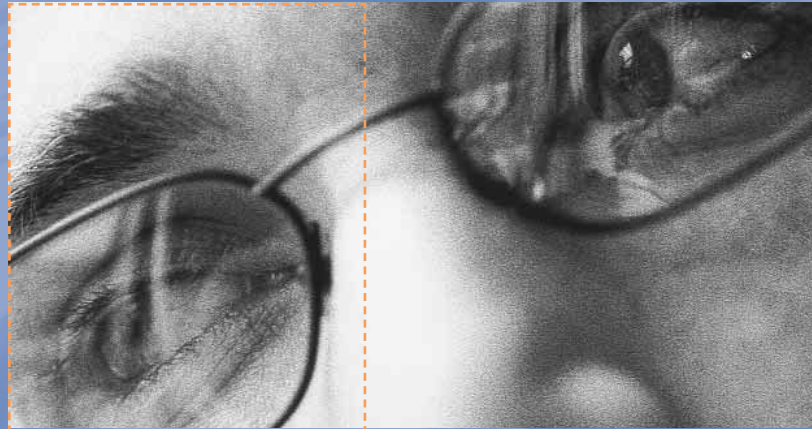




*Server Consolidation*

The better answer to many tough questions



**COMPAQ**

Better answers

# Planning



## **Many good questions. An even better answer: Server Consolidation.**

Today, one of the leading trends in Fortune 500 companies and government agencies is to centralize server operations. Some businesses consolidate as a result of a merger or acquisition. Some consolidate as the result of abandoning legacy systems. Others consolidate because of the global Y2K remediation effort. Server consolidation helps these organizations reduce the complexity of distributed computing, centralize widely dispersed operations, and reduce total cost of ownership.

## **Doing more with less**

Today's leading-edge servers offer quantum improvements in speed, power, and scalability over their predecessors. Often a single new server can do the work of many older servers — a solid reason for considering a consolidation effort. Server consolidation also helps organizations gain control of lease expenditures, eliminate data duplication, lower planned and unplanned maintenance expenses, reduce space used, and effectively redeploy staff.

Many enterprises are on their second or third generation of systems. As older servers need to be replaced or come off lease, they are prime candidates for server consolidation. Consolidating also provides an opportunity to replace outdated and non-standard platforms — such as small workstations running as servers and other substandard hardware — with a corporate standard. Additionally, setting the enterprise in one direction lowers IT staff training costs.

## **Is server consolidation right for your organization?**

The benefits are compelling. By consolidating, you'll reduce operating costs, increase efficiency, and provide flexibility, availability, and scalability as your business grows and needs change. You can simplify system and enterprise management, improve productivity, and enhance data integrity. Simply put, you'll be able to do more with less.

## **Lower cost of ownership through server consolidation**

### **Today's server scenario**

Sound familiar? Large numbers of servers are scattered throughout various departments in your organization and are often under-utilized. Many of these distributed servers use substandard hardware and do not follow engineering standards since they were purchased by business units instead of the IS department. This proliferation of servers impacts management complexity, floor space issues, and budget concerns. To lower your cost of ownership and simplify system management, you want to consolidate those servers into high-availability systems, or server farms.

But server consolidation can be complex. A successful server consolidation requires comprehensive planning and centralized standards. Where do you begin?

Begin by calling Compaq. Compaq Computer Corporation is a leader in helping customers lower total cost of ownership by successfully implementing server consolidation projects.

# Why Compaq?



Compaq is the world's leading manufacturer of client/server-based solutions. We are committed to providing the industry's best computing solutions and most innovative products and technologies, backed by global services and support. Compaq — coupled with the extensive capabilities of our resellers, channel partners, and integrators — offers the widest array of products and services for the fastest time to solution in the marketplace. And the best value in the industry.

## Compaq delivers better answers

**Methodology** — Compaq has the industry's best approach to tackling your server consolidation issues. We'll partner with you to develop the most appropriate solution for your particular needs.

**Breadth of product** — Compaq provides the industry's broadest line of products, including 64-bit Alpha servers running *Tru64*<sup>™</sup> UNIX, *OpenVMS*<sup>™</sup>, or Windows NT<sup>®</sup>, *NonStop*<sup>®</sup> *Himalaya*<sup>®</sup> systems, Intel<sup>®</sup>-based *ProLiant*<sup>®</sup> servers, workstations, desktops, handhelds, monitors, networking devices, and portables.

**Technology leadership** — We have consistently delivered leading-edge technology — from our first portables, to PCI Hot Plug technology and cable-free RAID, to 64-bit clustering and *NonStop* computing technologies.

**Industry-standard leadership** — A veteran innovator in industry-standard computing, Compaq is the market-share leader in Windows NT Server, SCO<sup>®</sup> UNIX, NetWare<sup>®</sup> and 64-bit solutions, delivering greater affordability and wider acceptance throughout the enterprise.

**Service and support** — We offer the most comprehensive service and support programs, including the industry's most extensive portfolio of Internet services with a global network of IT experts in more than 100 countries.

**Collaborative relationships** — Our strong alliances with other technology leaders, channel partner resources, systems integrators, and our customers ensure that we deliver the right solutions and services to meet your business goals.



# ProLiant systems

## Reliable, stable, industry-standard computing

Intel-based *Compaq ProLiant* systems offer superior reliability and fault tolerant features in an industry-standard server. Today's *Compaq ProLiant* servers have substantially more memory, faster systems and peripheral buses, and much faster microprocessors than do older servers.

Environments where consolidating on *Compaq ProLiant* servers makes sense include:

- **File and print servers** — Three years ago, NetWare servers could handle about 100 users; today they can handle about ten times that number.
- **Web servers** — Running your business on the Web is key to being competitive in today's market.
- **Mail and messaging applications** — New versions of applications may increase scalability, such as Microsoft Exchange V5.5, which improves server capacity by 200%.
- **Database applications** — By upgrading from Pentium® to Pentium III Xeon® technology, you can achieve quantum leaps in performance.
- **Homogeneous software applications** — Any homogeneous application that is consolidated generally improves in performance.

All *Compaq ProLiant* servers include the following state-of-the-art tools to assist server consolidation efforts:

**Compaq SmartStart**, a set of tools for server setup and management, lets you set up many servers at once — saving time and money while ensuring reliable system deployment.

**Compaq Insight Manager** monitors and tracks more than a thousand hardware and software parameters from a single console — standalone, networked, or client systems — and gives you advance warning of potential problems.

**Compaq Insight Manager 4.0** lets you take advantage of Web-style computing. It provides access to *Insight Manager* alarm, device, and configuration data via industry-standard Web browsers.

**Compaq Remote Insight**, a highly intelligent management board for continuous in-band and out-of-band communication and alert delivery tool, monitors remote servers.

# Alpha systems

## World-class enterprise AlphaServer systems

*Alpha* is Compaq's answer for customers who need the highest levels of enterprise computing performance. The *AlphaServer*™ GS60 and GS140 systems — Compaq's newest line of powerful *Alpha*-based servers — are designed to handle large-scale computing tasks. The *AlphaServer* GS series offers strong application performance, excellent price performance, and superior availability. These servers offer a choice of *Compaq Tru64 UNIX* with TruCluster, *OpenVMS* with award-winning *Galaxy* software or Windows NT. *OpenVMS Galaxy* software lets enterprise IT infrastructures respond to business demands with unheard-of flexibility — at a fraction of the cost. Compact, low-end DS *AlphaServer* systems provide streamlined packaging to allow efficient rackmount configuration with very low footprint. Mid-range DS *AlphaServer* systems provide strong performance and scalability with rackmount packaging. All *AlphaServer* systems offer seamless integration with Windows NT, high availability, and the flexibility to grow your computing environment — while maintaining operational and management simplicity.

Today's *AlphaServer* systems are powered by the new generation *Alpha* 21264 (EV6) processor, which provides performance leadership with up to twice the power of comparable solutions. While other 64-bit solutions are in their first generation, *Compaq AlphaServer* systems have been boosting productivity in businesses around the world for more than six years.

Major opportunities for consolidation on *AlphaServer* systems include:

- **UNIX Resource Consolidation with Windows NT Interoperability** — File and print consolidation using the *Advanced Server* for UNIX and NFS provides the high availability and scalability to thousands of users that global enterprises require.
- **Homogeneous applications** — *AlphaServer* systems are the ideal choice for consolidating distributed applications including SAP™, Siebel™, PeopleSoft™, BaaN™, SAS™, Lawson™, or custom-built applications.
- **Heterogeneous applications** — *AlphaServer* systems offer solid advantages when consolidating applications in the areas of business intelligence, business/enterprise applications, and integrated web server/mail and messaging such as high performance, availability and scalability as well as cost efficiencies based on streamlined operations and a reduced server footprint.

# Compaq NonStop<sup>®</sup> Himalaya servers

## Optimized for business-critical, transaction-based solutions

Compaq NonStop<sup>®</sup> Himalaya servers provide reliable, scalable processing to meet the critical requirements of businesses around the globe. Each time you make a credit card purchase, trade stock, withdraw money from an automated teller machine, dial emergency 911, request directory assistance, or place a cellular call, chances are that you have touched a Compaq NonStop<sup>®</sup> server.

Based on a powerful, open, parallel-processing architecture, Compaq NonStop<sup>®</sup> Himalaya servers deliver extraordinary reliability and performance — while providing the flexibility to scale transaction processing, storage, and throughput capacity to let you change at market speed.

Major opportunities for Compaq NonStop<sup>®</sup> Himalaya server consolidation include:

- **Corporate restructure** — Merger and acquisition activities oftentimes drive consolidation. The massively scalable Compaq NonStop<sup>®</sup> Himalaya servers enable enterprises to combine similar systems from different organizational entities onto one or a few servers, accommodating variable growth rates of processing demands and databases.
- **Web applications** — Downtime for web applications is intolerable. You risk losing revenue, customer satisfaction and productivity when you choose systems that deliver lesser availability. Consolidating processing from multiple servers that perform single application tasks onto Compaq NonStop<sup>®</sup> servers provides superior availability, absolute data integrity and scalability to meet any system and database size requirements.
- **Distributed systems** — Consolidating distributed systems running the same applications onto centralized Compaq NonStop<sup>®</sup> systems increases performance — while reducing overhead costs for space, power, software licenses, staffing, data backup/ recovery, and more.
- **Heterogeneous databases** — Compaq NonStop<sup>®</sup> SQL database supports the largest databases. Consolidating different operating division databases into one corporate Himalaya operational data store results in significant operating cost and license fee savings.

## Get what you need, when you need it — Compaq Capital leasing

Compaq Capital offers a complete, turnkey solution for business migration to Year 2000-compliant systems — including disposal of non-compliant systems, flexible leasing solutions for new Compaq equipment, and financing your old equipment's remaining book value. Compaq Capital provides leasing and financing solutions for businesses of all sizes.

### Compaq Capital helps you:

- **Overcome budget limitations** — Monthly lease payments are typically lower than purchase installments, which helps your company stretch its budget dollars further.
- **Obtain 100% financing** — Unlike bank loans and other types of financing that usually cover only hardware, Compaq Capital lets you finance 100% of the solution, including hardware, software, services, and other equipment.
- **Conserve operating capital** — Rather than tying up cash in fixed assets, leasing frees your valuable capital for other profit-generating opportunities.
- **Refresh technology** — Keep your technology solutions state-of-the-art through easy upgrades.
- **Meet unique financing needs** — Tailor financing solutions to meet your company's cash-flow requirements.

## Put Compaq's consolidation experience to work for you

Server consolidation requires a complex combination of skills, involving the development of detailed analyses of systems management and usage. Compaq's service organization can ensure that your existing applications are consolidated on more powerful, cost-effective servers — safely and without interruption to your business operations.

Compaq provides comprehensive services for the total lifecycle of today's complex IT systems, networks, and applications. We have proven strengths in helping organizations plan, implement, design, manage, and support IT solutions tailored to their unique business requirements.

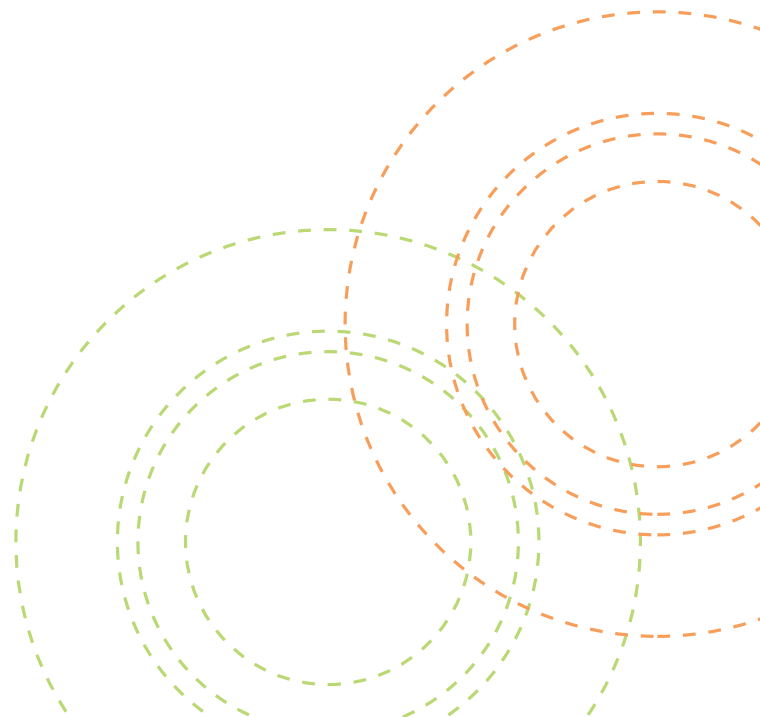
Wherever you are in the lifecycle of your solution, we have the expertise, tools, and services to help you take the next step and meet your business objectives faster.

# *World-class service and support*

Compaq Services is a truly worldwide organization, with 29,000 skilled and experienced service team members at 550 locations in 114 countries. We are among the top five system integrators and supply 24-hour, 365-day support to all industries. We have more than 2,000 Microsoft® certified system engineers. Of these, 250 are certified Microsoft NT solution architects — giving us a superior ability to design solutions using Microsoft products. In fact, Compaq Services has more Windows NT and mail and messaging specialists than all other Microsoft partners combined. And we have more than 3,000 UNIX specialists, 1000 *Compaq NonStop*® specialists and 500 Novell® specialists on our services team. Additionally, our business-critical service experts, utilizing proven service methodologies and tools, deliver services specifically designed to maximize system availability. Compaq Services offers a full portfolio of services that takes into account your total IT environment to ensure the level of business continuity that's right for you.

## **Take the next step**

To learn more about our server consolidation solutions, please contact your local Compaq Sales Office or Authorized Reseller.



# Questions



**What's the easiest way to reduce my cost of ownership?**

**How can I gain control over my LANs?**

**Will server consolidation help me address Year 2000 issues?**

**Why should I replace my older servers?**

**Can I regain valuable floor space?**

**Should I upgrade my operating system to complement new applications?**





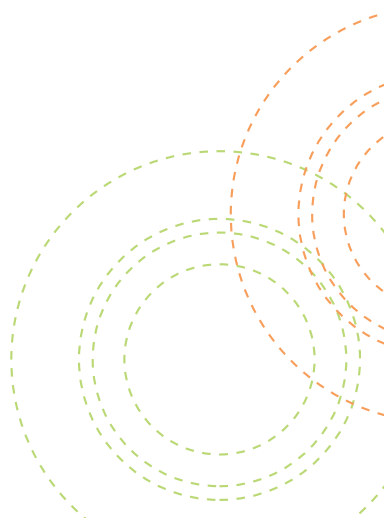
## *Server Consolidation Successes*

*A leading technology media company consolidated from hundreds of servers to 28 AlphaServers — resulting in better performance, less administration, and one tenth the number of servers competing for log-ins, permissions, and other shared resources.*

# Strategy

*A leading aerospace company moved from 25 different mail systems to one — and from 900 servers to 135 — resulting in lower operating costs, easier administration, and a simplified architecture.*

*... Just imagine what server consolidation can do for your business.*





# Answers

## Compaq Server Consolidation case studies

- A major publishing company consolidated 106 NetWare V3.12 servers into 15 NetWare V4.11 servers, and combined four data centers into three.
- In two months, a major pharmaceutical company consolidated 190 Windows NT file/print servers into 110 file/print servers.
- A major financial institution consolidated three file servers per floor into one — each supporting 200 users — and implemented Microsoft Cluster Server and Fibre Channel for high availability and scalability.
- An international grocery store chain consolidated six regional centers into one central data center on *Compaq NonStop*® systems, significantly improving their margin in a highly competitive environment.
- A national retailer consolidated their databases onto *NonStop* SQL running on *Compaq NonStop*® *Himalaya*™ servers to enhance their efficiency and save operational costs.
- A telecommunications customer consolidated eight regional *OpenVMS* data centers into a single national *OpenVMS* data center — improving availability, cutting costs, and providing higher computing capacity for future demand.

[www.compaq.com](http://www.compaq.com)

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