



# Case Study

## JeffCo Public School System Profile

### ORGANIZATION

Jefferson County Public Schools

### INDUSTRY

Education

### EMPLOYEES

5,800 in 160 locations

### SOLUTION

MX Logic® Email Defense Service

### BUSINESS RESULTS

- Saves taxpayers \$3.2 million over 12 months
- Eliminates spam, viruses, worms and other email threats
- Restores value and usability of email
- Maximizes staff, improves productivity
- Increases system availability

## The MX Logic® Email Defense Service Saves Jefferson County Public School System \$3.2 Million

### CUSTOMER PROFILE

Jefferson County Public Schools is the largest school district in Colorado, offering a variety of learning opportunities to more than 85,000 students. The district comprises 148 elementary, middle, high, option and charter schools – and everything from small schools in mountain communities to large urban campuses. With more than 11,000 employees, Jefferson County Public Schools is also one of the county's largest employers.

### BUSINESS SITUATION

First, employees complained about spam. And then the Sobig worm struck. Scott Bell, executive director of infrastructure services for Jefferson County Public Schools, explains what happened in 2003 when email defense became a critical issue to Colorado's largest school district. Gradually, employees had become inundated with spam. By 2002, some people were receiving more than 200 unsolicited email messages per day. Bell remembers one employee in particular – a webmaster who is also a grandmother – getting slammed with spam, mostly pornographic.

"We started receiving big-time complaints about spam," Bell says. "Some users got frustrated and just started deleting everything. Thanks to spam, email was becoming ineffective."

As if the situation wasn't bad enough already, along came the Sobig worm in August 2003. "Sobig crippled us for about a week – we couldn't use the network at all," Bell says. "This one event really spurred us to find an email threat solution. We were getting annoyed with spam, but Sobig stopped us. We had to do something to make sure our email was invulnerable to viruses and worms."

### THE MX LOGIC SOLUTION

The school system's infrastructure services team needed a comprehensive solution that would protect the network from spam as well as email-borne viruses and worms. They considered both email defense appliances and software solutions, but rejected these because they would have to be managed internally and were expensive to purchase. According to Bell, running an anti-virus software solution on top of the school system's mail server would cost \$50,000 – and that didn't include spam protection. He also estimated that managing an anti-spam appliance or software solution would require half of one employee's time – and that didn't include man hours for overseeing virus protection.

**"MX LOGIC HAS  
MADE LIFE A LOT  
NICER FOR  
EVERYBODY."**

– Scott Bell, Executive  
Director of Infrastructure  
Services, Jefferson County  
Public Schools



Goal	Before MX Logic	After MX Logic	Result
Reduce spam	Email became unusable for many employees, who received more than 200 unsolicited – and often pornographic – email messages per day	MX Logic's Email Defense Service stops more than 99% of spam – before it enters Jefferson County Public Schools' network	MX Logic has saved taxpayers more than \$3.2 million in lost productivity over the past 12 months
Prevent viruses and worms	The Sobig worm in August 2003 crippled Jefferson County Public Schools' network for one week	The Email Defense Service eliminates virus and worm outbreaks from external sources	Jefferson County Public Schools experiences much greater security from email threats – including zero-hour threats
Improve system performance and availability	Network servers and firewalls struggle to cope with burgeoning email traffic, which includes an influx of spam, viruses and worms	Identified as spam, 70 percent of all email attempting to reach the school system from the Internet is blocked by MX Logic	Overall email traffic has decreased by 13%





**"IF WE HADN'T HAD MX LOGIC FOR THE PAST COUPLE OF YEARS, OUR EMAIL SYSTEM WOULD BE UNUSABLE TODAY."** – Scott Bell, Executive Director of Infrastructure Services, Jefferson County Public Schools

"If we selected a software or appliance solution, we'd have to manage it – and we have enough to do already. Besides, we're a government entity, so we're not getting more head count," Bell says. "We realized a managed service was our best bet."

Bell explains that features such as end-user quarantine management and end-user allow and deny lists were top reasons for choosing the MX Logic® Email Defense Service.

### THE MX LOGIC EMAIL DEFENSE SERVICE

The MX Logic Email Defense Service is easy to administer and use, and requires no integration or migration. Using the MX Control Console<sup>SM</sup>, an intuitive Web-based email threat management platform, administrators like Bell can easily configure and control how spam, viruses, worms and inappropriate content are filtered and set parameters around end-user quarantine management.

Once email is filtered, suspect messages are stored in a safe, external quarantine on the customers' behalf. MX Logic's sophisticated quarantine can be managed by the corporate IT department, end users or both. When IT administrators elect to have employees manage their quarantine (as Bell did), end users receive a "Spam Quarantine Report" that shows them all messages that were blocked during a specified time period.

Significantly reducing the amount of time the IT department must spend managing spam, these Spam Quarantine Reports enable end users to develop their own allow and deny lists to prevent delivery of spam and messages with inappropriate content. Employees can also simply and quickly delete or forward quarantined email.

"The ability to give our end users control over their own spam quarantines was important to us, and its comprehensive features and seamless operation made us decide on the MX Logic Email Defense Service," Bell says. "With the exception of once in awhile tweaking black lists to suit our needs, we don't have to install updates or do anything to manage this service."

After what Bell describes as a "very impressive trial," the district implemented the MX Logic Email Defense Service, which included McAfee® virus protection, in September 2003. "MX Logic was very easy to implement," Bell says. "We just established one rule set that applies to our entire school district – some 160 locations – and then pointed our MX record to MX Logic."

By redirecting its MX record, all outside email is received by MX Logic first, which filters the email and then redirects it to Jefferson County Public Schools. This conceals Jefferson County Public Schools' Internet-facing mail servers and gateways, protecting them from attack. Best of all, the Email Defense Service worked. Immediately after its implementation, employees stopped receiving spam.

"When we removed all that spam employees were getting, we actually got a lot of thank-you notes – and IT departments typically don't get thank-you notes," Bell says. "Now, everybody takes the MX Logic Email Defense Service for granted."

When it comes to virus protection, Bell knew that a layered approach was the best solution. In addition to McAfee, Jefferson County Public

Schools receives protection from MX Logic's proprietary WormTra<sup>SM</sup> worm-detection technology, which identifies and intercepts zero-hour threats (such as the Sobig and Sober worms) – often hours before anti-virus services can distribute signature updates to their customers.

"When I hear about organizations getting hit by viruses and worms, I smile and say, 'That's why we pay for MX Logic.' Since we implemented this service, we've had no more network-crippling outbreaks from external sources," Bell says.

Bell explains that, because MX Logic scans Jefferson County Public Schools' email before sending it on, the school system's firewall has been configured to allow incoming mail from MX Logic only.

"This provides much more security for us," Bell says. "We don't have hundreds of thousands of hackers trying to find vulnerability on our mail server. They can't initiate anything – like Denial of Service attacks – against us, because they can't access our servers."

### THE RESULTS

The MX Control Console also provides a wide range of real-time daily, weekly and monthly reports, which enable Bell to quickly analyze and track email traffic and trends. "The MX Logic reports are very easy to use, enabling me to quickly gather my statistics for monthly traffic and threat overviews," Bell says. "It's nice to have a month-by-month play, because I pop these statistics into a spreadsheet and get a graph showing email trends."

Using the MX Logic reports, Bell gathered the following 12-month statistics:

- Emails received: 21,869,229
- Emails with viruses: 1,557,039 (7% infection rate)
- Emails identified as spam: 15,219,817 (70%)
- Attachment policy violations: 293,465
- Total quarantined emails: 15,391,965 (70%)

According to Bell, these statistics indicate that, by stopping spam from entering the Jefferson County Public Schools network, MX Logic saved taxpayers more than \$3.2 million over the past year.

"If we assume that each email takes 30 seconds to deal with, then we've saved our district approximately 128,266 person-hours, or 16,033 person-work-days, in the last 12 months," he says. "If we assume the average employee cost with benefits is \$25 per hour, then MX Logic has helped us save \$3,206,659 in lost productivity in the last 12 months. This doesn't include the lost productivity that would be caused by computer virus infections if we didn't have MX Logic."

Bell employs one email administrator for the district, who now focuses on delivering legitimate email – instead of dealing with system overloads from spam and eradicating email viruses.

"If we hadn't had MX Logic for the past couple of years, our email system would be unusable today," Bell speculates. "We were killed with Sobig, then we got MX Logic and now we don't have worm outbreaks or have to deal with spam anymore. MX Logic has made life a lot nicer for everybody – and it's been a job saver to me."



### ABOUT MX LOGIC

MX Logic is a leading provider of managed email and Web security services that deliver enterprise-grade performance without enterprise-level complexity and cost. Our easy-to-use, award-winning services reduce risk and liability, lower overall IT costs, and increase productivity. MX Logic services are available through our industry-leading partner network. For more information, visit [www.mxlogic.com](http://www.mxlogic.com).

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