Server Management
Delivering business value from complex application and server environments
Data center complexity—multiple operating systems, server and storage platforms, applications, databases, and networks—must be managed within tight IT budget and staffing constraints, in an atmosphere of constant change. And as application and server environments extend to virtual machines and blade technologies, complexity will only increase. Yet businesses continually raise the levels of service they expect from this infrastructure: higher availability, more complex multi-tier applications, and service levels converging on perfection. Veritas™ Server Foundation and associated technologies from Symantec offer compatible solutions to optimize the efficiency of IT organizations to secure maximum business returns from IT investments.
The challenge of complexity

Today’s data center is a product of change. Technological progress and business growth have added to the complexity of IT infrastructure with new operating system (OS), storage hardware, database, and network technologies. The challenges of IT complexity are well-known: productivity, returns from server and storage investments, manageability, and asset utilization. Complexity is a barrier to business growth, and a handicap on the future.

The speed of change causing all this complexity continues to accelerate. Front-line administrators already monitor applications on thousands of servers; tomorrow, more applications will be multi-tier, with more complex dependencies, specialized requirements, and logic. External threats and regulatory mandates will raise availability and recovery requirements even further. Data center consolidation—intended to reduce complexity—risks loss of multiple applications with a single server failure.

The problem is human as well as technical. IT headcount simply cannot keep pace with data center growth. And as complexity grows, skilled staff is required for even routine tasks such as application provisioning, inventory, reporting, maintenance, and disaster recovery. Fragmented visibility and poor manual processes limit their ability to measure and report policy compliance, much less implement best-practices.

Server Management Solutions from Symantec—a history of innovation

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<th>Corporate &amp; Market Events</th>
<th>Product Events</th>
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<td>Veritas acquires First Watch high-availability solution with Tidalwave Technologies, Inc.</td>
<td>1995</td>
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<td>First Watch becomes industry-leading clustering solution</td>
<td>1996 - 1997</td>
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<td>Relicore founded. Launches Clarity Server Management Solution</td>
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<td>1998 Veritas™ Cluster Server (CS) 1.0 brings advanced clustering capabilities to every major OS</td>
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<td>1999 Cluster Server over SAN reduces impact of storage growth</td>
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<td>2001 Veritas adds Traffic Management to Cluster Server</td>
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<td>Veritas Cluster Server 2.0 introduces Advanced Failover Logic, making cost effective HA possible</td>
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Veritas Server Foundation from Symantec helps IT managers meet ever-rising performance and availability requirements within budget and staffing constraints. The solution improves visibility—with application-aware information and alerts about events and conditions across the data center. It shows all running applications, along with attempts to change them, and out-of-compliance processes. And it shows them at the business service or application level, regardless of the infrastructure on which they run. Control spans the data center too: Server Foundation identifies running applications and automates routine tasks to help maintain standards and meet Service Level Agreements. Advanced management features include pooling servers and decoupling applications, smart failover of crashing applications to servers with available capacity, and automated distribution of patches and updates.

Server Foundation makes applications and databases highly available by allowing IT to move them under automated control from one server to another. This minimizes planned downtime for routine maintenance, OS patching or hardware repair. It helps prevent unplanned downtime by monitoring application health, with failover to another server when something goes wrong with an application, network, or server—or in a disaster, the entire site.

The unique combination of Server Foundation technologies provides data center administrators with a better cost structure, greater return on IT investments, and better scalability. By interposing a level of software standardization between hardware and applications, Server Foundation releases IT managers and administrators from the task of matching applications to specific infrastructures, thus unlocking compelling operational and business benefits. Staff productivity grows from reduced training requirements and better utilization.
Veritas Server Foundation from Symantec combines solutions that help IT organizations put their applications under centralized control, keep them available, and monitor and automate changes to their environment. Server Foundation establishes a high-performance framework to meet today’s business requirements, as well as those of tomorrow.

By pooling server resources at the software level, Server Foundation delivers improved IT effectiveness with fewer constraints on business growth, and maximizes returns through improved utilization of current hardware investments.

Veritas™ Cluster Server keeps critical applications running, delivering consistent, confirmable high availability and disaster recovery across heterogeneous applications, operating systems, and server and storage hardware, while helping to reduce the cost and staff needed to maintain the availability of an organization’s most important applications. The industry’s leading cross-platform solution for high availability, and disaster recovery across any distance offers:

- **Single-tool support for multiple platforms**—including virtual technologies—reducing staffing and hardware costs
- **Built-in application and database support** assures compatibility, and cuts deployment time and cost
- **Availability at any distance**, using local and remote clusters to deliver disaster recovery with local availability
- **Automated disaster recovery testing** of failover and replication configurations with no production impact
- **Easy implementation and management** across clusters, locations and platforms, with single-console visibility
• **Flexibility in disaster recovery**, with support for all major replication technologies

• **Advanced failover logic**—including one-click site failover—to use servers and sites efficiently, cutting redundancy and risk

**Veritas™ Configuration Manager** provides comprehensive discovery and dependency mapping with real-time change tracking, including:

• **Automated discovery** of servers and applications—including custom applications—across heterogeneous OS environments, tightly linked with leading configuration management databases (CMDBs)

• **Dynamic mapping** of infrastructure dependencies to identify the infrastructure underlying key business services and pinpoint vulnerabilities

• **Real-time change tracking** including monitoring, management and audit tools to help control changes more precisely and resolve problems faster

• **Consistency checks** to enforce compliance and change control for servers and applications

**Veritas™ Provisioning Manager** automates server provisioning and patch management, while intelligently orchestrating IT service management processes leveraging a sophisticated workflow engine:

• **Automated OS and application deployment** to enable rapid, standardized, and error-free server and application provisioning

• **Full life-cycle patch management** to assess and remediate patch vulnerabilities across all major operating systems
Intelligent workflow engine to orchestrate server builds, deployments, handoffs, and approvals with complete visibility along the way

Configuration and personalization of required network settings, VLAN switches, and application-specific parameters

Veritas™ Application Director reduces the complexity of operating large data centers by centralizing the control of multi-tier applications, automating administrative tasks, and providing advanced capabilities for resource management, including:

- Multi-tier application visibility by managing multiple application components and tiers as a single business service and providing visibility across all application dependencies
- Multi-tier application control by allowing administrators to monitor, start, and stop multi-tier applications to reduce downtime caused by planned or unplanned events
- Advanced resource management to consolidate servers while managing trade-offs between utilization and risk
- Heterogeneous support and centralized management for interdependent applications running on different operating OS and virtual server platforms

Symantec Global Services help you reduce IT infrastructure complexity, improve resource utilization, and realize full value from your investment in Veritas Server Foundation:

- Symantec Consulting Services help optimize processes to maximize your business returns:
  - Comprehensive assessments of your existing technologies and specific requirements
  - Architectural design of your Server Foundation environment based on well-established industry best practices
  - Implementation services in which Symantec specialists deploy, test and configure the technology for a smooth rollout
  - Residency services that support your staff with continuous on-site Symantec expertise

- Symantec Education Services transfer knowledge to your staff through technical training courses from beginner to advanced levels— in classroom, private or on-line formats

- Symantec Enterprise Support Services offer a broad portfolio of service offerings—from basic support to dedicated, on-call expertise for your most critical requirements
Why Symantec for server management?

Symantec’s server management solution shares a history and reputation built on integration—across operating systems, storage architectures, vendor platforms, data centers, organizational boundaries and geographies. Count on Symantec’s solutions to help you manage:

- Operating platforms including Sun Solaris, IBM AIX, HP-UX, Oracle 11i, SUSE and Red Hat Linux, and Windows
- Virtual server platforms from Xen, VMware, and major OS vendors
- Enterprise and multi-level applications from Microsoft, Oracle, SAP, IBM, Apache, BEA and hundreds of others, including custom applications
- Hardware replication on IBM, Hitachi, EMC, and NetApp platforms

Symantec’s server management solution combines comprehensive coverage with visionary technology for a solution that unlocks business value from investments in IT applications, hardware, and staff.
Modern business applications process complex transactions quickly across systems, networks, companies and nations. But the growing complexity of application and server environments—and growing demands on them—stretch the capabilities of IT budgets and staffing. Symantec offers a comprehensive server management solution that offers dramatic improvements in utilization, manageability and return on hardware investments, without compromising high availability and disaster recovery. Symantec products and expert services help raise the efficiency of your infrastructure and organization, to meet today’s service and budget requirements, and tomorrow’s business challenges. To learn more, visit www.symantec.com/serverfoundation.
**About Symantec**

Symantec is a global leader in infrastructure software, enabling businesses and consumers to have confidence in a connected world. The company helps customers protect their infrastructure, information, and interactions by delivering software and services that address risks to security, availability, compliance, and performance. Headquartered in Cupertino, Calif., Symantec has operations in 40 countries. More information is available at [www.symantec.com](http://www.symantec.com).

Confidence in a connected world.