

REVIEWING AND DEFENDING
AGAINST THE LATEST
CYBERSECURITY ATTACKS

ABOUT SIKICH

 **1,000+**
TOTAL PERSONNEL

90+ 
PARTNERS

NATIONWIDE PRESENCE
WITH CLIENTS SERVED
IN 50 STATES 

35+ **SERVICING CLIENTS**
YEARS AS A FIRM

 **1** **POSITIVE AND COLLABORATIVE CULTURE**

AUDIT, ACCOUNTING, TAX & CONSULTING

Outsourced Accounting
Tax Compliance & Planning
International & Expatriate Tax
Audit & Assurance
Employee Benefit Plan & Retirement Plan Audits
Consulting Services

General Business Consulting
Insurance Services
Investment Banking*
Workforce Risk Management



TECHNOLOGY

ERP & CRM Software & Consulting
IT Services
Cloud & Hosting Services
Technology Consulting & Projects
Information Security & Compliance
Cybersecurity

ADVISORY

Regulatory, Quality & Compliance
Human Capital Management & Payroll Consulting
Retirement Services

Marketing & Communications
Supply Chain
Transaction Advisory Services
Wealth Management



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CYBERSECURITY

OUR SECURITY SERVICES

We help customers understand security and compliance risks, how to avoid them and what to do should a security incident occur.



FORENSIC INVESTIGATIONS



PENETRATION TESTING



VULNERABILITY SCANNING



IT AUDITS



COMPLIANCE AND RISK
ASSESSMENTS



REMEDIATION



SECURITY AWARENESS TRAINING

HOW 2022 IS GOING

PROTECTING AGAINST THE NEWEST CYBERSECURITY THREATS

INDUSTRIAL CONTROLS UNDER ATTACK

Co-Authored by:



TLP:WHITE

Product ID: AA22-103A

April 13, 2022

APT Cyber Tools Targeting ICS/SCADA Devices

- Industrial control system (ICS)
- Supervisory control and data acquisition (SCADA)
- Devices such as: programmable logic controllers and open platform communication servers
- Impacts mostly medium and large size businesses

MICROSOFT DYNAMICS GP VULNERABILITY

- Multiple vulnerabilities found this year
- Can lead to confidentiality and integrity issues

Microsoft Dynamics GP Spoofing Vulnerability

CVE-2022-23269

On this page ▾

CVSS 5.4

Security Vulnerability

Released: Feb 8, 2022 Last updated: Feb 25, 2022

Microsoft Dynamics GP Elevation Of Privilege Vulnerability

CVE-2022-23271

On this page ▾

CVSS 6.5

Security Vulnerability

Released: Feb 8, 2022

Microsoft Dynamics GP Elevation Of Privilege Vulnerability

CVE-2022-23272

On this page ▾

CVSS 8.1

Security Vulnerability

Released: Feb 8, 2022

Microsoft Dynamics GP Elevation Of Privilege Vulnerability

CVE-2022-23273

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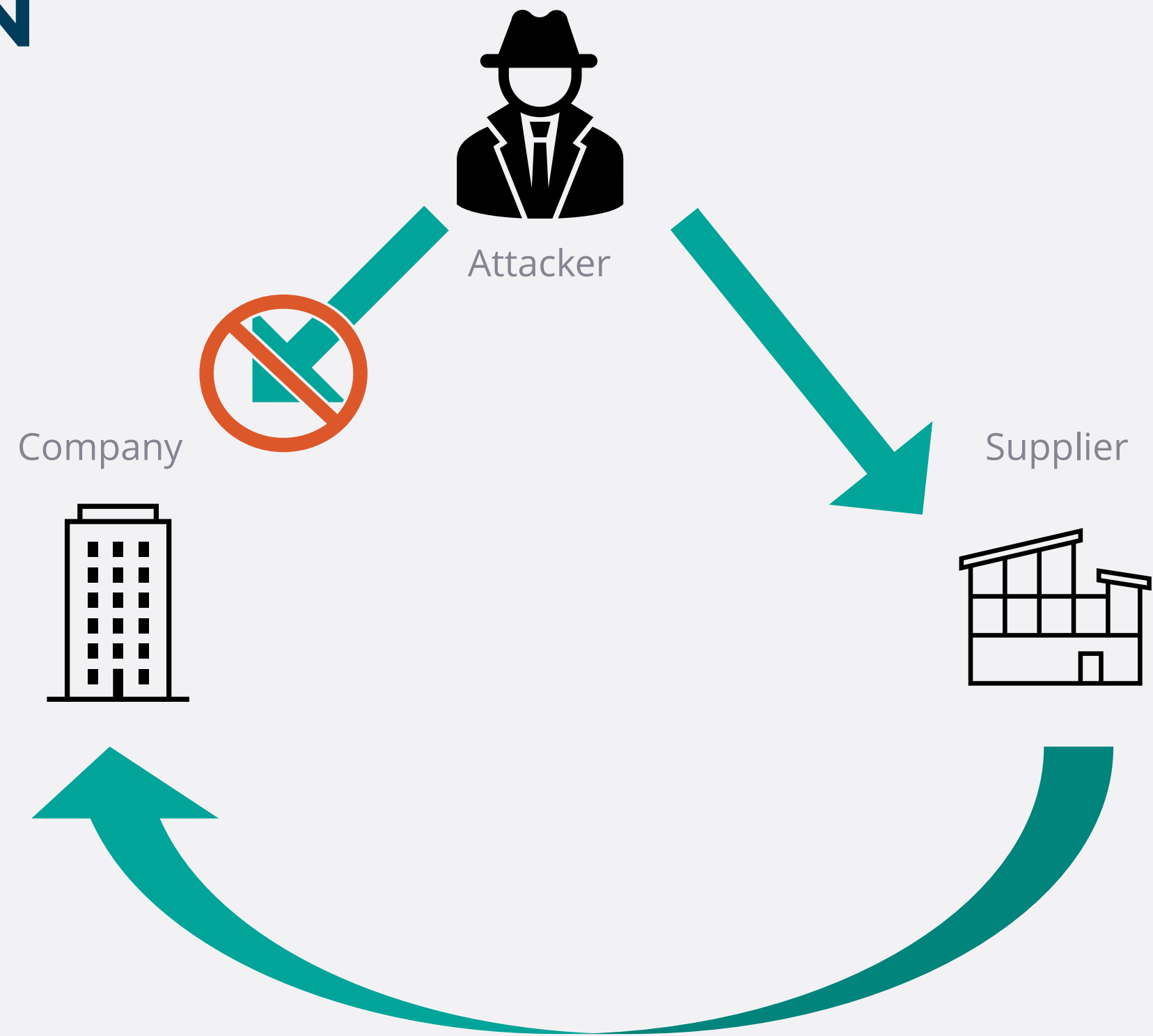
CVSS 7.1

Security Vulnerability

Released: Feb 8, 2022

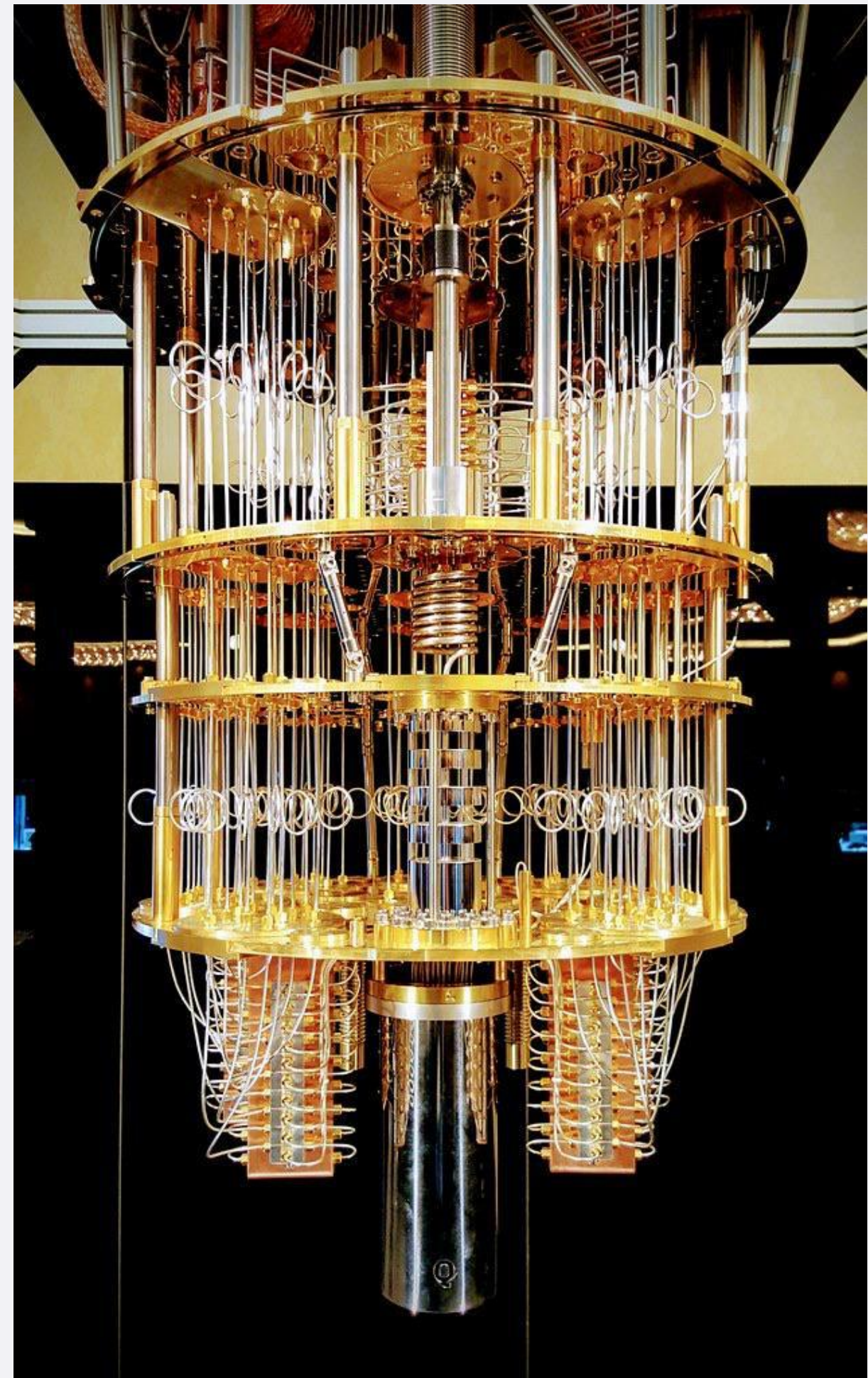
SOFTWARE SUPPLY CHAIN ATTACKS

- Goal: gain access to Company
- Attacker finds what software Company uses
- Attacker gains access to Supplier to compromise software
- Compromised software is distributed to Company
- Attacker now has access to Company



QUANTUM COMPUTING CYBER ATTACKS

- Can solve problems that are considered “impossible” today
- Threat against public-key encryption
- Researchers are working on “quantum-resistant” cryptography (standard by 2024)



ADVANCED TACTICS AND TECHNIQUES

PROTECTING AGAINST THE NEWEST CYBERSECURITY THREATS



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POLLING QUESTION:

HAVE YOU EVER USED SITES SUCH AS [HTTPS://HAVEIBEENPWNED.COM](https://haveibeenpwned.com)
TO CHECK FOR CREDENTIAL LEAKS?

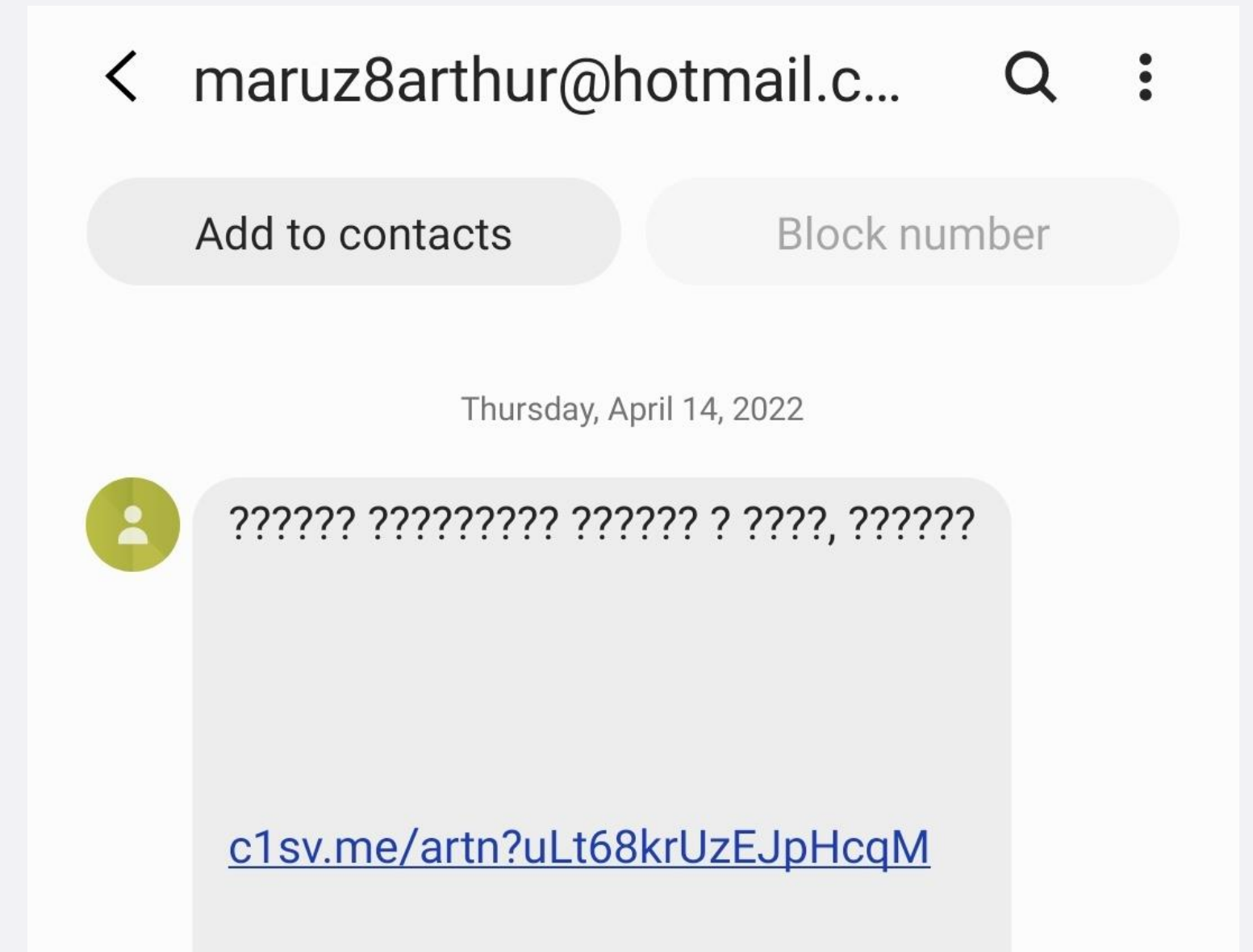
GAINING A FOOTHOLD WITH COMPROMISED CREDENTIALS

```
kbong@tompetty:/bobby_tables/dumps$
```

SMS PHISHING

THE NEW EMAIL PHISHING

- Information about an issue
- Needing you to complete a task
- Asking you to log into a site
- Task needs to be completed quickly
- Includes a link to visit



WIDE ARRAY OF THREATS AND ATTACK TECHNIQUES



Virus / Malware

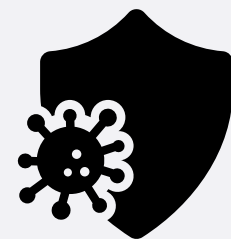


SMS Attacks



Account Takeover

Phishing Attacks



Password Guessing

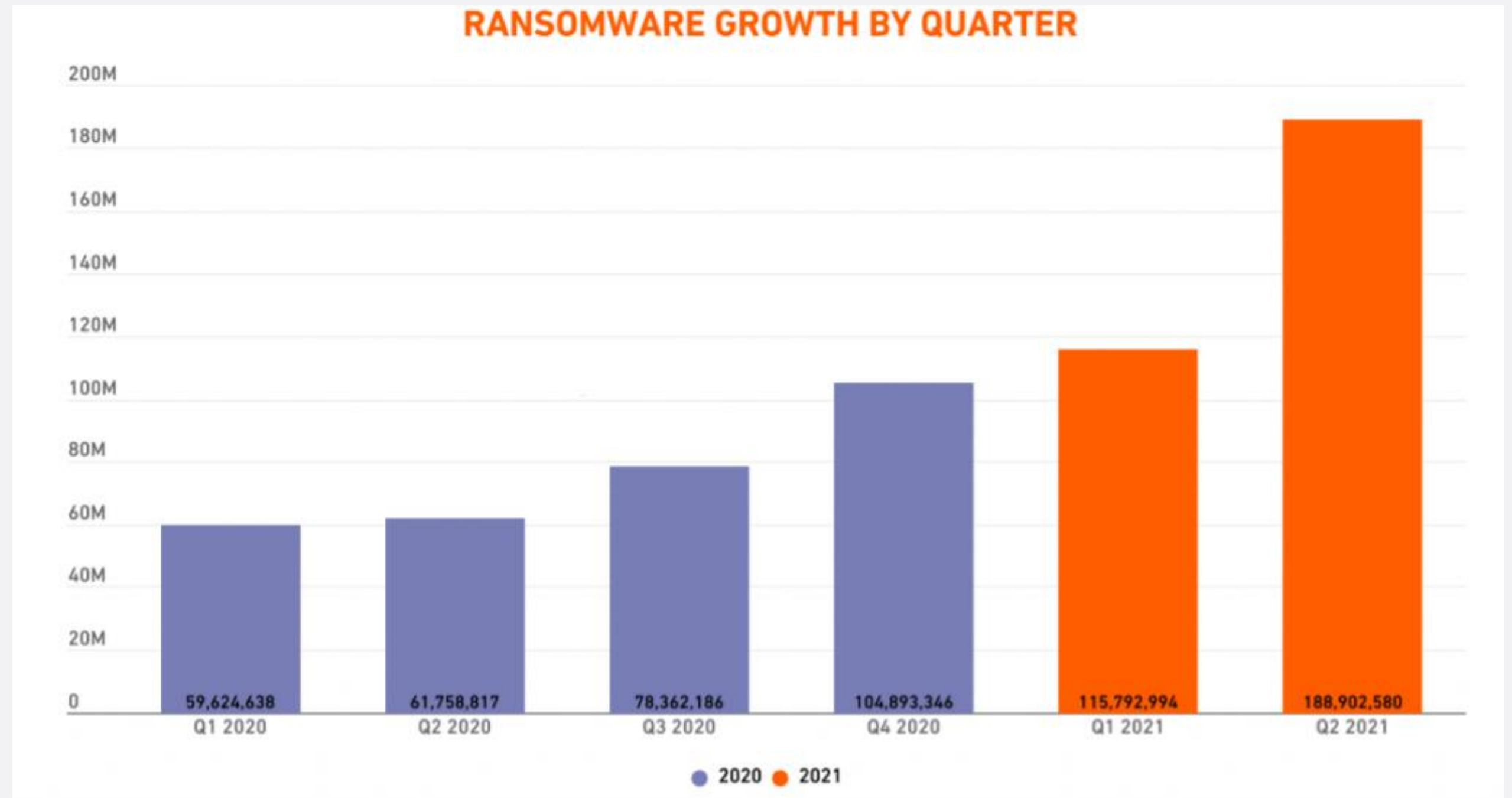


Browser-Based Attacks



RANSOMWARE POST EXPLOITATION

- Offline applications
- Deleted backups
- Ransom demands
- Infected systems
- Shaming sites



DOING THE BASICS WELL

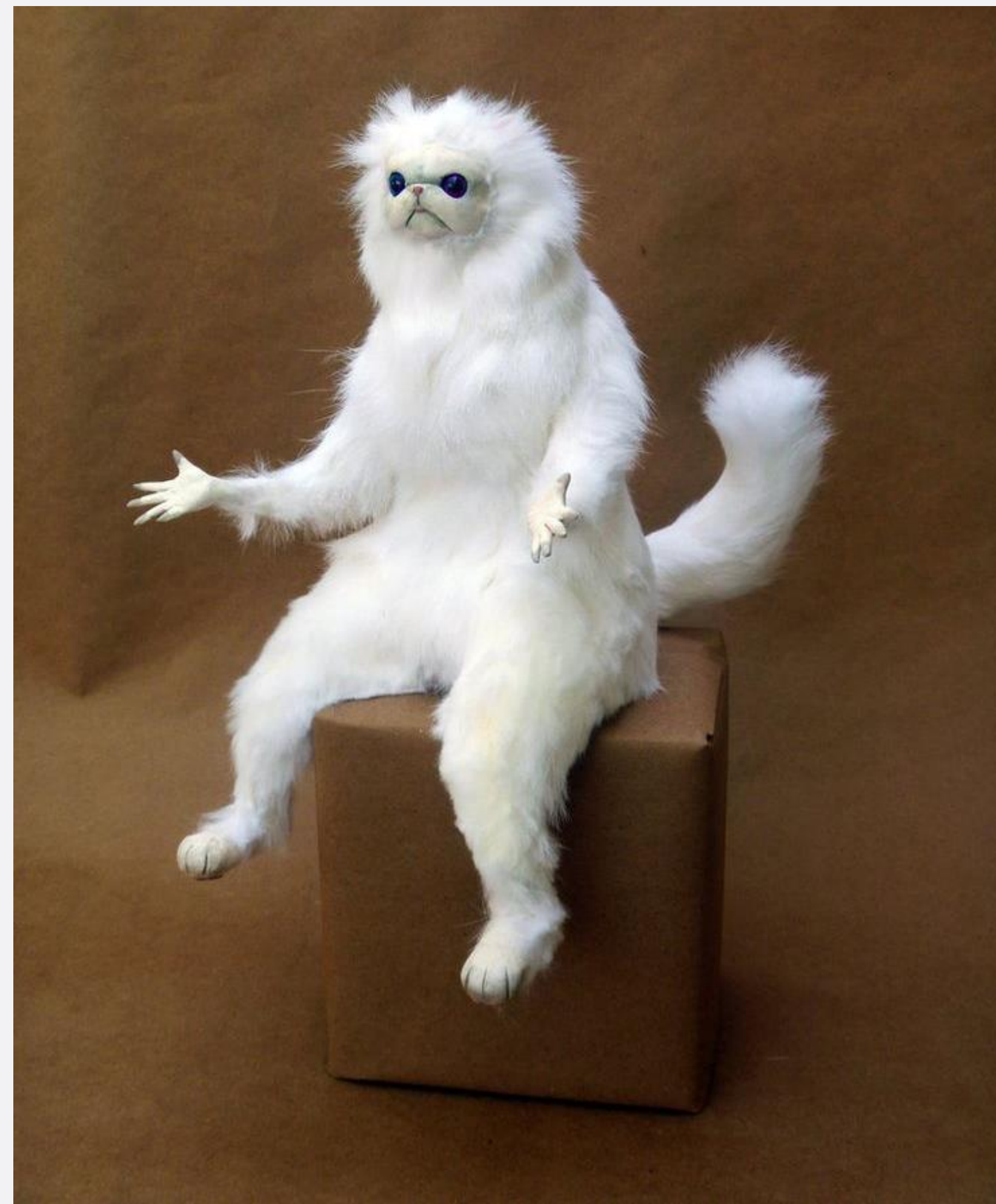
PROTECTING AGAINST THE NEWEST CYBERSECURITY THREATS

POLLING QUESTION:

HAVE YOU IMPLEMENTED MULTI-FACTOR AUTHENTICATION?

I WISH I'D KNOWN...

- That multi-factor authentication was so easy to implement
- That my backups weren't safe from hackers
- That we had so many anti-virus gaps
- How easily they could get admin access after infecting one computer
- That we didn't have hardly any logs



POLLING QUESTION:

HOW LONG DO YOU THINK IT WOULD TAKE TO CRACK THE PASSWORD
"\$ecure P@ssword!"

TOP CYBERSECURITY CONTROLS YOU ALREADY KNOW ABOUT

- Multi-factor authentication (MFA)
- Commercial anti-virus installed everywhere (workstations and servers)
- Patch management for operating systems, browsers, firewalls
- Passphrases of 15+ characters, and unique passwords per system
- System hardening
- Security awareness training & exercises
- Cyber liability insurance

"5p@rt3n5!"

- Hard to remember
- Easy for a computer to guess (48 hours)

"flying purple snail gallon"

- Easy to remember
- Hard for a computer to guess (1000s' of years)

EMERGING SECURITY SOLUTIONS AND STRATEGIES

PROTECTING AGAINST THE NEWEST CYBERSECURITY THREATS

NEW CYBERSECURITY CONTROL STRATEGIES YOU SHOULD KNOW ABOUT

- Protected backups
 - Immutable backups
 - Offline, in the cloud or behind MFA
- Endpoint detection and response (EDR) applications
 - Provide advanced firewalling, application whitelisting, host intrusion monitoring
- Filtered outbound (egress) traffic to block malware command-and-control
 - Web content filtering (with “uncategorized” set to block)
 - Default-deny for all other protocols

NEW CYBERSECURITY CONTROL STRATEGIES YOU SHOULD KNOW ABOUT

- Extending workstation management and filtering controls to at-home users
- Logs set to retain six months of history
- Managed security services provider (MSSP) or security information and event management (SIEM) solution
- Periodic testing of security controls
- Testing of systems hosted in the cloud

HOW CAN SIKICH HELP?

CYBERSECURITY AND IT SOLUTIONS SERVICES

POLLING QUESTION:

DOES YOUR ORGANIZATION HAVE A CYBERSECURITY PROGRAM?

HOW CAN SIKICH HELP?

- Compliance assessments
- Risk and network security assessments
- Penetration testing (ethical hacking) to test security posture
- Virtual CISO (vCISO) support
- IT solutions and managed services



THANK YOU

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