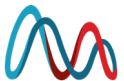


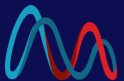
The Importance of Cyber Security

Presented by Jon Lyons



Contents

1. Types of attack
2. National Critical Infrastructure
3. Minimising the risk



Types of attack?

Types of attack

- AI powered attacks
 - Very personalized
 - Automated exploits
 - Quickly learns patterns
 - Enhanced password cracking
 - Deep fake
- Quantum computing
 - Do you encrypt data today?
 - Scrape and Store

Cyber-hacking victims 'paid out record \$1.1bn in ransoms last year'
Ransomware gangs targeted hospitals, schools and bodies such as BA and the BBC, Chainalysis finds

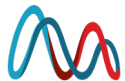


Cybersecurity Risks of Quantum Computing
Today's encryption, safeguarding sensitive data and communications, faces a 'Q-Day' threat from tomorrow's ultra-powerful quantum computers.
by Rusty Weston | Jan 18, 2023



Scammers trick company employee using video call filled with deepfakes of execs, steal \$25 million

The victim was the only real person on the video conference call
By Rob Thubron February 5, 2024 at 5:20 AM | 8 comments



Types of attack

- Human error
 - Most common type
 - Phishing
 - Malware
- Supply chain breaches
 - Only as secure as the weakest link
- IoT Attacks
 - DDoS
 - High volume of devices

The Register
Greater Manchester Police ransomware attack
another classic demo of supply chain challenges

Are you the weakest link?

20+ hospitals in Romania hit hard by ransomware attack on IT service provider

Graham Cluley @ 11:25 pm, February 12, 2024
@gcluley@mastodon.green
@gcluley

NHS IT supplier held to ransom by hackers

11 August 2022



British Library left counting the cost of cyber-attack

8 February 2024, 4:50pm

Casino Gets Hacked Through Its Internet-Connected Fish Tank Thermometer

Apr 16, 2018 Wang Wei



Millions of hacked toothbrushes could be used in cyber attack, researchers warn

Army of infected devices could cause millions of euros of damage

Anthony Cuthbertson • 4 days ago • 11 Comments



AI-boosted phishing sees 222% surge, warns Acronis report

National Critical Infrastructure

EV Charging Infrastructure

- What is the risk?
 - Customer details
 - Payment (QR code scam)
 - Failed charging
 - Downtime
 - Massive power outages

NCSC Warns Of 'Living Off The Land' Attacks Against Critical Infrastructure

Tom Jowitt, February 8, 2024, 11:58 am

EV Charging Networks Prepare for Cyberattacks

Mandates for electric-vehicle sales have raised concerns over poorly defended charging stations—and the possibility for spillover hacks of wider power grids

By Catherine Stupp

July 14, 2023 5:30 am ET | WSJ PRO

Listen (2 min)

Share AA Resize

Do EV Chargers Present a Cybersecurity Risk?

August 24th 2023 | 5min | by @devinpartida

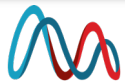
TLDR

EV Charger Hacking Poses a 'Catastrophic' Risk

Vulnerabilities in electric vehicle charging stations and a lack of broad standards threaten drivers—and the power grid.

EXCLUSIVE How scammers are targeting EV drivers: Video reveals how fraudsters are sticking fake QR codes on charge points for electric cars

- Fake QR codes are targeting electric vehicle owners trying to charge their car
- Have YOU been tricked by fake QR code? Contact matt.drake@mailonline.co.uk



PUBLIC | @2024 MOBIUS NETWORK

Minimising the risk

Are you secure?

- Do you test your security?
 - 3rd Party certifications
 - SSL Labs
 - Shodan.io
- Shodan.io
 - Powerful IoT / Device search engine
 - Easy to find devices and look for vulnerabilities
- The hackers never stop evolving
 - Security needs investment
 - And constant monitoring

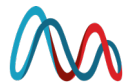
Shodan search results for 'ocpp' showing 281 results. The interface includes a world map, a list of top countries (Spain, France, United States, Germany, Finland, More...), top ports (8080, 8081, 8443, 443, 50000, More...), and top organizations (Vodafone Spain, Bouygues Telecom, DNA Oyj, Amazon Technologies Inc., Amazon.com, Inc., More...). A detailed view of a specific device is shown, including its IP address (167.71.202.97), location (Singapore), and various HTTP headers. A 'Not secure' warning is visible in the browser address bar.

Qualys SSL Labs report for 'bifrost.mobiusnetworks.co.uk'. The report shows an overall rating of A+ and various security metrics, including Certificate, Protocol Support, Key Exchange, and Cipher Strength. The report also includes a summary of the server's configuration and a link to the documentation page.

Qualys SSL Labs report for 'www.vtsimm.com'. The report shows an overall rating of F and various security metrics, including Certificate, Protocol Support, Key Exchange, and Cipher Strength. The report also includes a summary of the server's configuration and a link to the documentation page.

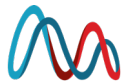
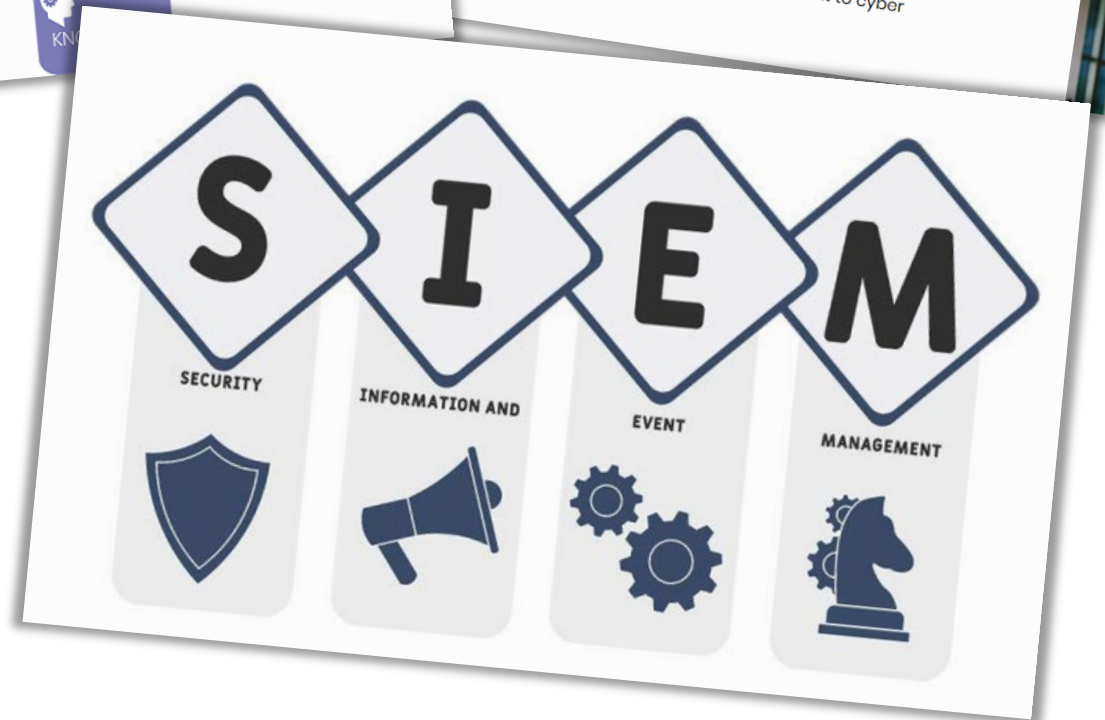
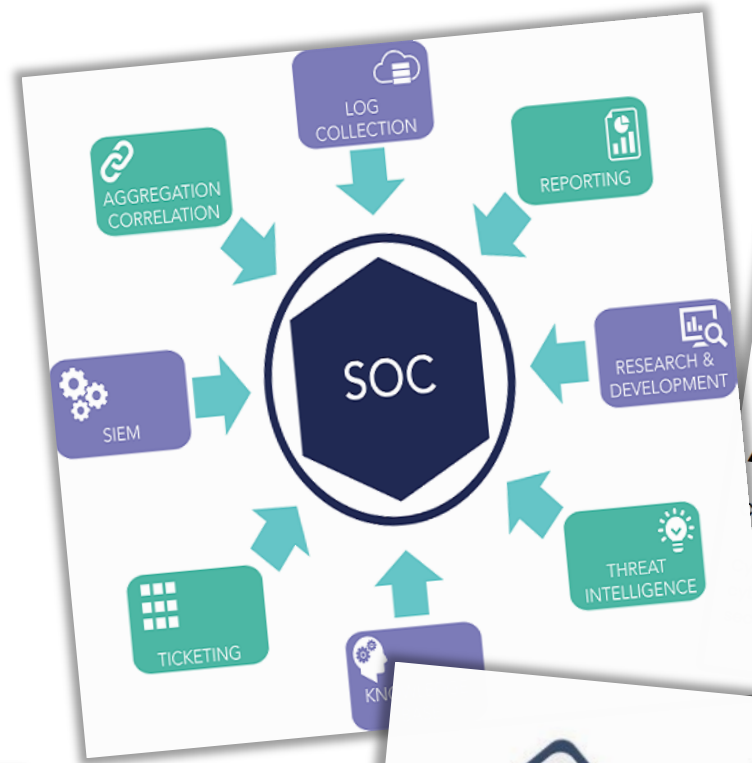
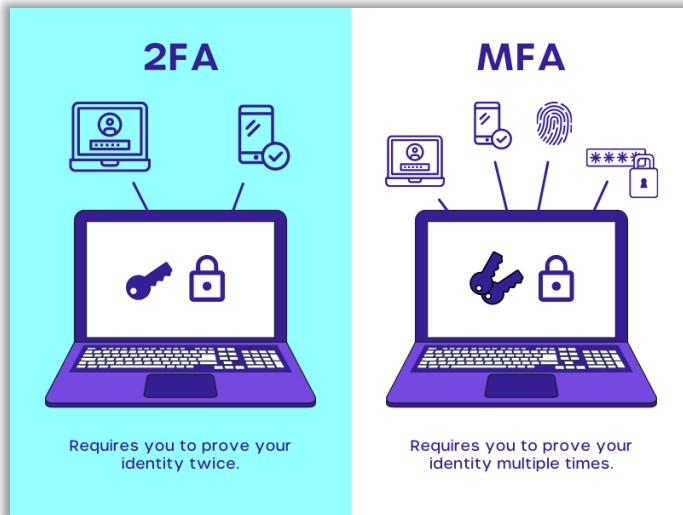
```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <link rel="icon" href="/ocpp/static/images/favicon.ico" type="image/x-icon" />
5   <link rel="shortcut icon" href="/ocpp/static/images/favicon.ico" type="image/x-icon" />
6   <link rel="stylesheet" type="text/css" href="/ocpp/static/css/style.css">
7   <title>Beep - Login</title>
8 </head>
9 <body>
10  <div class="main">
11    <!--div class="top-banner"><div class="container"><a href="/ocpp/manager/home"><a href="/ocpp/manager/home"></a></div>
14  <div class="main-wrapper">
15    <section><span>Sign In</span></section>
16    <form method="POST" action="/ocpp/manager/signin">
17      <table class="userInput">
18        <tr><td>Name:</td><td><input type="text" name="username" id="username" required /></td></tr>
19        <tr><td>Password:</td><td><input type="password" id="password" required /></td></tr>
20        <tr><td></td><td id="add_space"><input type="submit" value="Sign In"></td></tr>
21      </table>
22      <input type="hidden" name="_csrf" value="090f3e36-6f91-4495-9990-1de6544651ce"/>
23    </form>
24  </div>
25 </div></div>
26 <!--
27 <div class="footer">
28   <a href="http://www.rwth-aachen.de"></a>
29   <a href="http://dbis.rwth-aachen.de"></a>
30 </div>-->
31 </body>
32 </html>
```

Google search results for 'beep-live default username and password'. The search results show about 4,690,000 results in 0.43 seconds. The top result is from 'Server Fault' with the title 'What's the default username and password for an Ubuntu ...'. The snippet mentions that in the latest 22.04 versions of Ubuntu, the username is the same as the computer name and the password is blank.



Procurement

- What to request as part of procurement
 - Cyber Essentials (Plus)
 - Patching and maintenance plan
 - Evidence of vulnerability scanning
 - Evidence of PEN tests
 - SOC/SIEM
 - Endpoint Detection and Response plan
 - 2FA/MFA



You can't be a little bit secure

jonl@mobiusnetworks.co.uk

07880187045

<https://www.linkedin.com/in/lyonsjon>

