Executive Summary

Schools are expected to keep their students physically and digitally safe, even with increasing numbers of devices connecting to their networks. In addition, 1:1 initiatives have accelerated rapidly since 2020, and students are accessing lessons and completing homework online. These challenges make complying with the Children’s Internet Protection Act (CIPA) more complicated, and pervasive internet use by tech-savvy students makes it more important than ever. Essentially, CIPA requires K–12 schools and libraries to certify that they are enforcing internet safety policies in order to be eligible for E-rate discounts.

Much has changed since CIPA was enacted by the U.S. Congress in 2000, but the rules enforced by the Federal Communications Commission remain in place. CIPA has become synonymous with “web filtering,” which relies heavily on text and object patterns in images to provide restrictions where needed. This service works well when traffic is open and easily analyzed by filtering software or hardware. This is not the case when traffic or content websites themselves are encrypted with SSL/TLS encryption. In the early 2000s, very few websites or even software browser companies supported SSL encryption; fast-forward to today, and 95% of all internet-based traffic is encrypted when processed through search engines, per Google HTTPS statistics.

Fortinet Solutions

Fortinet offers products that can help you achieve CIPA compliance for your school or library.

FortiGate: Our E-rate-eligible, next-generation firewalls deliver top-rated network security, as well as the ability to monitor your network and filter even encrypted internet traffic for inappropriate content in real time.

FortiMail: Email is the most frequently used delivery method for malware. Our secure email gateways feature high-performance, top-rated security effectiveness and DLP.

FortiClient: Our endpoint protection platform delivers easy to manage, automated, customizable antivirus, web filtering, application control, IPS, and more, for endpoints on- or off-network, including Chromebooks.

FortiWeb: Our web application firewalls (WAFs) monitor, allow, or block application traffic by categories. It can prevent the use of unwanted applications, including proxy apps and HTTPS messaging apps.

FortiSandbox: Proactive advanced threat protection (ATP) stops the latest and most sophisticated threats.

CIPA Requirements

Schools and libraries subject to CIPA are required to adopt a policy that addresses all of the following:

- Access by minors to inappropriate matter on the internet and World Wide Web
- The safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications
- Unauthorized access, including “hacking” and other unlawful activities by minors online
- Unauthorized disclosure, use, and dissemination of personal information regarding minors
- Access to materials harmful to minors. (Security measures must be able to block or filter pictures that are obscene or contain child pornography.)
ISSUE BRIEF | Keeping Students Safe Online and Meeting CIPA Compliance With Fortinet

Linksks HomeWRK for Education Secured by Fortinet: The only all-in-one hotspot solution that provides the combination of intelligent content filtering and harmful malware protection while giving you the flexibility to allow students to use district-owned or personal equipment.

FortiManager and FortiAnalyzer: Appliances enable single-pane-of-glass management with extensive logging and archiving capabilities to enhance oversight and simplify auditing centrally with distributed FortiGates.

FortiGuard Services: Threat research and analysis provide regular updates to block new cyber threats and unsavory websites.

**How Fortinet Products Address Specific CIPA Requirements**

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<th>CIPA Requirements</th>
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| Prevent minors from accessing inappropriate matter on the internet and World Wide Web | FortiGate:  
- Web filtering to block sites under inappropriate categories such as adult/mature content.  
- Manual website blacklisting to block webpages by keywords or URLs.  
- Safe search enforcement to rewrite search queries with Safe Search option to deliver child-appropriate results.  |
| Address the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications | FortiGate:  
- Antivirus to detect malicious attachments or file transfers over electronic communications.  
- Anti-spam, DLP to stop malicious or inappropriate content.  
- Web filtering to restrict social media and online communication sites.  |
| Prevent unauthorized access, including "hacking" and other unlawful activities by minors online | FortiGate:  
- Firewall to enforce access to other networks and internet. User authentication can also be implemented.  
- Application control to prevent the use of malicious or inappropriate applications.  
- IPS to detect and block unlawful activities.  |
| Prevent unauthorized disclosure, use, and dissemination of personally identifiable information (PII) regarding minors | FortiGate:  
- Firewall to prevent unauthorized access to internal hosts.  
- Antivirus to mitigate malicious code infections that allow external control.  
- DLP to protect against servers and terminals from disclosing personal information.  |
| Address measures designed to restrict minors’ access to materials that are harmful to minors | FortiGate:  
- Web filtering to block sites under inappropriate categories such as violent content.  
- Manual website blacklisting to block web pages by keywords or URLs.  
- Safe search enforcement to rewrite search queries with Safe Search option to deliver child-appropriate results.  |
| FortiWeb:  
- Prevents the use of unwanted applications, including proxy apps and HTTPS messaging apps.  
- Linksks HomeWRK for Education Secured by Fortinet.  
- Web filtering to block sites under inappropriate categories such as adult/mature content.  |

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