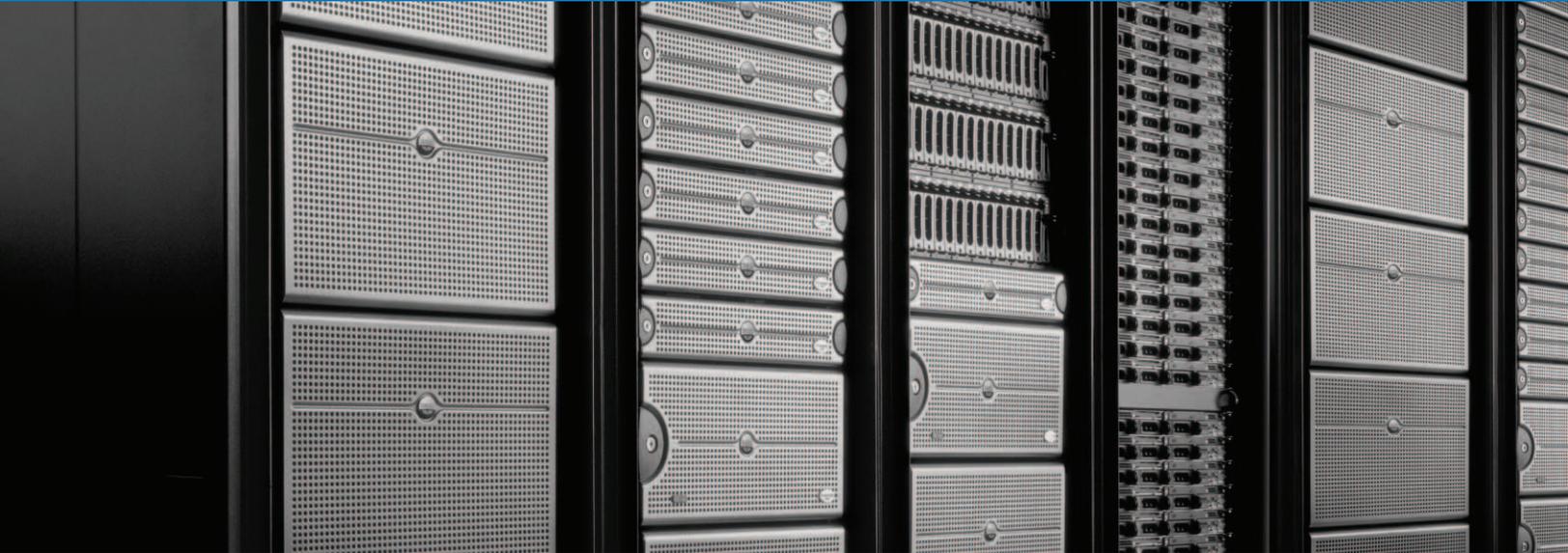# Dell Server
Consolidation

According to Gartner Inc., 94% of IT departments are either considering server consolidation or are currently consolidating.[1] The reasons are obvious. Every day, it seems, you're being asked to "do more with less" in your IT environment. Meanwhile, your budget tightens and your infrastructure seemingly grows out of control. Server consolidation may be the solution to your IT problems.

When it comes to managing your server environment, Dell provides you with the right tools, products and services to help you with server consolidation. Our proven expertise goes into every step of the server consolidation process, helping to reduce the complexity of server consolidation while maximizing your server and IT dollars.

Why Consider Server Consolidation?

Server consolidation could be an answer to your organization's challenges if you want to reduce operational costs and make more efficient use of your IT resources. If your servers are under-utilized, consolidation can help minimize this. If you are considering upgrading your operating system or messaging package, it is also a great time to evaluate server consolidation. Other key drivers of consolidation may be the need to improve systems availability and security, simplify management processes or reduce operating expenses. And if your organization has grown through mergers or acquisitions, consolidating servers can be a good way to establish an integrated, standardized infrastructure for your new environment. Dell's complete approach to server consolidation gives you the opportunity to design and implement a consolidated infrastructure that meets your specific requirements. It helps identify cost savings and improved management control opportunities that can contribute to the success of your organization.

Server Consolidation. Easy as **DELL**

Visit **www.dell.com/ROI** for more information.

Server consolidation can help lower costs by potentially reducing the operational expenses necessary to effectively run your operations. Your organization may also realize other benefits of server consolidation such as reduced software licenses, servers and administrative costs, and a potential reduction in the number of data centers. Consolidation may also help you simplify server administration and operations management.

Server Consolidation Types and Potential Benefits			
Logical Consolidation	Physical Consolidation	Workload Consolidation	Application Consolidation
— Simplified operations: common processes and standard systems management procedures	— Co-location of multiple platforms at fewer locations — Configure for High Availability	— Implement more users on fewer platforms for same application — Group-like functionality	— Combine mixed workloads on fewer platforms — Focus on non-mission critical applications
— Fewer consoles — Simplified, automated management processes	— Fewer data centers — Centralized operations — Improved systems availability and security	— Fewer servers — Reduced IT costs — Better manageability and control — Better support for users	— Fewer servers — Reduce under-utilization of servers — Better manageability and control
— Dell Intelligent IT™ — Dell Professional Services — Premier Enterprise Services	PLUS — Dell™ PowerEdge™ Servers — Server Blades	PLUS — Dell/EMC® Storage	PLUS — VMware™ through Dell Aurema's ARMtech™ through Dell

Service and Support

Dell Professional Services offers a comprehensive portfolio of consulting, deployment and support services designed to meet the unique needs of Dell's server and storage customers. We believe that by working directly with you, we can better anticipate, understand and react to service requirements to provide the best customer experience possible. For example, our Server Consolidation Services help you optimize and deploy the use of Dell server products and technologies in your environment. Dell is consistently recognized as a leader in customer satisfaction with our excellent service quality and the high product reliability of our enterprise systems. Furthermore, Dell focuses on environments that can benefit the most from consolidation such as Microsoft® Windows®2000 File/Print, Exchange 2000, SQL and server-based computing. We offer best practices, technical white papers and customer case studies so you can have the advantage of shared knowledge. Our service specialists can guide you through this proven process:

Step 1: Identify Barriers

— Discover and baseline your current environment, including server hardware,

  installed software, WAN/LAN and domain topology and security

— Develop risk and mitigation plans associated with a migration and/or consolidation

  • Utilizing predictive performance analysis software, Dell creates a baseline sample

    of current resource utilization requirements by analyzing application usage,

    storage utilization, processor utilization. Based on client growth projections,

    Dell will determine estimated capacity requirements for 12, 24 and 36 months

— Determine opportunities for greater return on investment (ROI)

  • Utilizing Dell's Return on Investment Analysis Tool and actual customer data,

    Dell will identify potential ROI benefits of consolidation

Step 2: Architect an Enterprise Platform

— Establish management tool standards

— Document your business and technical drivers

— Design a comprehensive enterprise architecture

— Develop operational recommendation for managing the new environment including

  backup and recovery, security and administration

Step 3: Prepare and Plan for Migration/Consolidation

— Establish a migration and/or consolidation strategy

— Validate sizing and performance assumptions

— Integrate your plans with your support teams

— Document your plan

— Confirm your plan through pilots and Proof of Concept

Step 4: Manage your Migration/Consolidation

— Manage your deployment through tools-based methodologies to help mitigate risk

  and increase efficiency

— Utilize proven communications, metrics management and delivery methodologies

Dell makes it easy to get the most out of your server resources. Take the first step toward realizing the advantages of server consolidation. Visit www.dell.com/ROI or contact your Dell representative to schedule an ROI analysis and learn more about the benefits of partnering with Dell.

GO TO WWW.DELL.COM/ROI TO LEARN MORE ABOUT DELL SERVER CONSOLIDATION.

Easy as **DELL**

Dell ROI Analyst Tool Report

Dell's Server Consolidation Return on Investment (ROI) Analyst Tool

Dell offers the ROI Analyst Tool to help you through the critical, complex planning phase. It allows you to quickly see how server consolidation may help reduce your organization's costs and provides an estimate of when you can expect to see a return on your technology investment. It creates a customized business case for consolidating print and messaging environments. The internal process of developing an ROI analysis may be painstaking, but the Dell ROI Analyst Tool is designed to help reduce the time and money usually required to do a business case analysis. Contact your account representative to conduct an in-depth analysis or visit www.dell.com/roi and complete a preliminary, self-guided analysis with the server ROI calculator.

Exceptional Products

The Dell PowerEdge™ server family offers a wide range of cost-effective solutions for server consolidation. These rack dense servers provide the serviceability, availability, manageability and high performance features a consolidated solution requires. And they incorporate Dell Intelligent IT, Dell's system management suite of software tools that allows you to deploy, manage and refresh your consolidated environment from a central location.

PowerEdge 1650

PowerEdge 2650

PowerEdge 6650

If you are undertaking physical consolidation, Dell rack-optimized servers are ideal. Designed for environments where space is at a premium, these servers, such as the ultra dense 1U dual processor PowerEdge 1650, the 2U dual processor 2650 and the 4U quad processor PowerEdge 6650, can be packed and stacked into a 42U rack, which may help reduce the data center footprint required to deliver your application throughput. The PowerEdge 6650 is an ideal product for workload consolidation, providing outstanding price-for-performance. With impressive density, the PowerEdge 1655MC provides demanding, yet space-conscious environments with exceptional performance in a highly dense form factor. Housing up to six server blades in a 3U enclosure results in twice the density of today's 1U server, without compromising performance or availability features.

PowerEdge 1655MC

Server Consolidation. Easy as

Visit **www.dell.com/ROI** for more information.