Presented By 🗱 NeoSystems & 511

Hiding in the Shadows

How Threats Exploit the Unprepared

Solution NeoSystems

CMMC: Why We Do It, Episode 7

JUNE 5, 2025

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CMMC: Why We Do It Episode #7: Hiding in the Shadows (How Threats Exploit the Unprepared)

Contractors comply with FAR, DFARS, and NIST because the Federal Government says they must.

But to be effective, cybersecurity must align with the actual threats. In this series, we will explain the linkage between threats and the cybersecurity measures that counter those threats.

These webinars should help you make better choices about cybersecurity and reduce the likelihood that you will become a victim.





Our Speakers



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Agenda



EPISODE 7: Hiding in the Shadows

- The Threat Map
- The Modern Day Espionage
- The Detection Window is Shrinking
- Bad Actors Playbook
- Case Studies
- Best Practices for Prevention
- AI and Looking Forward
- Tying it Back to NIST 800-171



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TRAFFIC BLOCK REASONS

- Known Cyber Threat
- Country of Origin
- O Unapproved Traffic Denied by Policy

BLOCKED ATTACKS THIS MONTH 17,936,686

TOP 5 ATTACKERS

The top countries attempting to breach our systems in the last month.

The Netherlands - 2,987,593 attempts	175
China - 2,938,917 attempts	17 :
Romania - 2,832,079 attempts	165
🕒 Canada - 1,211,801 attempts	75
HUnited Kingdom - 1,020,993 attempts	5

TOP 5 IPS ATTACKED

The top SNC internal IPs being targeted in t month.	the last
192.82.42.198 - 619,400 attempts	37
192.82.42.74 - 371,099 attempts	29
192.82.42.112 - 317,786 attempts	19
192.82.42.115 - 302,679 attempts	19
192.82.42.11 - 276,453 attempts	19

TOP 5 PORTS ATTACKED

The top ports being targeted in the last month.

80 - 839,980 attempts 23 - 781,135 attempts 53 - 484,083 attempts 8000 - 441,314 attempts 443 - 435,063 attempts 4% 4% 2% 2%

src lp: 196.251.113.65 dest ip: 192.82.42.23 dest port: 80 2025-05-19 00:24:44.153Z src port: 34090







HHHHHHH





ADVERSARIAL MINDSET

A sophisticated, multidisciplinary long-game approach to compromising a U.S. national security system or weapons platform by a sophisticated nation-state adversary will involve a combination of cyber, human, technical, political, and economic strategies, deployed over *years* or even *decades*. Such a comprehensive strategy will involve several stages, aiming to penetrate, influence, degrade, or ultimately neutralize the targeted system.

The strategy will be slow and methodical, relying on persistence and long-term exploitation of systemic vulnerabilities, all while avoiding overt detection or retaliation. The goal will be to erode U.S. military superiority, disrupt decision-making, and create vulnerabilities that can be exploited in times of crisis or conflict.



Hacking is China's *preferred* mode of espionage, of which there are hundreds of examples from the past 10 years. But *hacking is not the only form of spying*. China uses traditional methods of agent recruitment (usually sex or money) as well as unconventional approaches, such as buying property next to a military or research

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employees

facility and engaging direc

- 49% of incident directly involution
- 41% were private Chinese
- 10% were non-Chinese actors (usually U.S. persons recruited by Chinese officials)

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- 46% of incidents involved cyber espionage, usually by State-affiliated actors
- 29% of incidents sought to acquire military technology
- 54% of incidents sought to acquire commercial technologies
- 17% of incidents sought to acquire information on U.S. civilian agencies or politicians.

Detection Window is Shrinking

57

Minutes **Séconos Minutes**



84

Speed is survival.





- Real-time threat detection to identify and halt intrusions before they spread
- Identity and access controls to prevent adversaries from simply "logging in"
- A counterintelligence mindset assume breach, proactively hunt for anomalous behaviors to block adversary movement



The Bad Actor's Playbook

- 1. Start with the Obvious: *Public info is Gold*
- 2. Find the Weakest Link: *Look for an open door*
- 3. Use People, Not Exploits: *Trick someone into letting you in (phishing, pretexting)*
- 4. Be Sneaky: *Stay quiet and avoid detection at all costs*
- 5. Create a Backdoor: Establish a way to get back in whenever you want
- 6. Live off the Land: Use what's already there
- 7. Go for the Crown: *Escalate privileges until you own the network*



The Adversary's Advantage: Why Attackers Succeed

- Lack of visibility not collecting activity logs
- Lack of detection not able to discern bad behavior
- Checklist approach security tools not used effectively
- Single layer security trusting anything already inside the perimeter





SNC & Solarwinds: Rapid Detection & Response = Damage prevented

Unauthorized Change: A "Quick" change to an externally facing firewall led to a short window of vulnerability and over 9M brute force attempts by RU and CN





MSS Aerospace Industry Targeting





- Wing anti-icing: Liebherr 🛑 APU: Honeywell a Engine: CFM Leep-1 Wings and movable surface: AVIC Xi'an Engine Thrust Reverser: French Aircelle Flight Recorder: GE 🚢 Flight Control System: Parker Aerospace 🚢 Empennage: COMAC Airframe: AVIC Weather Radar: Rockwell Collins Fuel System: Parker Aerospace Gate Signals: Crane AE 🚢 Electricity System: Honeywell 🚢 Landing Gear: Honeywell 📫 Radar cover: AVIC Changdu 😫 Tire: Michelin 🚢 Fire Detection: Kidde 🚢 Cockpit: Eaton 🚢 Simulate System: Rockwell Collins 🚄 Image: Aerotime
- Direct competitor to Boeing and Airbus
- Development of China's COMAC C919 involved a lot of espionage
- Two teams of intel officers; one recruiting, one hacking
- Remote installation of malware, or delivered by USB through an insider
- Successful supply chain breaches Honeywell, GE, Capstone Turbine, etc.

Best Practices for Prevention

- Real-time threat detection to identify and halt intrusions before they spread
- Identity and access controls to prevent adversaries from simply "logging in"
- A counterintelligence mindset assume breach, proactively hunt for anomalous behaviors to block adversary movement
- Know Your Normal: Maintain a real-time inventory of assets and logs
- Establish alert thresholds and escalation workflows
- Run tabletop exercises
- Tune your controls—don't just "set it and forget it"



AI and Looking Forward





Government Playbook

Requirements to address these risks:

- System and Information Integrity
- Audit and Accountability
- Incident Response

National Institute of

Standards and Technology U.S. Department of Commerce



System and Information Integrity

Fix flaws

Stop malware

Monitor alerts and take action

Detect attacks

Identify unauthorized use



Audit and Accountability

Log system activity

Know who did what when

Protect logs

Use logs for investigation and response



Incident Response

Prepare, detect, analyze, contain, recover

Track and report incidents

Test incident response



Takeaway Summary

Speed is Survival. Threat actors move fast. Vulnerabilities are identified almost immediately by the adversary. Keeping your systems patched and your defenses dynamic and agile are foundational to preventing a breach.



Visibility is key. Threat actors are quiet and experts at evading detection. Having top-notch visibility with cross team and tool integration with automated alerting is key.



Al and Automation. Threat actors are already using Al, getting smarter and faster. Don't let them stay ahead.



Episode #8: Working Hard or Hardly Working

(How threat can tell the difference between real security versus fake security)



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EPISODE 1	EPISODE 2	EPISODE 3	EPISODE 4	EPISODE 5	EPISODE 6	EPISODE 7	EPISODE 8
Shut the Front Door	Loose Lips Sink Ships	The K.I.S.S. Principle	All Together Now	Thinking Critically About	Rip the Band-Aid Off	Hiding in the Shadows	Working Hard or Hardly
How unauthorized access happens	The role of user behavior in cyber attacks	How complexity & connectivity increase the probability and impact of a cyber incident	Exploiting the supply chain	Security You've already been hacked, or at least should act like it	Old security only leaks when it rains	How threats exploit the unprepared	Working How threat can tell the difference between real security versus fake security



Questions?



Thank you. Feel free to contact us:

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