

Case Study

Lewisville Independent School District

PROFILE:

COUNTRY: USA
INDUSTRY: Education
SIZE: 53,000 students

OBJECTIVE:

Lewisville ISD needed a cross-platform Internet monitoring and filtering solution that would scale effectively, providing SSL decryption at very high speeds with no noticeable network latency so administrators could have very fine control over the types of content students could access.

SOLUTION:

In ContentKeeper, Lewisville ISD has found a solution that supports all browsers and device types with deep packet inspection, granular control, and full visibility into students' web use from any location.

RESULTS:

ContentKeeper's versatility and powerful functionality have facilitated high-quality digital teaching and learning within the district. Lewisville administrators also appreciate ContentKeeper's unmatched reporting and level of support.



Lewisville ISD Sees Tremendous Versatility and Value from ContentKeeper's School Web Filter

An effective school web filter should help K-12 leaders enforce thoughtful Internet use policies without getting in the way of instruction. In fact, it should facilitate digital teaching and learning by allowing for a completely seamless experience no matter what device students are using—while giving administrators powerful insights into students' online activity.

The Lewisville Independent School District in Texas has used ContentKeeper to achieve these goals since September 2013. During this time and currently, the district has found ContentKeeper to be a highly versatile and adaptable tool that has been indispensable in providing high-quality filtering, reporting and application control.

With ContentKeeper, Lewisville can apply very granular control over the types of content students can access online, whether they're learning from home or school—and whether they're using an iPad, a Chromebook, or a Windows device. Administrators have full visibility into students' web searches and application usage, which has improved instructional decision making. The district has been able to accomplish all of this without compromising network performance in the slightest. In addition, IT leaders rave about the quality of support they have received from ContentKeeper staff.

Fast SSL decryption with no network latency

Lewisville was using another web filtering product several years ago. But as the district's network grew, its legacy filter couldn't keep up with decrypting Secure Socket Layer (SSL) web encryption at very high speeds.

"If you're going to set granular policy controls, SSL decryption is key," says Chief Technology Officer Bryon Kolbeck. Without the ability to decrypt and inspect SSL-protected web traffic, Internet filtering and monitoring solutions can only see the top-level domain of many requested websites. That means users would need to block or allow access to entire domains such as Facebook.com or YouTube.com, rather than blocking or allowing individual pages within those websites.

Because the need to decrypt and re-encrypt web traffic adds more steps to the inspection process, SSL decryption typically slows Internet speeds down if it's not engineered well, often quite dramatically. That's what was happening with Lewisville's old Internet filter.

"We needed a product that could scale effectively," Kolbeck says. Lewisville discovered the perfect solution in ContentKeeper; currently the district can support more than 50,000 students on a 20 Gbps network with no noticeable delays.

Supporting effective instruction

ContentKeeper's powerful SSL decryption and its group-based policy settings allow for very granular control: Lewisville administrators can set different content restrictions for elementary students

versus high schoolers. They can block access to specific pages or features within social media sites while allowing access to others. They can even allow access to certain content after school hours but block access during school.

“The degree of control we have allows us to do more for our students,” says network engineer Tim Norton. It also enables more effective teaching and learning.

One feature that Lewisville instructors have found to be particularly useful is ContentKeeper’s dynamic safelisting ability. If a teacher finds a video from YouTube or another source that is typically blocked, he or she can add that video to the school’s learning management system or a class website. If the video is being delivered through a trusted source, ContentKeeper safelists it in real time and allows the video to play—without the need for teachers to contact the IT department to request access first.

Lewisville has implemented a 1:1 learning initiative in grades 4-12, with students receiving an iPad they can take home at night. The district also has thousands of Windows and Mac OS laptops for students to use in class if they need a more powerful device. To make sure everyone could learn remotely during the pandemic, the district also issued Chromebooks to students who did not have a device at home.

Monitoring and filtering students’ Internet use in a mixed-device environment like this can be tricky. “There are a lot of solutions that work just for Chromebooks, but not everyone does iOS filtering well,” Kolbeck says.

With ContentKeeper, students have the same online experience regardless of what kind of device they’re using. What’s more, administrators can identify which students are using which devices, so they always have full visibility and control over students’ network use.

Insightful reporting, ‘top-notch’ support

This enhanced visibility is helping leaders make better decisions around instruction. “If we want to evaluate how technology is being used at school and at home, we can,” Kolbeck says.

Administrators can see which domains and websites are being used for instruction and how often. They can report this information to the superintendent and school board to demonstrate technology’s value in teaching and learning. They can also reevaluate whether they want to continue investing in tools that aren’t being used very frequently. “To me,” Kolbeck says, “that’s super important in telling the story of technology use in our district.”

With all the value that Lewisville ISD realizes from using ContentKeeper, perhaps the aspect that IT leaders appreciate the most is the level of support they get from the company.

“When I send an email with a question, within a few minutes they are on the phone with me to work on the problem. The support we get is top-notch, probably the best of any product we use,” Norton says.

He concludes: “We have been extremely happy with ContentKeeper.”

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—Tim Norton
Network Engineer