

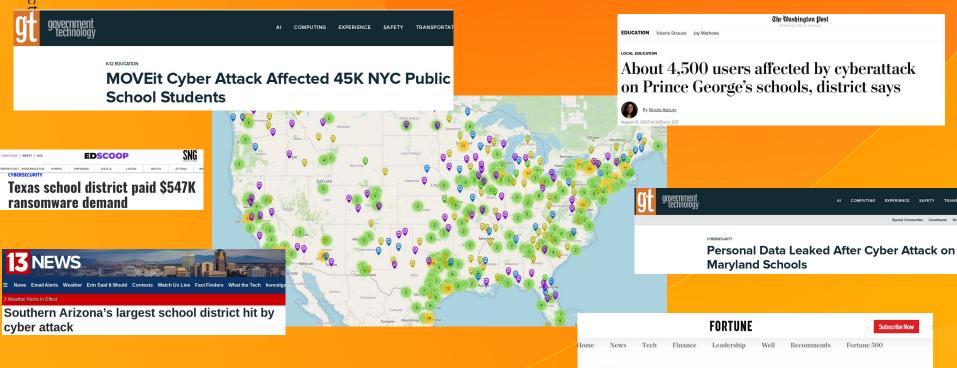
## Project Cybersafe Schools

## Presented to: Stanislaus County Office of Education

Scott Reilly California Client Executive



## Cyber Threats are a National Issue



#### Los Angeles Times

CALIFORNIA

L.A. Unified data breach last year includes at least 2,000 student records, officials say

#### TECH · RANSOMWARE

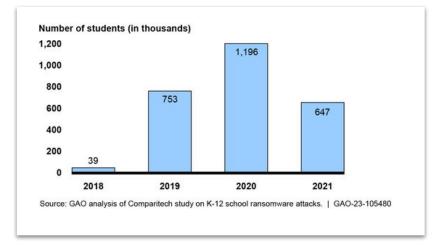
'A five-alarm fire': Public schools have become a prime target of ransomware gangs that traumatize students by dumping their private records online

BY FRANK BAJAK AND THE ASSOCIATED PRESS August 8, 2023 at 10:35 AM PDT



### The Impact of Cyber Attacks on Schools

Number of U.S. Students Affected by Ransomware Attacks on K-12 Schools and School Districts, 2018-2021



- Ransom requests varied from \$5,000 to \$40 million
- The overall cost of these attacks is estimated at around \$9.45 billion
- On average, schools lose 11.65 days to downtime and spend more than a month (42 days) recovering from the attack
- Leaks of confidential student data

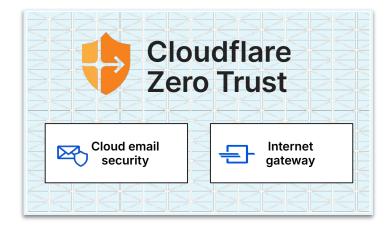


### **Cloudflare Project Cybersafe Schools: What is it?**

Bringing security tools for free to small K-12 public school districts in the US

Cloudflare's mission is to *help build a better Internet*, and we have always believed in helping protect those who might otherwise not have the resources to protect themselves from cyber attack.

Announced as part of the Back to School Safely: K-12 Cybersecurity Summit at the White House on August 8, 2023, Project Cybersafe Schools supports eligible K-12 public school districts with a package of Zero Trust cybersecurity solutions for free, and with no time limit. These tools will help your school district minimize your exposure to common cyber threats.





### A Note on Eligibility

Project Cybersafe Schools participants must be:



K-12 public school districts



Located in the United States



<u><</u> 2,500

No larger than 2,500 students per district



#### Spotlight: Shielding schools from online attacks

Cloudflare announced Project Cybersafe Schools at the White House's Back to School Safely: K-12 Cybersecurity Summit in August 2023.

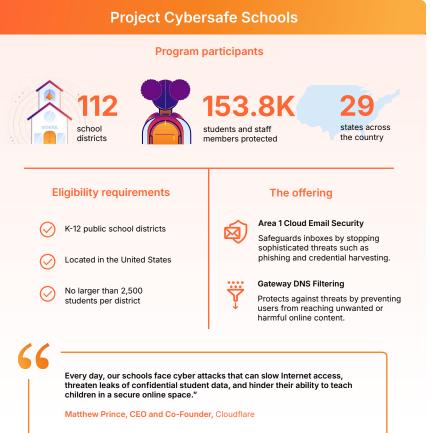
Cloudflare provides eligible school districts with Zero Trust cyber security solutions that help minimize exposure to harmful online content and common cyber threats such as phishing and credential harvesting. We provide these products for free and with no time limit.

This program was inspired by ongoing conversations with fellow members of the Joint Cyber Defense Collaborative. Cloudflare worked with officials from the Cybersecurity & Infrastructure Security Agency (CISA), the Department of Education, and the White House to determine how we could partner to protect K-12 schools in the United States from cyber threats, particularly since small schools often lack the resources and capacity to combat evolving threats.

#### Apply for Project Cybersafe Schools at cloudflare.com/lp/cybersafe-schools.

The White House's >> Back to School Safely: K-12 Cybersecurity Summit. Matt Schneider and Zaid Zaid from Cloudflare.





# **Cloudflare is an Internet-native platform** that delivers local capabilities with global scale in the areas of...





510+ cities in 100+ countries

**136B** Threats Blocked Daily 90

Data centers in the US across **41 cities** 

95% Of the world's Internet users within 50ms

### 13,000+

networks directly connect to us, including ISPs, cloud providers & large enterprises

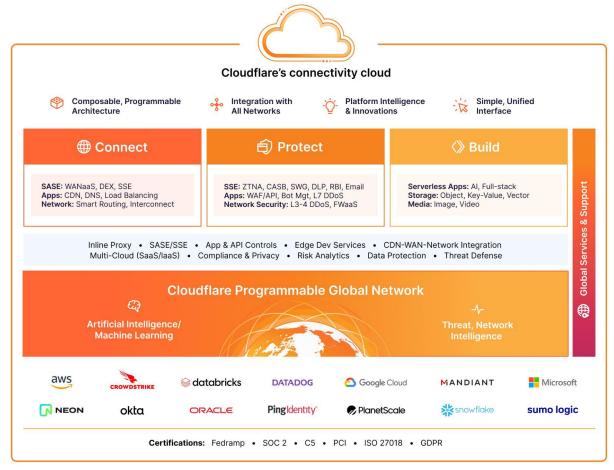
100% Uptime SLA

### 248 Tbps

of network edge capacity and growing

20% of the world's Internet traffic

### The Cloudflare portfolio





# **DNS** Filtering

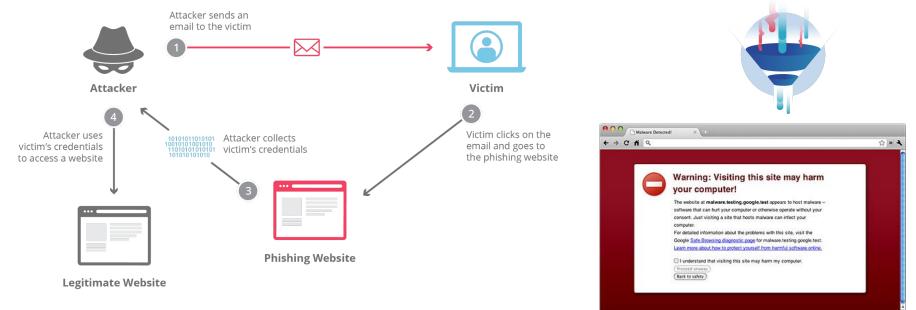
Section





### **DNS Filtering**

Protects against Internet threats with DNS filtering by preventing users from reaching unwanted or harmful online content like ransomware or phishing sites and can be deployed to comply with the Children's Internet Protection Act (CIPA).





### Gateway DNS Filtering (CIPA Compliant)

#### **CIPA Requirements**

CIPA mandates that K-12 schools and libraries adopt Internet safety policies that include measures to block or filter access to specific categories of content. These categories encompass a wide range of topics that could be harmful or inappropriate for minors.

Compliance with these requirements helps ensure that students' online experiences are safer and more secure.

#### **Cloudflare Configuration**

To facilitate compliance with CIPA requirements, administrators can enable a single filtering policy option. This includes applying the required filter categories to block access to unwanted or harmful online content.

It is important to note that while our recommended CIPA compliance rule covers the essential filter categories, CIPA is designed to be flexible, allowing administrators to adjust filtering policies based on local standards and requirements.

Administrators should carefully assess their specific location and userbase to determine if additional categories may need to be added or modified to ensure comprehensive protection.

## **Email Security Overview**





### Today's phishing attacks exploit trust



Spoof common business workflows



Impersonate trusted entities



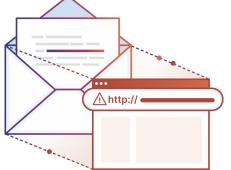
Exploit trusted free services



Piggyback on news cycles and life events

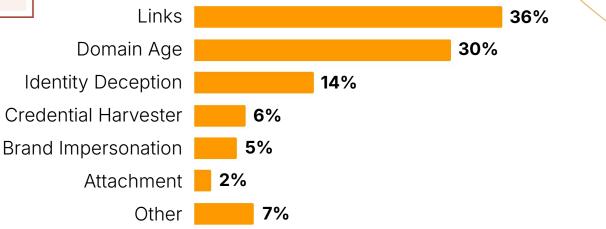
- Password reset emails
- File-sharing notifications
- Online shopping receipts / returns
- CEO
- Vendor / partner sending invoices
- The U.S. government
- Hosting phishing pages on Google Sites, Typeform, etc.
- Using marketing automation tools to send phishing emails
- Sending attacks from a Gmail / Yahoo ID
- Tax scams
- COVID vaccine scams
- Black Friday scams





# Links are the most detected phishing threat

(Results of 2023 Phishing Threats Report)







### **Cloudflare Cloud Email Security Preemptive Detection**



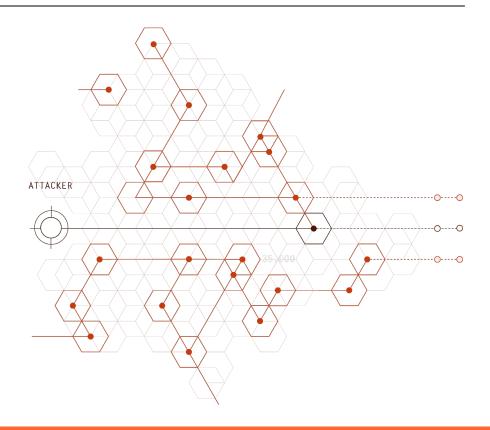
## Massive-Scale Phish Indexing for "Domain Intelligence"

High speed Web crawlers 3+ Billion Pages, 10+ Petabytes of Data

Dynamic Frontier Management

03

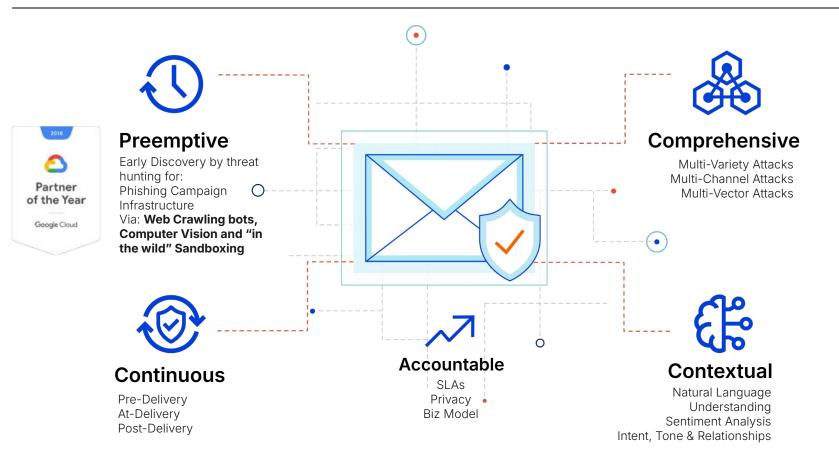
- CV: Browser Emulation / User Impersonation
- In-the-Wild "Active content inspection" with component analysis & detonation



#### SPOT EMERGENT INFRASTRUCTURE BEFORE CAMPAIGNS LAUNCH

#### Zero Trust Email Security = not all domains should be allowed to email you

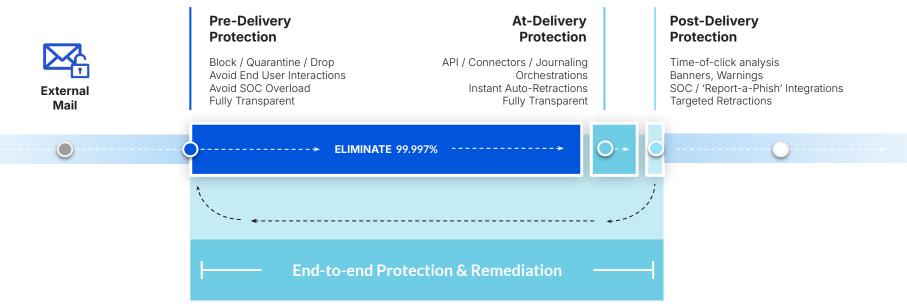






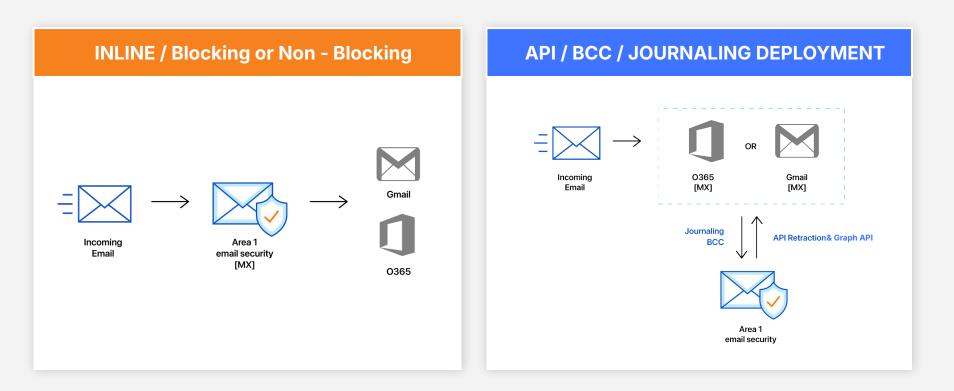
### **Area 1 Cloud Email Security**

### **Continuous protection**



### **Benefits of flexible and hybrid deployments**

#### Transparent, Multi-Mode, Zero Touch



CLOUDFLARE

**AREA 1 SECURITY** 



#### Shielding schools from online attacks

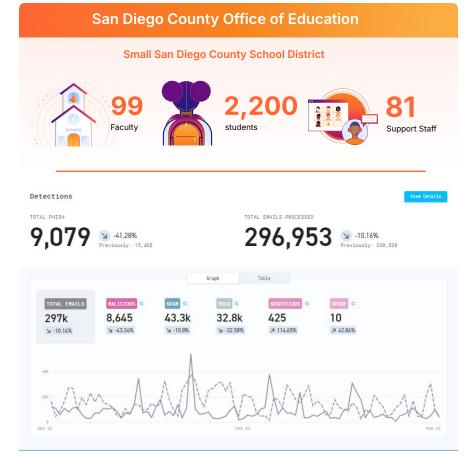
San Diego County Office of Education and Cloudflare partner together to provide a safe learning environment for Small County School District.

The Cloudflare Cybersafe Schools program, announced at the "White House Back to School Safely: Cybersecurity Summit" in August of 2023, is helping small San Diego County Local Educational Agencies (school districts) protect its students, staff and communities by minimizing exposure to malicious online content and cyber threats such as phishing and credential harvesting. The San Diego County Office of Education (SDCOE) is able to quickly and efficiently manage email threats from a centralized Cloudflare Email Security dashboard, providing its smallest districts, many with few or no technical staff, the benefits of a enterprise grade solution without having to implement or maintain the platform.





Apply for Project Cybersafe Schools at cloudflare.com/lp/cybersafe-schools.





- 1. <u>Most comprehensive</u> threat intelligence
  - ~ 22% of all web traffic combined with Computer Vision & Web Crawling
- 2. 30-40% lower annual license cost compared to Secure Email Gateways
- 3. All Cloudflare solutions are operated in a "single pane of glass" at:

https://dash.cloudflare.com/login

- 4. No tuning or bandaids Cloudflare keeps your security up to date for you
- 5. We the leader in BEC detection with our "Domain Intelligence" = ROI



## **Solution Demo**



## **Quick Start Guide**

Schools student size 2,500 or less



### How to get started

1. Create your <u>Cloudflare account</u>, <u>Area 1 account</u>, and <u>Zero Trust organization</u>

Note: You will receive an email following this webinar requesting some inputs we require in order to provision some of these services. Please complete the intake form and we will let you know when you can begin onboarding.

#### 2. Onboard your email traffic

- a. Decide between Inline or API setup options
- b. Proceed with simple onboarding steps based on setup decision and email provider

#### 3. Onboard your DNS traffic

- a. Add a DNS location to Gateway
- b. Change your DNS resolvers to send test traffic to your environment
- c. Verify local connectivity
- d. Test a simple firewall policy
- e. Create CIPA policy
- f. Enable (and customize) your block page

Please refer to the Project Cybersafe Schools learning path (linked here) for comprehensive instructions.



### Learning Path - Project Cybersafe Schools

You can find a step-by-step onboarding guide specific to Project Cybersafe Schools on Cloudflare Docs, which should contain all the information you need to onboard.

		Learning path Project Cybersafe Schools Prevent children from accessing obscene or harmful content over the Internet. Go to Project Cybersafe Schools to apply.			
<b>Concepts</b> Learn the technical concepts behind Project Cybersafe Schools. Start module	Account creation Get started by creating a Clou Start module	udflare account and initializing the Zero Trust and	Onboarding your DNS Traffic Now that your Cloudflare environment is ready and you have you are ready to test and onboard your DNS traffic. Start module	e established a foun	Onboarding your email traffic Continue securing your environment by protecting against email phishing attac Start module
▼Contains 4 units	▼ Contains 3 units		▼ Contains 7 units		▼ Contains 4 units



#### **Support Resources**



#### **Self-serve documentation**

<u>Click here to access to Project Cybersafe</u> <u>Schools Learning Path</u>, your best resource for onboarding assistance. You can also access the comprehensive guides below for more information:

- Area 1 Cloud Email Security
- <u>Cloudflare Gateway</u>



#### **Technical questions & troubleshooting**

For general troubleshooting assistance and general technical questions not answered in the above documentation, <u>submit a ticket via the</u> <u>24/7 Support Portal in the Cloudflare</u> <u>dashboard</u>. A Technical Support Engineer will respond to your inquiry.



#### **Support Tips & Best Practices**

Cloudflare Support only assists individuals whose email addresses are validated against the list of registered account users.

Please review and update all contacts accordingly in your Cloudflare Dashboard.

**Security Verification Options:** 

- Generate a single use token
- Authenticator app + QR code



#### **Office Hours**

This initial group of school districts will be invited to attend an **Office Hours session in September**, for live assistance with any remaining onboarding steps.

Note: This will not be held regularly, so please plan to attend if you need live guidance.



## Thank you

### Comprehensive Protection Against Cyber Attacks.

Cyber Emergency Hotline: +1 (866)-325-4810

Scott Reilly, California Client Executive

- → 916.390.4946
- sreilly@cloudflare.com





## Appendix



## Section

## Area 1 Cloud Email Security

Nick Perry Technical Support Engineer



## Gateway DNS Filtering



Section

Daniel Elder Customer Solutions Engineer

