	ProLiant 5500R Model 6/550-1 (512 KB cache)	5
<input type="checkbox"/>	1.14	1.30	ProLiant 6400R Model 6/550-1 (512 KB cache)	4

Performance

Price

Expandability

COMPAQ