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CUSTOMER SUCCESS

Tiscali S.p.A.

European Internet Giant Relies on Symantec for Infrastructure, Security, and Messaging

Tiscali S.p.A., an Internet service provider and IP telecommunications company based in Italy, considers Symantec a partner in providing highly available and reliable service to its 3.1 million customers. Veritas NetBackup provides a 12-hour recovery point objective for Tiscali's 3,000-server, 350-terabyte data center, where various Symantec infrastructure products help to deliver 24x7 availability. Symantec Managed Security Services monitors Tiscali's network, which receives 100,000 attacks weekly, and Symantec Brightmail products keep spam out of 13 million email boxes and help Tiscali avoid buying dozens of servers and hundreds of terabytes of storage.

When Tiscali S.p.A., launched in 1998, company founder Renato Soru named his new regional telecommunications company after a remote bronze-age village found in a mysterious cave on the Italian island of Sardinia.

More than a decade later, there's nothing remotely mysterious about Tiscali. Mainly through acquisitions, the company now has 3.1 million customers—a mix of individuals and businesses in 13 European countries and South Africa. (Most are in Italy and the UK.) Tiscali has 1,700 employees who are served by a very small IT department—just 65 people—working in twin 3,500-square-meter (37,675-square-foot) data centers in Cagliari, Sardinia.

From those data centers, Tiscali provides its customers with Internet Protocol (IP)-based "triple play" services: broadband Internet, telephone service, and television. It also provides email service, video on demand, and other products over its IP network, one of the largest and most interconnected in the world.

Keeping its services running uninterrupted is vital for Tiscali's business. Salvatore Pulvirenti, Tiscali's CIO and a member of its managing committee, acknowledges that the services Tiscali provides are commodities, and the only way the company can differentiate itself from its competition is by providing superior service. "The most important aspect of being an Internet Service Provider is that you need to be available 24/7," he says. Pulvirenti relies on a variety of Symantec products and services to keep Tiscali running and its customers happy.

ORGANIZATION PROFILE

Website: www.tiscali.com

Industry: Internet, telephony, television, and business services

Headquarters: Cagliari, Sardinia, Italy

Employees: 1,700

Customers: 3.1 million

SYMANTEC SOLUTIONS

Data Protection

High Availability

Storage Management

Security Management

Messaging Security

Why Symantec?

- Supports NetApp SnapMirror, Oracle RAC, and Critical Path MTA
- Provides operational efficiency with flexibility
- Around-the-clock security monitoring with no additional headcount

Protecting customer and employee data

Tiscali operates about 3,000 servers in its two data centers. Sun™ hardware comprises about 95 percent of those servers; half of them run Sun's Solaris operating system, and half run Linux®. The remainder of the servers run Microsoft® Windows Server 2003 and 2008.

All of Tiscali's servers tap into a pool of about 40 NetApp storage systems that currently totals 350 terabytes of data. Because of data growth, Tiscali's storage budget is immense: about half of its annual infrastructure spending is for storage.

Tiscali's data growth comes from two sources: burgeoning email traffic and regulatory requirements, with the latter growing in importance. "Nowadays, the most important challenge for us is to meet legal requirements—especially in the UK, where there is a strong push from the Home Office in terms of data retention," Pulvirenti says. "That includes, of course, data integrity, and being able to provide, almost in real time, information where needed."

Tiscali relies on Veritas NetBackup™ in a disk-to-tape backup model to protect the data it stores. NetBackup replaced EMC® Legato at Tiscali in 2001 and was deployed with the help of Symantec Consulting Services. NetBackup dovetails with NetApp® SnapMirror technology, which makes an online copy of data onto disk; that copy is subsequently written to tape using NetBackup. About 10 terabytes of data are written to tape each day, allowing Pulvirenti to deliver a 12-hour recovery point objective (RPO).

In addition to customer data, Tiscali employees also store corporate data on the company's NetApp storage systems. They, too, get the benefits of NetBackup, but with an extra level of control: Employees can tell NetBackup when to back up their data, and can recover lost data without intervention from Tiscali's IT staff.

SOLUTIONS AT A GLANCE

Business Drivers

- Avoid purchasing additional servers and storage
- Address security threats without adding staff
- Provide uninterrupted service to customers
- Protect data to meet regulatory requirements

Symantec Products

- Veritas NetBackup™
- Veritas NetBackup™ for Oracle
- Veritas™ Cluster Server
- Veritas Storage Foundation™
- Veritas Storage Foundation™ for Oracle RAC
- Symantec Brightmail™ Gateway
- Symantec Brightmail™ Traffic Shaper

Symantec Services

- Symantec Managed Security Services
- Symantec Consulting Services
- Symantec Education Services
- Symantec Business Critical Services

Technology Environment

- Server platform: Sun™
- Server operating systems: Solaris™, Linux®, Microsoft® Windows
- * Storage platform: NetApp®
- * RDBMS: Oracle®, Microsoft® SQL, MySQL
- * Networking: Cisco®

BUSINESS VALUE AND TECHNICAL BENEFITS

- Established 12-hour recovery point objective for 3,000-server, 350-terabyte data center
- Achieved 80% storage utilization
- Avoided purchasing 50 servers and 400 terabytes of storage
- Network strain reduced 800% through spam blocking

Server clustering and high storage utilization

Protecting data is important, of course, but making sure systems are available when customers and employees need to access that data is key to Tiscali's success. Indeed, Tiscali's IT department maintains service-level agreements (SLAs) for some 20 services it provides to individuals and businesses. The company relies on virtualization and clustering to provide high application availability.

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CIO and Member of the Managing Committee
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Server clustering is delivered through two technologies: Oracle® RAC (2 nodes) and Veritas™ Cluster Server. Systems using Oracle RAC are further supported with Veritas Storage Foundation™ for Oracle RAC. “All of the management systems, the customer service infrastructure, billing, and financial support systems are, for us, mission-critical platforms,” Pulvirenti says. “And we are using, for those platforms, Veritas Cluster Server.”

Active/active clustering is used whenever possible; it supports Tiscali’s need for high service levels and delivers the ability to perform system maintenance without taking systems off line. Clustering “gives us flexibility if a node fails to be, in any way, in line with the service level,” Pulvirenti explains. “At the same time, we are able to provide maintenance during business hours.”

In addition to clustering, Tiscali relies on Veritas Storage Foundation™ to achieve maximum value from storage purchases. (Recall that storage amounts to half of the company’s infrastructure spending, so there’s constant pressure to keep storage costs down—even as data volume balloons and data retention requirements grow.) Pulvirenti attributes Tiscali’s remarkable 80 percent storage utilization rate in part to Veritas Storage Foundation.

Working with three major partners in its data center—Sun, NetApp, and Symantec—supports Pulvirenti’s desire to drive standards throughout Tiscali’s IT operation. “We consolidated our infrastructure to a common toolset in 2001, and we have worked to maintain this standard,” he says. “It allows us to focus on a common build, driving operational efficiencies yet providing the flexibility to quickly address new business opportunities.”

Security management assistance

But new business opportunities—and staggering business growth, such as Tiscali has experienced—also can open new avenues for security problems. Because Tiscali has been an IP-based company since its inception, it is acutely aware of the problems that hackers, malware, and other security challenges can cause.

And being a large global company, Tiscali provides a big target; Pulvirenti says the company’s network receives 100,000 security attacks every week. “A huge number of things attempt to break our infrastructure every day,” he says. “In order to block them, we need to be well organized not only from a professional standpoint, but also from an infrastructure standpoint.”

Tiscali chooses to have Symantec Managed Security Services help monitor its Cisco® firewalls and its IBM®/ISS intrusion detection system. “We put the infrastructure in place, and we manage it with the people here, but we need support,” Pulvirenti says. “And the more we grow, the more the support is needed.”

By outsourcing security monitoring to Symantec, Tiscali has been able to keep its security headcount steady at 10 people for several years. Tiscali is so pleased with the service that it is now exploring the possibility of reselling Symantec Managed Security Services to its small and medium-sized business customers. (It already resells Symantec’s Norton security products to its customers in the UK on a month-to-month basis.) “Security presents a good business opportunity,” Pulvirenti says. “But the real business opportunity for us is to maintain a high level of security standards, in order to not have customers churn because of service failure.”

Keeping mail moving

Email, one of Tiscali's primary customer offerings, has the potential to be a major source of security problems. Indeed, Pulvirenti estimates that 80 percent of the email that Tiscali receives for its customers is spam. But thanks to Symantec products and services, the company is able to successfully deliver 30 million email messages to 13 million email boxes every day.

Tiscali uses Critical Path (also known as Memova) as its mail transfer agent (MTA) software, and protects it with Symantec Brightmail™ Gateway and Brightmail™ Traffic Shaper. Brightmail Gateway provides inbound and outbound antispam and anti-virus protection and content filtering, and Brightmail Traffic Shaper stops spam before it enters Tiscali's network. For its Brightmail environment, Tiscali has Symantec Business Critical Services. The solution helps the team to avoid service interruption and provides 24x7 priority case handling for any issues that arise. They also have access to a remote product specialist who serves as a single point of contact. "Our mail environment is business-critical, and Symantec Business Critical Services enables my team to deliver to very aggressive service level agreements," says Pulvirenti.

The Symantec products and services not only save Tiscali's customers from countless email-related headaches, but they also save Tiscali itself some serious money. Pulvirenti estimates that Tiscali would have needed 50 more Critical Path servers and 400 additional terabytes of storage (more than doubling its current environment) if the Brightmail products were not keeping spam from its systems. And by removing spam before it enters the systems, Brightmail products have reduced network strain by as much as 800 percent, he says.

Another benefit of the Brightmail technologies is that they put the customer in control. "We have implemented Brightmail with the possibility for the end user to opt out or modify the level of filtering," Pulvirenti explains—and then he adds with a laugh, "There are customers who, in my opinion, like to receive spam—because if you block all the spam, they are not going to receive any email!"

Innovation is ongoing

Pulvirenti says Tiscali's IT department must continue to work with its trusted partners to improve operations in today's tight economy. "I believe that, as always, innovation will be driven by need," he says. "Today, the need is to make the infrastructure efficient as possible. So I believe that innovation will be around process automation and saving costs in order to make [Tiscali] more profitable."

But as the economy improves, he sees Tiscali adding more services to its offerings, including software-as-a-service (SaaS) for business customers—and when it does, it will look to its trusted partners. "I believe that a partnership between Symantec and a provider [such as Tiscali] could exactly target this kind of market," he says.

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