



# Internet Security Guide for School Administrators

## 1. Why we care

The Internet is full of wonderful things for children to learn. It also has many places for them to play and explore. And teachers, staff, and education communities use the Internet to get work done and stay in touch.

Without adequate security, however, the Internet can also be dangerous. Student records and personal data are at risk for theft. Virus outbreaks threaten computers and interrupt work. And, even worse, children can be victimized when they visit malicious websites or online chat rooms.

## 2. What to do

Schools can create safer and more secure environments for their Internet users and communities by taking action to raise awareness, reduce risk, and implement security measures.



**Raise awareness:** Explain to all users—teachers, staff, and students—the potential risks inherent in Internet use. Promote online security best practices, such as the following:

- Keep personal information private.
- Report online bullying and other inappropriate behavior.
- Never arrange to meet a chat room friend unless accompanied by an adult in a public place.

For more tips and suggestions, see the additional resources listed in section 5.

**Reduce risk:** Reduce online risks by implementing additional best practices, including the following:

- Back up sensitive data regularly.
- Keep logs and audit reports.
- Maintain up-to-date computer system patches with anti-malware protection.
- Configure networking equipment (routers, switches, and wireless devices) securely.

It's also important to consider physical security; this includes video surveillance systems, physical access control, and emergency response solutions for areas that need such protection.

Implement security measures: Take advantage of the latest technology to help mitigate security threats. Firewalls, network access control solutions, and web security can help schools greatly improve their results in stopping online attacks, reducing network infections, and protecting students from malicious content.

## 3. How Cisco can help

Cisco offers a holistic security solution to help schools improve their online security. The solution contains three powerful components: Cisco® ASA 5500 Series firewalls, Cisco Network Admission Control (NAC), and Cisco IronPort® Web Security Appliances. Collectively, these components enable schools to easily and more effectively improve their Internet security.

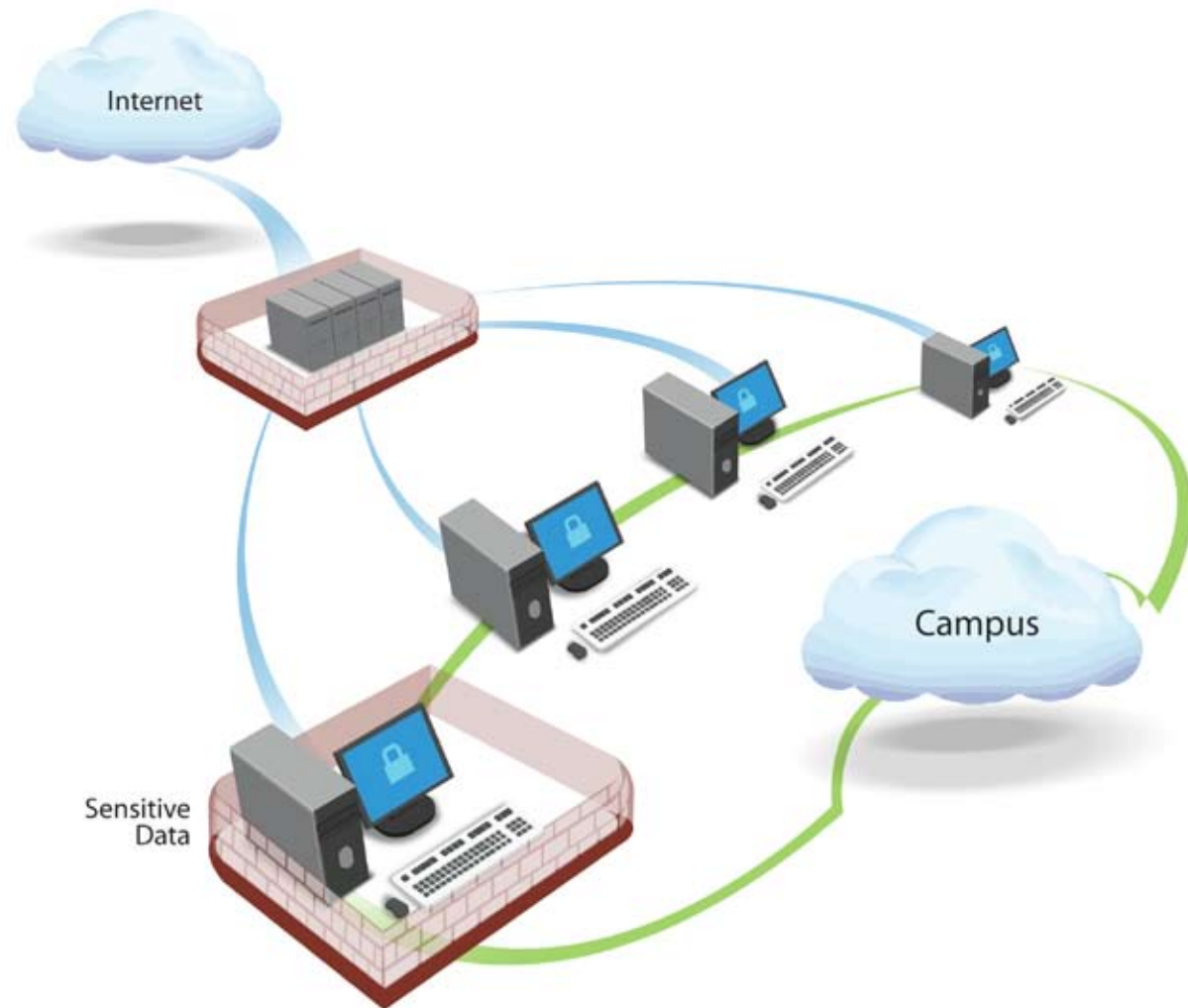


**Firewall to stop online attackers.** Hackers take many actions to break into school networks and systems. Cisco ASA 5500 Series firewalls provide schools with strong protection to stop these intruders. Cisco ASA firewalls are typically used between a school's network and the Internet. It is also a good practice to place a Cisco ASA firewall in front of servers that house important student records and other sensitive data.

**NAC to prevent network infections and unauthorized access.** Computer viruses can quickly spread via the Internet and mobile devices, such as laptops. Cisco NAC effectively mitigates viruses and malware-based security threats. Cisco NAC validates every computer before it is allowed to connect to the school network. If a computer does not have necessary antivirus or other required security software, Cisco NAC will quarantine it and provide remediation. In addition, Cisco NAC can be used in the administrative network area to prevent access by unauthorized onsite personnel.

**Web security.** Students face online dangers ranging from inappropriate web content to harmful sites that carry Trojans and other malicious codes. Cisco IronPort Web Security Appliances combine URL filtering, reputation filtering, malware filtering, and data security to address these security risks. The Cisco IronPort Web Security Appliance helps schools secure and control web traffic as students use the Internet.

The following diagram shows how the Cisco security solution is deployed in a school network.



## 4. Why Cisco

Cisco has clear understanding of the education communities. Cisco has a strong commitment to education customers to help them succeed. Cisco Networking Academy is a prime example of how Cisco works with the education communities to deliver information and communication technology skills. In addition, Cisco offers the following to the education communities:

- Deep technical expertise and industry-leading security solutions to help schools build safer and more secure Internet environments.
- Award-winning security products:  
[http://www.cisco.com/en/US/prod/vpndevc/leadership\\_awards.html](http://www.cisco.com/en/US/prod/vpndevc/leadership_awards.html)
- Customer validation and success:  
[http://www.cisco.com/en/US/products/ps6128/prod\\_case\\_studies\\_list.html](http://www.cisco.com/en/US/products/ps6128/prod_case_studies_list.html)

## 5. Act now

Contact your Cisco representative to learn more about Cisco security solutions. Use the following resources to get more information:

1. National Cyber Security Alliance:  
<http://www.staysafeonline.info/>
2. Cisco security solutions:  
<http://www.cisco.com/go/security>
3. Cisco physical security solutions:  
<http://www.cisco.com/en/US/products/ps6712/index.html>

