

Jiangxi Telecom

Staying ahead of competitors and saving time and cost with Symantec solutions



When Jiangxi Telecom launched a new value-added set of hosted services, it decided to upgrade its data protection and information security with Symantec products and services. The telecom is reaping the rewards: greater staff efficiency, cost avoidance by deferring storage purchases, and increased antivirus protection. Best of all, business-critical applications have been continuously available—no unplanned downtime—for over two years.

The Challenge

Driven by a series of government-initiated economic reforms, the Chinese telecommunications market has seen explosive growth over the last five years. In the face of fierce competition, local service providers must develop and offer value-added services to retain existing subscribers and attract new ones.

In 2005, Jiangxi Telecom responded to this challenge by launching the Internet Data Center (IDC), an integrated hosting service offering connectivity, storage, backup and security services to businesses. While IDC is a relatively small group within Jiangxi Telecom—50 employees—its success is considered vital to the company's long-term strategy.

The responsibility for overseeing the technology platform falls to Tan Hui, chief technology officer of IDC. Tan's staff manages a multivendor environment in a datacenter that is growing rapidly. They must offer high availability of both servers and storage for both the company's hosted services customers and internal users. Protecting the company's infrastructure from Internet threats and ensuring compliance are top priorities.

The Solution

Since 2003, Symantec has been helping Jiangxi Telecom meet these challenges. In that year, Tan replaced the existing manual backup process with a fully automated one based on Veritas NetBackup™.

Two years later, at the same time that Jiangxi Telecom was launching IDC, the company purchased Veritas Storage Foundation™ and Veritas™ Cluster Server. Storage Foundation provides virtualization capabilities for the IDC storage infrastructure. Veritas Cluster Server boosts the availability and reliability for IDC's most critical applications. The company's Oracle and Microsoft SQL Server databases run on two-node active-passive clusters. In addition, Jiangxi Telecom's billing system runs on an active-active cluster.

Symantec AntiVirus™ Corporate Edition plays a key role in defending the IDC network against Internet threats. The Symantec solution was procured in 2005, replacing an existing product from McAfee. "We felt that Symantec has better updates and detection capabilities," explains Tan. "That's why we made the switch."

ORGANIZATION PROFILE

Jiangxi Telecom (www.online.jx.cn) is a branch of China Telecom, the largest fixed service telecommunications provider in mainland China. Jiangxi Telecom's primary offerings include local and long distance phone service, leased lines, broadband Internet, and value-added communication services. The company has more than 15 million subscribers and 15,000 employees.

INDUSTRY

Telecommunications

SOLUTION

Data Protection, Storage Management, High Availability, Information Security

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Tan Hui

Chief Technology Officer,
Internet Data Center
Jiangxi Telecom

For over two years, Jiangxi Telecom has experienced no unplanned downtime for business-critical applications, thanks to Veritas Cluster Server.

Because its parent company, China Telecom, trades on the New York Stock Exchange, Jiangxi Telecom must comply with Sarbanes-Oxley (SOX) requirements. The company chose Symantec Enterprise Security Manager™ in 2006 to streamline compliance audits.

Jiangxi Telecom is constantly striving for higher levels of IT staff efficiency, and reduced exposure to IT risk. Symantec Education Services plays a key role. The company has sent a number of IT staffers to formal training on NetBackup, Storage Foundation, and Cluster Server.

The Results

Now NetBackup is protecting the information for more than 10 UNIX servers and about 350 Windows servers—over 10 terabytes, including about 1 terabyte of information belonging to its hosted customers.

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Storage Foundation is saving money, too, through storage virtualization. It allows Tan’s team to dynamically allocate storage space to internal applications and hosted customers much more efficiently than the previous way. “Our storage administrators

can manage our entire storage environment from a single console,” Tan says. “In addition, Storage Foundation supports all our platforms—IBM AIX, Microsoft Windows Server and Linux. That’s important for us because our hosting service must support different customers’ needs.”

Jiangxi Telecom has increased storage utilization about 20 percent with Storage Foundation, which translates into avoiding additional purchases of storage. Also, because Storage Foundation works with equipment from all major storage vendors, Tan’s team can shop for the best price when buying storage.

Veritas Cluster Server is helping Jiangxi Telecom meet its strict service level agreements (SLAs) for availability. “We’ve had no unplanned downtime since we deployed Veritas Cluster Server,” relates Tan. “Supporting all of our clusters with a single software tool reduces training costs and leverages staff knowledge.” While Jiangxi Telecom has not yet measured the exact time to fail over, Tan estimates it to be in microseconds.

On the security side, Jiangxi Telecom is well-protected with Symantec AntiVirus Corporate Edition. “Our antivirus protection is better than it was with the previous solution,” says Tan. “We also appreciate the Live Update feature. Symantec AntiVirus Corporate Edition is reliable and effective.”

Complying with Sarbanes-Oxley is not a one-time activity—you have to prove it through continuous auditing. That’s where Symantec Enterprise Security Manager is making a difference for Jiangxi Telecom. “When we encountered problems with a SOX audit in the past, we would have to manually go into each individual system to try to locate the source,” Tan explains. “Symantec Enterprise Security Manager helps us pinpoint problems much faster. It’s saving us about three hours a week in that way alone.”

SOLUTION AT A GLANCE

Key Challenges

- Ensure high availability for both internal users and customers of hosted services
- Maximize utilization and minimize capital outlays for storage
- Defend network against Internet-based threats
- Streamline audits for Sarbanes-Oxley compliance

Solution

Comprehensive data protection and information security for heterogeneous server and storage platform

Symantec Products

- Veritas NetBackup™
- Veritas Storage Foundation™
- Veritas™ Cluster Server
- Symantec AntiVirus™ Corporate Edition
- Symantec Enterprise Security Manager™

Symantec Services

- Symantec Education Services
- Symantec Essential Support Services

Technology Environment

- Databases: Oracle 9i, Oracle 10g, Microsoft SQL Server
- Server platform: IBM AIX, Microsoft Windows Server 2003, Red Hat and SUSELinux
- Storage: EMC, Hitachi Data Systems

Business Results

- 3 hours of backup administrator time saved per day
- 20% improvement in storage utilization
- 100% availability of critical applications and information (no unplanned downtime in two years)
- Fast failover in case of server failure (estimated to be a few microseconds)
- 3 hours of auditing time saved per week
- Ability to buy from multiple storage vendors, reducing capital outlays