

Consultative Group on International Agricultural Research

Blocking 55 Million Spam per Year to Help Reduce World Poverty with Software and Services from Symantec and CGNET



The research centers supported by the Consultative Group on International Agricultural Research (CGIAR) rely on email to enable thousands of geographically dispersed researchers to communicate and exchange information. The challenge is greatest in developing countries where bandwidth is scarce and spam and viruses can bring email communications to a standstill. The CGIAR Centers turned to its managed services provider, CGNET, for a Symantec Hosted Mail Security solution. The Symantec service is helping the Centers block more than 55,000,000 spam and 1,200,000 viruses per year while continuing the collaborative research that has reduced hunger and poverty for millions of people worldwide.

Coordinating research to feed the world

Agricultural research conducted by the Centers supported by the Consultative Group on International Agricultural Research (CGIAR) helped make possible the Green Revolution of the 1960s and 1970s and today continues to reduce hunger and poverty for millions of people in developing countries. The Centers produce critical information and technologies to address the needs of poor farmers. Their research on crops, livestock, forestry, fisheries, and food policy has resulted in such global achievements as the introduction of new and more nutritious types of maize, rice, and wheat that improve health and help developing countries cut food import costs.

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Chief Information Officer
CGIAR

This world-changing work takes place at 15 research centers that the CGIAR supports worldwide, as well as in the field. CGIAR staff and their research partners often work in remote areas of developing countries, performing tasks such as testing soils and water, measuring and analyzing crop yields, taking samples and photos, and directly transferring knowledge and technology to the people who need it.

Providing an electronic lifeline for researchers

For these researchers, email has become an essential technology for communication with the larger scientific community and the outside world.

“Timely information is vital for scientists, and science more than ever is about collaboration and information sharing,” says Enrica Porcari, CIO of the CGIAR. “If you were to ask anyone in the CGIAR what the one thing is they would take with them in the event of an evacuation, which occurs in the places we work, they would point to email. In fact, when the staff in Bouaké, Côte d’Ivoire returned after being evacuated when the region became engulfed in war, the first thing they demanded was email. It’s their lifeline.”

ORGANIZATION PROFILE

The Consultative Group on International Agricultural Research (CGIAR, www.cgiar.org) is a strategic alliance of countries, international and regional organizations, and private foundations supporting 15 international agricultural research centers. The alliance employs more than 8,500 people and works with governments, nonprofit organizations, and corporations in more than 100 countries to reduce poverty, foster human well-being, promote agricultural growth and protect the environment.

INDUSTRY

Education and Research

SOLUTION

Information Security, Enterprise Messaging Management

The Symantec hosted service helps support life-saving research in remote and undeveloped parts of the world.

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When spam is a true menace

One of the main challenges facing Porcari and her team is to provide this community with a secure and reliable infrastructure for email communications. This infrastructure must be truly global, reaching remote areas in more than 100 countries. In addition, the CGIAR email infrastructure must be hardened and resilient to protect researcher inboxes from spam, viruses and other electronic threats that find their way from the global Internet to even the most remote areas of the world.

“With many of our researchers and scientists working from narrowband connections in developing countries, even a handful of spam messages could choke their limited bandwidth, waste precious time and resources, and inhibit critical communications,” Porcari explains. “Having virus-free and virtually spam-free email is not a luxury for us, but a significant business necessity.”

Working with network infrastructure experts

To address these challenges, the CGIAR Centers rely on CGNET, a managed services provider and Symantec business partner with deep experience and expertise providing network communications and other information services in the developing world. Working with CGNET allows the Centers to avoid the hardware, software, and administration costs of fighting Internet-based spam and viruses in its email. The Centers can thus focus more resources on core research.

CGNET for several years has supported the CGIAR Centers’ email with antivirus and traffic shaping capabilities based on Symantec AntiVirus™ Enterprise Edition software and the Symantec™ Mail Security 8160 appliance. The results have met the CGIAR’s business objectives, with 98 percent of spam messages blocked from CGIAR mailboxes and no disruptions to research at the centers caused by viruses or other malware.

Evolving email security capabilities

Based on these results, CGNET in 2006 began providing the CGIAR an upgraded set of antispam and antivirus capabilities based on Symantec Hosted Mail Security. Hosted at the Symantec Operations Center, this integrated email security solution is powered by industry-leading Symantec Brightmail™ AntiSpam and Symantec AntiVirus technologies. It protects against spam, viruses, directory harvest attacks, and other email-borne threats without requiring hardware or software installation by either CGNET or CGIAR Centers.

“Symantec Hosted Mail Security enables us to provide the CGIAR with the highest levels of protection from spam and viruses, along with new management and reporting capabilities that give more flexibility and control to end users,” says Georg Lindsey, CGNET’s Chief Executive Officer. “It gives us all the performance and reliability of our on-premise solutions, but allows us to pass on even more value to our clients.”

Lindsey adds that the Symantec solution also helps CGNET operate more efficiently. “Symantec hosts the solution for us and backs it with excellent support,” he says. “By offloading security processing to Symantec, we can save bandwidth, improve server performance, and reduce storage. When you process up to 90,000 email messages per hour, like we do, all those factors add up. This hosted solution is a win-win solution for both service providers and their clients.”

Enabling users to serve themselves

The quarantine management features are especially valuable to the CGIAR Centers because they enable staff to manage their spam filtering and protection options from anywhere they can access their email. Users gain the flexibility to correct and avoid future occurrences of any “false positives” tagged as spam, and to filter out content according to their needs and preferences. This frees both CGIAR IT and CGNET from having to address individual quarantine issues.

“Symantec Hosted Mail Security serves our needs beautifully,” says Porcari. “With the click of a button, our users can quickly ac-

cess the message quarantine, find the email they need, and ensure they have no more false positives. Researchers and scientists in the field want control over what gets into their email, and this Symantec solution gives it to them.”

Blocking spam messages by the millions

The hosted Symantec solution continues to provide CGIAR researchers with virus-free and virtually spam-free email. Over the past year, Symantec solutions at CGNET have blocked more than 50,000,000 spam messages and approximately 900,000 viruses from reaching the CGIAR network.

Porcari estimates that the hosted solution continues to filter out more than 98 percent of spam messages targeted at staff mailboxes. Because CGIAR Centers provide a public service and actively solicit partnerships and support, she comments, email addresses are often made public and create extra vulnerability to spam. “The number of spam messages, and the percentages captured, are staggering,” she says. “Without CGNET and Symantec Hosted Mail Security, spam could bring our network to a standstill. I wouldn’t be sleeping at night.”

Information technology that makes a difference

Porcari emphasizes that information technology continues to help the CGIAR make a positive impact on people’s lives. As just one example of the impact of CGIAR research, she sites how improvements in the quality of rice crops have the potential to significantly reduce the number of children born blind in some parts of the world.

“For every dollar invested in the CGIAR, \$9 worth of additional food has been produced in the developing world, catalyzing substantial additional ‘multiplier effects’ for poor producers and consumers in the process” she adds. “Information technology is helping us keep our focus on research. CGNET and Symantec are valuable partners in that mission.”

SOLUTION AT A GLANCE

Business Drivers

- Conduct research in remote and undeveloped parts of the world
- Coordinate research taking place in more than 100 countries
- Minimize IT infrastructure costs
- Focus resources on core research mission

Technology Challenges

- Provide secure email access to mobile users in remote and undeveloped areas
- Stop spam, viruses, and other unwanted content from burdening email environment
- Filter spam while minimizing false positives
- Conserve scarce bandwidth available in remote areas
- Enable end-user self-management of email quarantines

Solution

Hosted email and security services from a trusted managed services provider

Symantec Products

- Symantec™ Hosted Mail Security
- Symantec AntiVirus™ Enterprise Edition
- Symantec™ Mail Security 8160

Technology Environment

- Applications: Microsoft Exchange
- Database: Microsoft SQL Server
- Server platforms: 10 HP servers running Microsoft Windows 2003 and Red Hat Linux
- Storage: HP StorageWorks Ultrium drives
- Off-site data vaulting: DataSafe

Symantec Partner

- CGNET

BUSINESS VALUE AND TECHNICAL BENEFITS

Information Security

- Zero disruptions to research caused by email-borne viruses and other threats
- Blocked 55,000,000 spam per year and 1,200,000 viruses
- 98% reduction in spam in user mailboxes
- Virtually zero user complaints about spam

Operational Efficiency

- Established secure email worldwide without on-premise hardware, software, or ongoing administration and maintenance

Business Continuity

- Deployed continuous, secure email service for mobile researchers in remote and politically unstable areas

Staff Productivity

- Enabled email quarantine self-management for mobile researchers to virtually eliminate “false positive” spam filtering

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