

Protecting Main Street from Malware: A Cyber Briefing for Busy Leaders



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What are we going to talk about?



1 What types of attacks are there? (TTPs)



2 What types of attackers are there?



3 Who is being attacked?



4 What can we do to prevent?



5 What to do if (when) it happens to you?



6 Questions?



What types of attacks are there? (TTPs)

1



Phishing

Vectors include:

- Email
- Text messages
- Phone calls:

2



Ransomware

Type of malware that:

- Encrypts files
- Blocks access
- Usually requires payment

3



Social Engineering

A tactic used by threat actors:

- No technical skill needed
- TA builds rapport with target
- Gets target to do something they normally wouldn't do

4



Denial of Service

Type of attack that:

- Causes high traffic (packet floods)
- Eventually servers can't withstand the traffic
- Knocks resources offline

What types of attackers are there?

1



Script Kiddies

- Less experienced
- Hack not always for damage, but to see what's possible
- Bad at covering their tracks

2



Hacktivists

- Not financially motivated, want to make a statement
- Can be motivated by revenge or other ideology
- Just because they don't steal money, doesn't mean they're not dangerous

3



State-Sponsored Hackers

- Well resourced/very sophisticated
- Hack for strategic advantages
- Considered very dangerous
- Can exist in an environment undetected for some time due to advanced capabilities

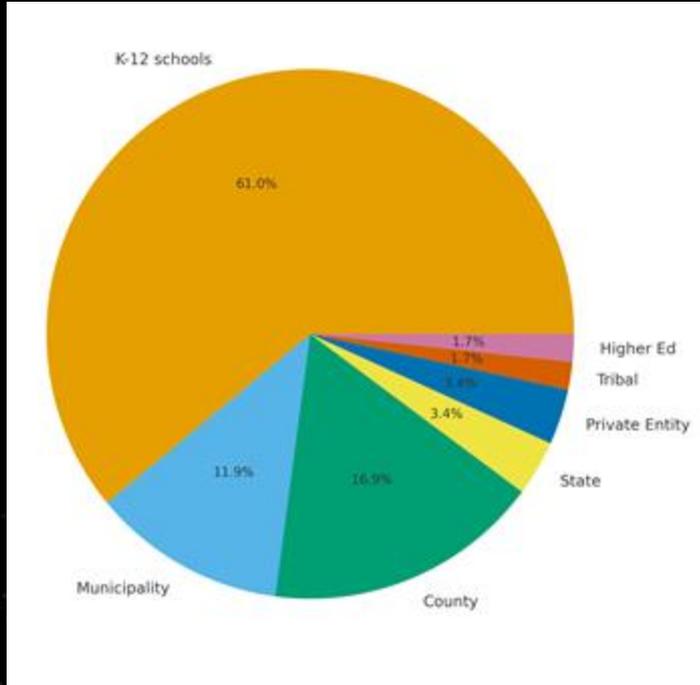
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Malicious Insider

- Individual with legitimate access
- Motivated by revenge, personal gain
- Bribery or coercion
- Especially dangerous because of their insider knowledge

Current Cyber Attacks in WI YTD



2025 Incidents

59

Volunteer Membership

Total Members: 293

Incident Responders: 156

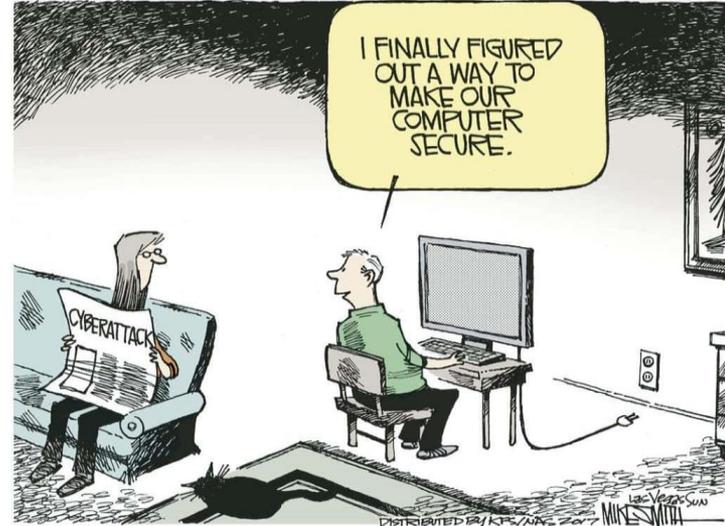
Slack #general: 594

External Partners

- Cybersecurity & Infrastructure Security Agency (CISA)
- Wisconsin Department of Justice
- Wisconsin Department of Administration
- Wisconsin Department of Public Instruction
- Wisconsin National Guard
- University of Wisconsin-Whitewater
- Madison College
- Wisconsin Cyber Threat Response Alliance

Who is primarily being attacked?

- K-12 schools and other higher learning institutions
- Local governments/municipalities
- Healthcare
- Communications

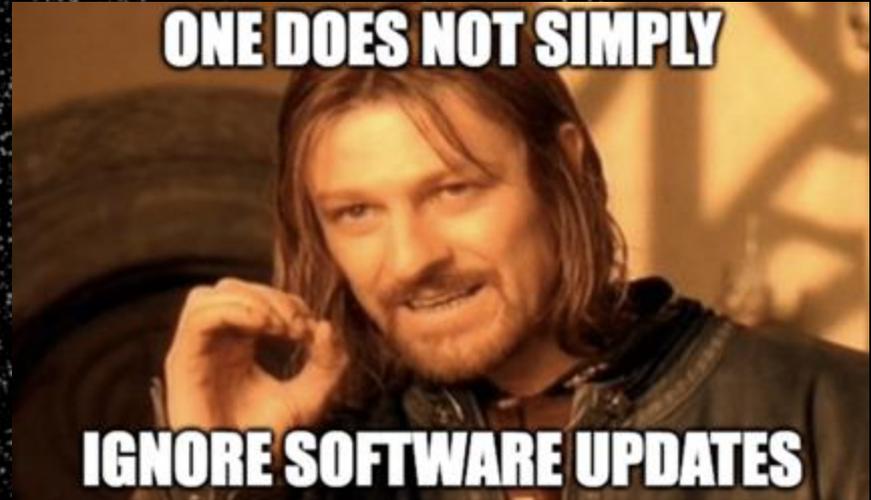


Why are these targets attractive to threat actors?

- Lack of funding for cybersecurity tools/management
 - Lack of staff to detect/defend
 - Financial gain
 - Valuable information
 - Pressure to pay quickly-can't afford downtime
 - Public visibility/requirement to disclose
-

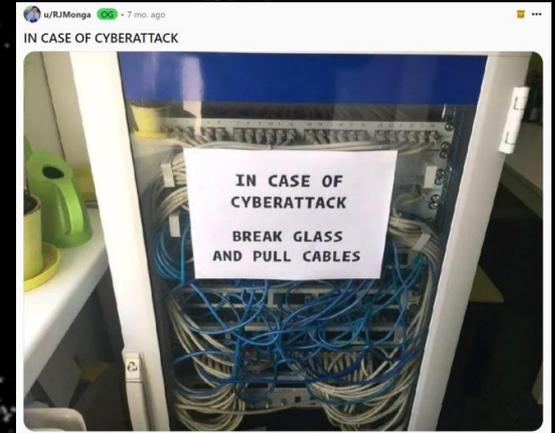
Things You Can Do Before

- Ensure systems are patched
- Conduct user awareness training
- Enable MFA
- Enforce a unique password policy
- Back up data "air gap" a copy
- Develop an incident response plan
- Have an inventory of all IT resources
- Consider a Zero Trust architecture
- Cloud resources, understand where they are residing/how they are accessed
- Email security software that evaluates for phishing/spoofing
- Enable non-technical controls to stop/slow down fraudulent change requests



What should you do during?

- Don't turn anything off/pull any plugs!
- Contact your IT Department
- Call your cyber insurance (if you have it!)
- Call the Cyber Response Team (1-800-943-0003, option 2)
- Contact IC3 to report the incident
- Try to write down what you observed and when (as close to exact timing as is possible)
- If the attackers leave a note or ask you to click on something, DON'T touch anything
- Wait for professional assistance before doing anything else on the affected machine



Resources

1 <https://www.schoolsafety.gov/>  Safety resources for K-12 schools

2 <https://www.ic3.gov/>  Internet Crime Complaint Center

3 https://www.cisa.gov/sites/default/files/2024-08/Federal_Government_Cybersecurity_Incident_and_Vulnerability_Response_Playbooks_508C.pdf

4 <https://wem.wi.gov/response-teams/#crt>  Wisconsin Cyber Response Team

5 <https://attack.mitre.org/>  Mitre Attack Framework-Definitions and mitigations for TTPs

6 https://www.knowbe4.com/hubfs/Municipalities_Cybersecurity_Report.pdf 