Powering Linux® in the Data Center
Solution Brief: Platform Solutions

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Symantec™ and Linux in the data center

Many IT professionals are drawn by the economy that Linux brings to the data center but are concerned about the potential risks that arise from trusting their business to "free" software. For mission-critical enterprise data center applications, the complete line of Symantec data management and protection offerings delivers UNIX-class performance, scalability, administration, and support on Linux.

With a depth of features and unmatched breadth of server and storage platform coverage, Symantec offerings for Linux leverage significant engineering expertise, go-to-market partnerships with Red Hat, Novell®, and others, and world-class support to deliver Linux solutions for the enterprise.

Veritas® data center offerings from Symantec support all major UNIX, Linux, and Windows® platforms and provide a set of centralized management tools to simply manage these diverse environments. This allows users to simplify the management of their data center infrastructures in the areas of data and system protection, storage management, server management, and application performance management. These offerings span solution areas from traditional data protection services for the Linux platform to advanced disk-based data protection, enterprise storage management, server management, application availability, and business continuity and disaster recovery.

Proven Linux success

Veritas data center solutions from Symantec have a proven track record on all major platforms, including Linux. The company’s first Linux products were introduced almost a decade ago. Today, Symantec offers its entire suite of data center-class products on the Linux platform and has more than 6,000 data center customer deployments on Linux worldwide. Symantec is committed to the Linux community and has been a regular contributor in key areas of Linux development. With a significant Linux development effort on several continents, Symantec has made valuable contributions to the Linux open source code base in the areas of critical memory allocation, scalability, and performance enhancements.

Symantec solutions for the data center have been designed to offer the features and performance that enterprise-class environments expect, with a common set of management tools available across Linux, Windows, and all major UNIX platforms and all major CPU architectures. With its world-class technical support and industry partnerships, Symantec is able to deliver the capabilities critical to the success of enterprise deployments.
The Weather Channel Server and Storage Migration in Mission Critical Environment

The Weather Channel is a 24-hour weather network seen in over 88 million homes in the United States. The Weather Channel produces literally millions of daily forecasts for locations around the globe. This data must be available 24/7, so a highly reliable IT infrastructure is absolutely essential.

**Challenge:** In a several-year effort to reduce costs while expanding services and accommodating continued business growth, The Weather Channel undertook two initiatives: one to migrate to Linux and at the same time improve server management, and a second to improve storage management for its multi-tier storage pool providing over 58 TB of capacity.

**Solution:** To meet these objectives and facilitate the migration, The Weather Channel chose a suite of products from Symantec including Veritas Storage Foundation™ for Linux, which provides storage management capabilities. Veritas Storage Foundation enables online disk administration from a single console as well as load balancing and failover between I/O paths using Dynamic Multi-pathing. The Veritas Storage Foundation FlashSnap™ option allows for real-time backup with little or no impact to the forecast applications that run around the clock.

Veritas Cluster Server is used for clustering and centralized management of business-critical applications still residing on UNIX servers, while Veritas NetBackup is used to back up the entire storage infrastructure.

A pain-free migration to Linux for Entertainment Partners

Entertainment Partners is the largest outsourcing provider of payroll, budgeting, and production scheduling services in the entertainment industry.

**Challenge:** To support the information and business growth requirements of the entertainment industry, Entertainment Partners sought to lower total cost of ownership for both its server and storage environment while migrating to a Java™ 2 Platform, Enterprise Edition (J2EE)-based application infrastructure.

**Solution:** Seeing Linux as the best option for meeting its cost and performance goals, Entertainment Partners migrated its business applications from legacy servers to Linux on IBM® xSeries and standardized on Veritas Storage Foundation™ and Veritas NetBackup™ from Symantec. With the Portable Data Containers provided by Veritas Storage Foundation, Entertainment Partners was able to migrate data from legacy Unix to new IBM xSeries servers running the Novell SUSE Linux Enterprise operating system with no interruptions to ongoing operations or its production environment.

**Results:** The new solution utilizing Veritas Storage Foundation and Veritas NetBackup has eliminated disk outages, reduced QA time for new applications, increased administrator productivity by 60%, and reduced total cost of ownership with a 35% decrease in facility, maintenance, and operating costs.
Symantec Linux Data Center Products
Symantec offers a complete line of data management and protection offerings, including:

**Data and system protection** - Protect critical data, simplify management of backup and recovery tasks, and provide consistent, reliable system protection.
- Veritas NetBackup™

**Storage management** - Simplify the administration and management of heterogeneous environments and provide continuous availability of mission-critical applications.
- Veritas Storage Foundation™
- Veritas Storage Foundation™ Cluster File System
- Veritas CommandCentral™ Storage

**Server management** - Ensure maximum data and application availability across operating systems, applications, hardware components, and data center locations.
- Veritas™ Cluster Server

Symantec is committed to bringing UNIX-class support to Linux. Support centers around the globe are ready to assist with any problems or questions—24 hours a day, 7 days a week. Joint escalation processes are in place with partners such as Red Hat, Sun™, Oracle®, EMC, HP®, and others to provide fast problem resolution without vendor finger-pointing. Symantec Consulting Services provides the expertise to make enterprise Linux deployment a success, with proven methods and best practices that leverage our breadth of experience and depth of certified resources.

Solving enterprise needs from core to edge
A common problem with enterprise-class software products is that, while they are easily justified for data center deployments, they may not make economic sense for deployment on edge servers or in remote locations. Symantec takes a fresh approach to this problem, offering freeware versions of popular products such as Veritas Storage Foundation, so the same products that are used for mission-critical applications in the data center can also be used on the edges of the network.

Scaling out the data center or updating edge servers requires the right capabilities, feature set, and management tools. Symantec integrates diverse operating system environments to ensure success with unique, centralized heterogeneous management tools from the core to the edge.
Powering Linux® in the Data Center

Download Veritas Storage Foundation Basic, the industry's leading volume manager and file system together, for free at: http://www.symantec.com/sfbasic.

Enabling Linux migration
One of the biggest challenges of Linux deployment is transitioning data from existing platforms. Symantec products simplify the process with vendor-independent array migrations and unique features such as Portable Data Containers that make it easy to move data from one operating system platform to another, even when the processor architecture requires an endian conversion. After migration, all of the same features are available to manage your new platforms. And, if the requirement is to manage multiple platforms simultaneously, Symantec data center solutions enable that by spanning all major server and storage platforms to deliver the cost and control benefits of a standard set of tools.

High availability, performance, and ease of administration on Linux for Replacements, Ltd.
Replacements, Ltd. receives over 100,000 pieces of china, crystal, and silver from 1,000 suppliers each week while simultaneously servicing the IT needs of 530 employees.

Challenge: The challenge was to build a software infrastructure that supports hardware from all major vendors while maintaining high availability to support around-the-clock business operations.

Solution: In order to meet its business-critical goals, Replacements, Ltd. chose Veritas Cluster Server, Veritas Storage Foundation, Veritas NetBackup Enterprise Server with Veritas NetBackup Oracle Agent, and Symantec Backup Exec™ for Windows Servers.

Results: The results included a boost in application performance and a 50% savings in administration time. Veritas Cluster Server with its multi-platform heterogeneous capability performed as expected in the transitioning from the Solaris™ platform. Meanwhile, Veritas NetBackup has shortened the restore time for file-based information by 93% and accomplished the organization's data-protection goals, including an 89% reduction in time to restore. An administrative benefit was a 50% reduction in time spent managing storage vs. using the native Linux storage tools.

For the complete story, visit: http://www.symantec.com/enterprise/solutions/successes/.

Heterogeneous solutions for today's data center
It's the rare IT professional who has the luxury of dealing with just one system platform these days. Even if a decision has been made to standardize on Linux, it seems there's always one more application that can't be migrated for some reason or other.
Managing a heterogeneous environment isn't easy, especially when each platform has its own management tools. Symantec simplifies the situation with products that support not just Linux, but all popular versions of UNIX and Windows—and even offer support for server virtualization solutions. Symantec management tools, such as Veritas Storage Foundation Manager, encompass all your server and storage platforms, so you can see and manage everything across your data center from a single console, improving ease of manageability for administrators.

A sample of leading data centers powered by Symantec Linux solutions:

- City of Munich
- Corrections Corporation of America
- El Camino Hospital
- Entertainment Partners
- ICICI Bank
- Network Appliance
- Renault
- Replacements, Ltd.
- SalesForce.com
- Siebel Systems
- The Weather Channel

For more information on how these customers use our technologies to extend the business value of their technologies, please visit: [http://www.symantec.com/enterprise/solutions/successes/](http://www.symantec.com/enterprise/solutions/successes/).

Learn more
About Symantec

Symantec is a global leader in providing security, storage and systems management solutions to help consumers and organizations secure and manage their information-driven world. Our software and services protect against more risks at more points, more completely and efficiently, enabling confidence wherever information is used or stored.