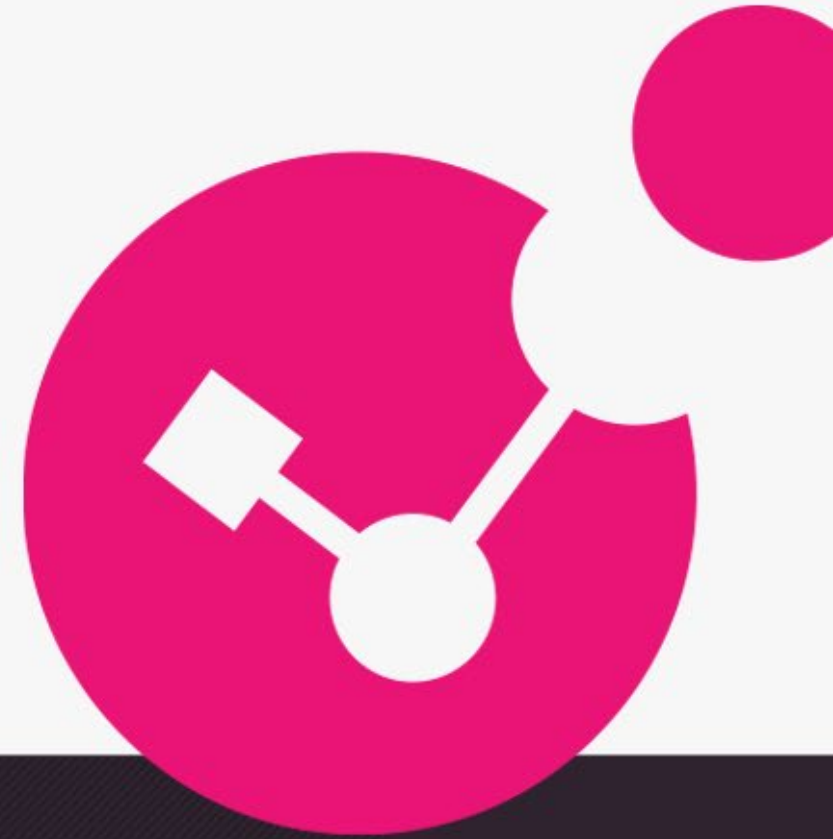




Threat Prevention in the Age of AI

5th InfoCom Security Cyprus 2023

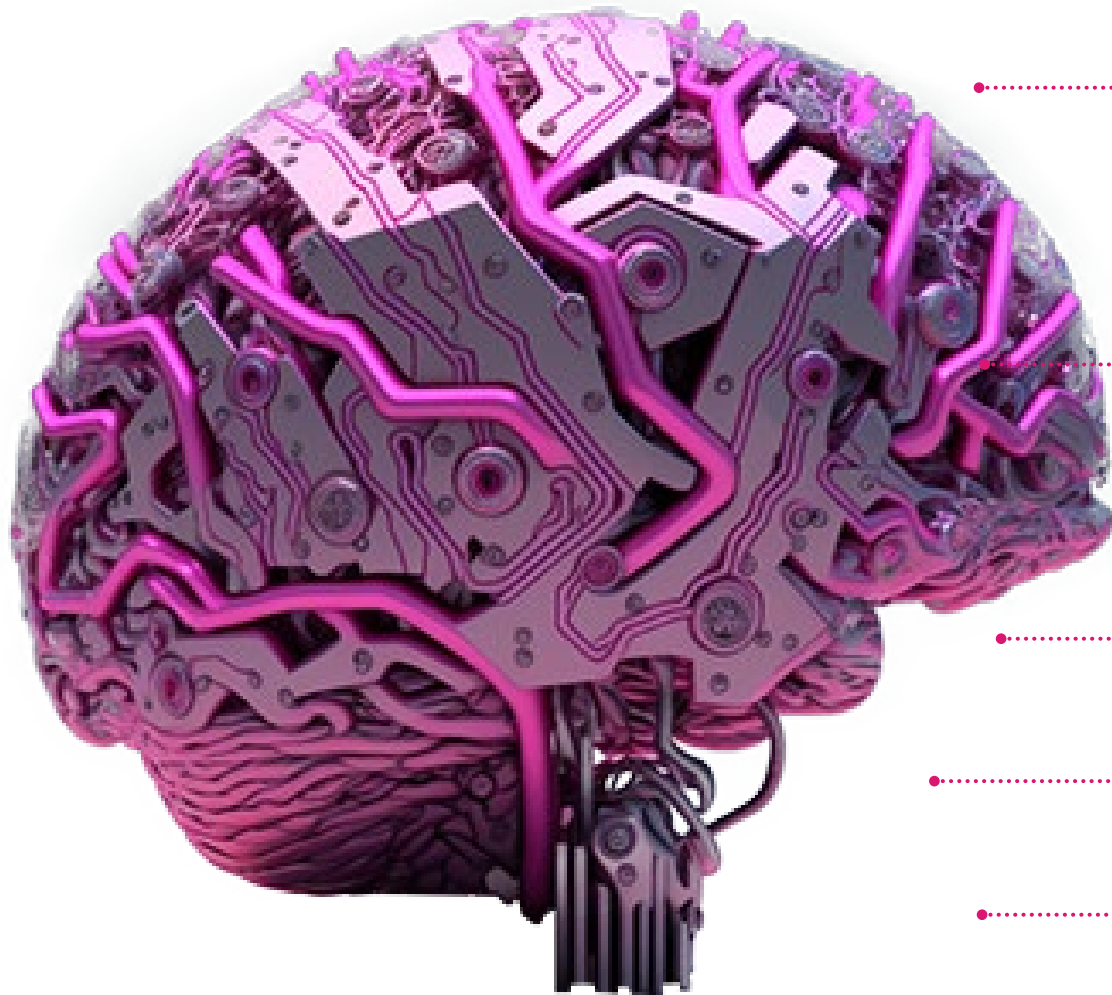
Fanis Tsomis | Security Engineer, Greece & Cyprus



YOU DESERVE THE BEST SECURITY

COLLABORATIVE SECURITY - THREATCLOUD AI

AI is all about your data



Big data threat intelligence:

2,000,000,000

Websites and files inspected

73,000,000

Full content emails

30,000,000

File emulations

20,000,000

Potential IoT devices

2,000,000

Malicious indicators

1,500,000

Newly installed mobile apps

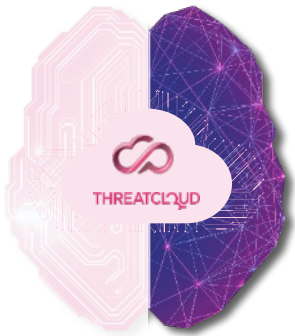
1,000,000

Online web forms

Counted
DAILY!

Big data threat intelligence

Analyzing big data telemetry and millions of IOCs every day



Check Point's
customers &
products



150,000 Connected networks

Millions of Endpoint devices

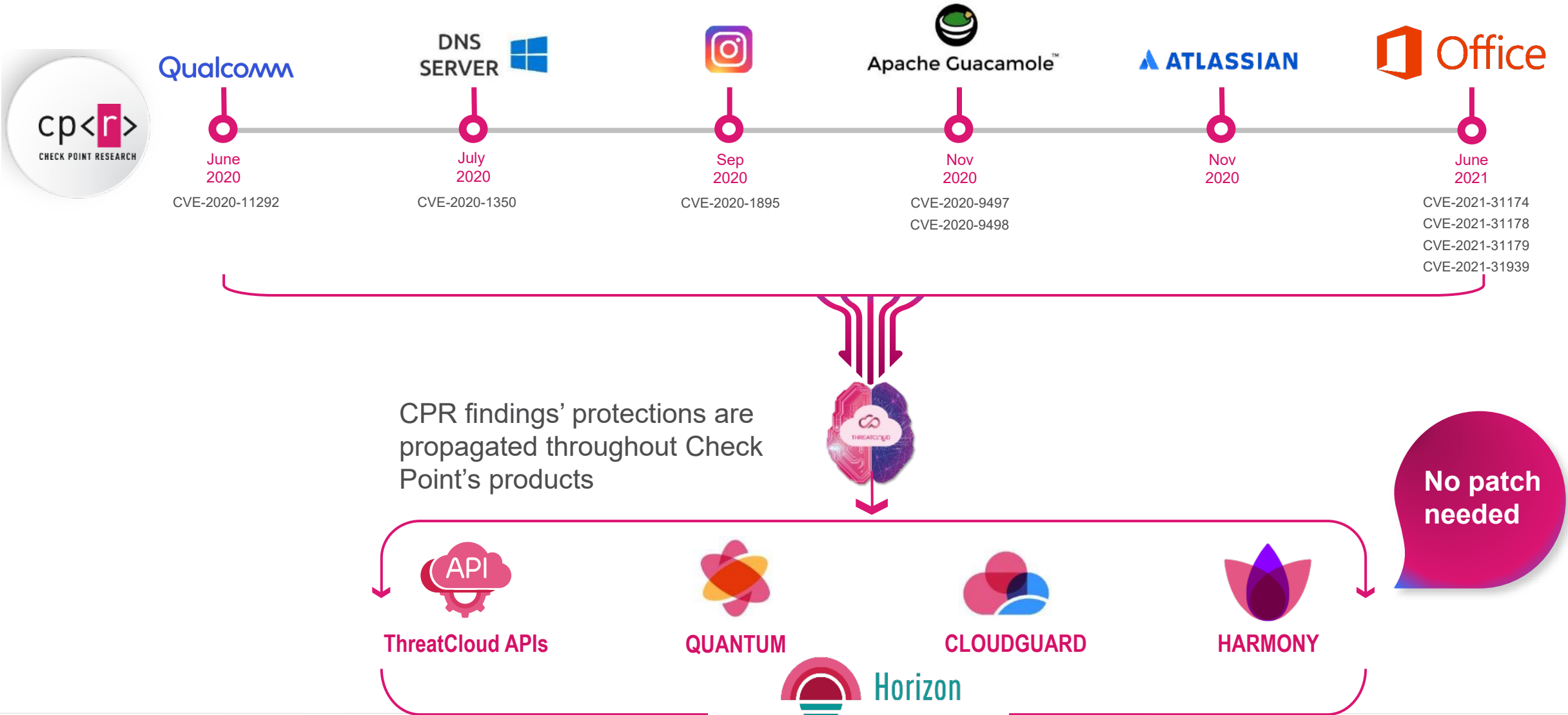
2,000,000,000 Websites and files inspected daily

Dozens of external feeds and crawling the
www and social media

Unique ML algorithms detecting **650,000**
suspicious domains daily

Patented

Instant protection from the most significant unknown software vulnerabilities



Best security with most innovative AI and Deep Learning technologies



Zero-Day Phishing New Software Blade

4 X

More attacks blocked compared to **Signature** based technologies

40%

Zero-phishing attacks **MISSED** by other **AI** based technologies

Advanced DNS Security New Software Blade

5 X

More attacks blocked compared to **Signature** based technologies

47%

Zero-DNS attacks **MISSED** by other **AI** based technologies

Blocking never-seen-before Phishing Attacks



AI-based analysis of 300 phishing indicators in email & web



- IP REPUTATION
 - ✓ URL REPUTATION
 - SUBJECT CONTEXT
 - URL EMULATION
 - ✓ HTML INSPECTION
 - NLP
 - DOMAIN REPUTATION
 - ✓ LOOKALIKE FAVICON
 - ✓ BRAND IMPERSONATION
- +300 indicators

#1 GATEWAY WEB INSPECTION

```
<!DOCTYPE html>
<html>
  <title>Wikitechy Login Form</title>
  <meta charset="UTF-8" type="text/css" href="login-style.css">
  </head>
  <body>
    <form class="form container">
      <div>WIKITECHY Login Form</div>
      <label><input type="text" name="uname" required>
      <input type="password" name="pw" required>
      <input type="submit" value="Login"/>
    </form>
  </body>
</html>
```

#3 BROWSER INSPECTION (BY INJECTED CODE)

#2 CHECK POINT'S INJECTION

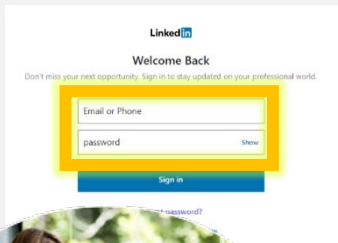
GET

RESPONSE

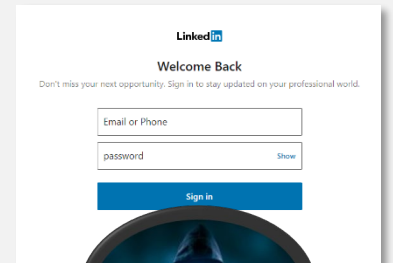
```
document.getElementById('uname').value = 'admin';
var obj=document.getElementById('pw');
obj.value = '12345678';
document.getElementById('login').click();
```

GET

RESPONSE

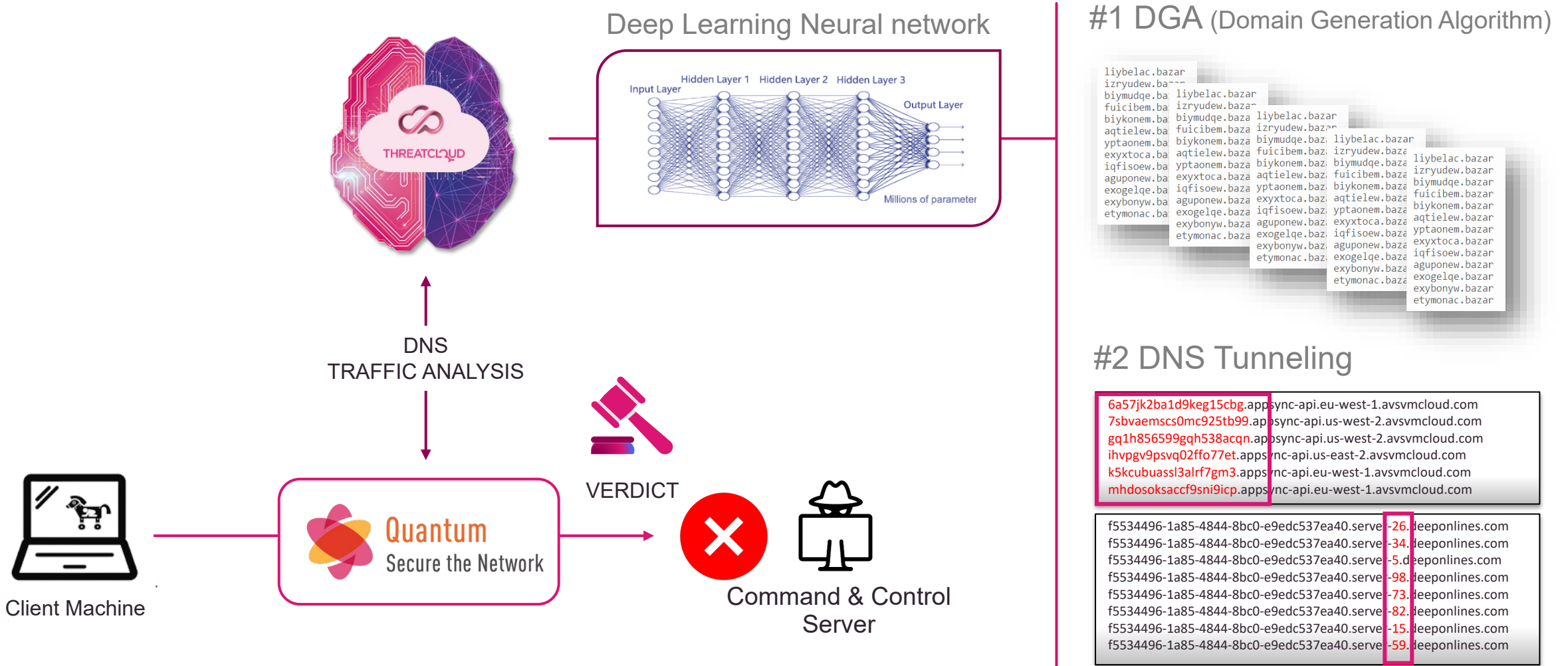


PHISHING SITE
LinkedInscam.com

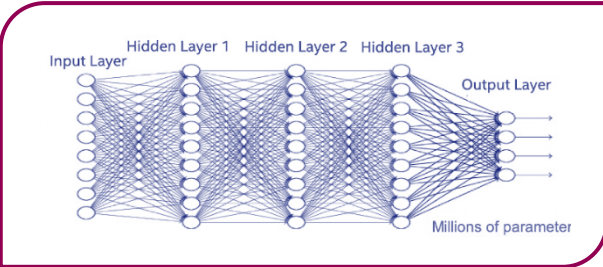


Prevents 5X more sophisticated DNS attacks

Block C&C communications and Data theft with Deep Learning engines



Deep Learning Neural network



#1 DGA (Domain Generation Algorithm)

```
liybelac.bazar  
izryudew.ba  
biymudqe.ba  
fui cibem.ba  
biykonem.ba  
aqtlelew.ba  
yptaonem.ba  
exyxtoca.ba  
iqfisoew.ba  
aguponew.ba  
exybonyw.ba  
etymonac.ba  
liybelac.bazar  
izryudew.baza  
biymudqe.baza  
fui cibem.baza  
biykonem.baza  
aqtlelew.baza  
yptaonem.baza  
exyxtoca.baza  
iqfisoew.baza  
aguponew.baza  
exybonyw.baza  
etymonac.baza  
liybelac.bazar  
izryudew.bazar  
biymudqe.bazar  
fui cibem.bazar  
biykonem.bazar  
aqtlelew.bazar  
yptaonem.bazar  
exyxtoca.bazar  
iqfisoew.bazar  
aguponew.bazar  
exybonyw.bazar  
etymonac.bazar  
liybelac.bazar  
izryudew.bazar  
biymudqe.bazar  
fui cibem.bazar  
biykonem.bazar  
aqtlelew.bazar  
yptaonem.bazar  
exyxtoca.bazar  
iqfisoew.bazar  
aguponew.bazar  
exybonyw.bazar  
etymonac.bazar
```

#2 DNS Tunneling

```
6a57jk2ba1d9keg15cbg.appsync-api.eu-west-1.avsvmcloud.com  
7sbvaemscs0mc925tb99.appsync-api.us-west-2.avsvmcloud.com  
gq1h856599gqh538acqn.appsync-api.us-west-2.avsvmcloud.com  
ihvpgv9psvq02ffo77et.appsync-api.us-east-2.avsvmcloud.com  
k5kcubuaass3alrf7gm3.appsync-api.eu-west-1.avsvmcloud.com  
mhdosoksaccf9sni9icp.appsync-api.eu-west-1.avsvmcloud.com
```

```
f5534496-1a85-4844-8bc0-e9edc537ea40.server-26.leeponlines.com  
f5534496-1a85-4844-8bc0-e9edc537ea40.server-34.leeponlines.com  
f5534496-1a85-4844-8bc0-e9edc537ea40.server-5.leeponlines.com  
f5534496-1a85-4844-8bc0-e9edc537ea40.server-98.leeponlines.com  
f5534496-1a85-4844-8bc0-e9edc537ea40.server-73.leeponlines.com  
f5534496-1a85-4844-8bc0-e9edc537ea40.server-82.leeponlines.com  
f5534496-1a85-4844-8bc0-e9edc537ea40.server-15.leeponlines.com  
f5534496-1a85-4844-8bc0-e9edc537ea40.server-59.leeponlines.com
```



COMPLETE SECURITY OPERATIONS AS A SERVICE WITH PREVENTION-FIRST APPROACH TO MDR

PREVENTION FOCUSED

Best practices to
improve defenses
and prevent
future attacks

SIMPLICITY

24*7x365
service
by our
elite experts

ELEVATE SECURITY

Advanced
threat prevention
powered by
AI-based analytics

ONE SOLUTION

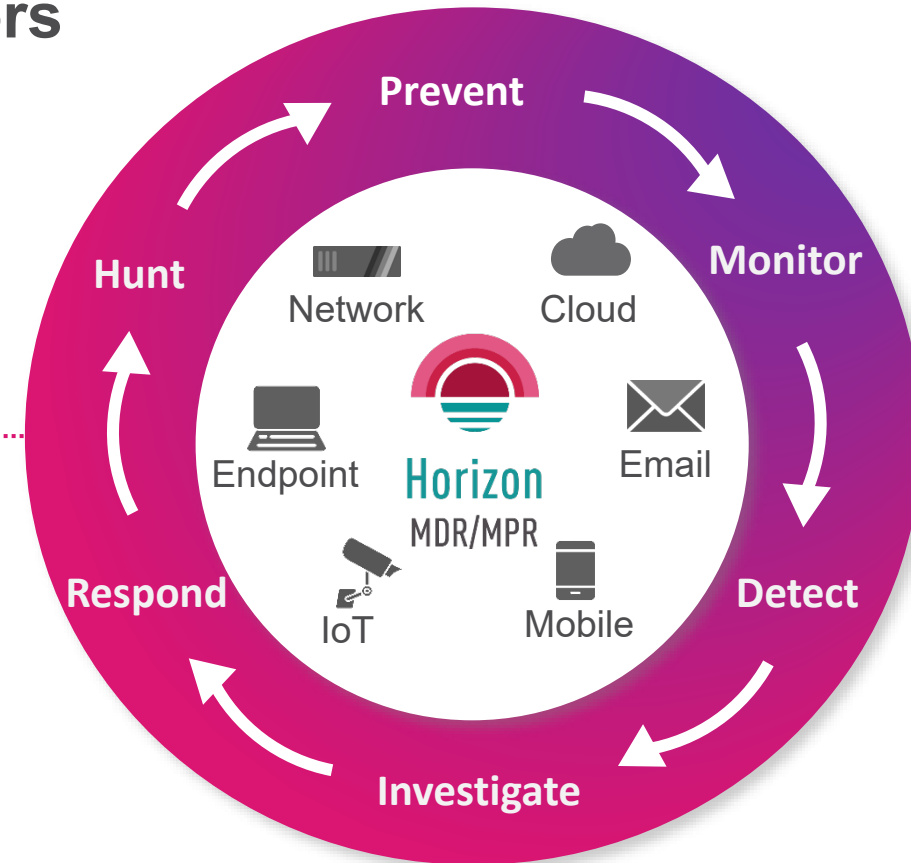
Prevent, monitor,
detect, investigate,
and remediate
attacks

End-to-end Security Operations Service

One solution across all attack vectors

- Prevent threats and attacks
- Full-cycle investigation
- Automated remediation

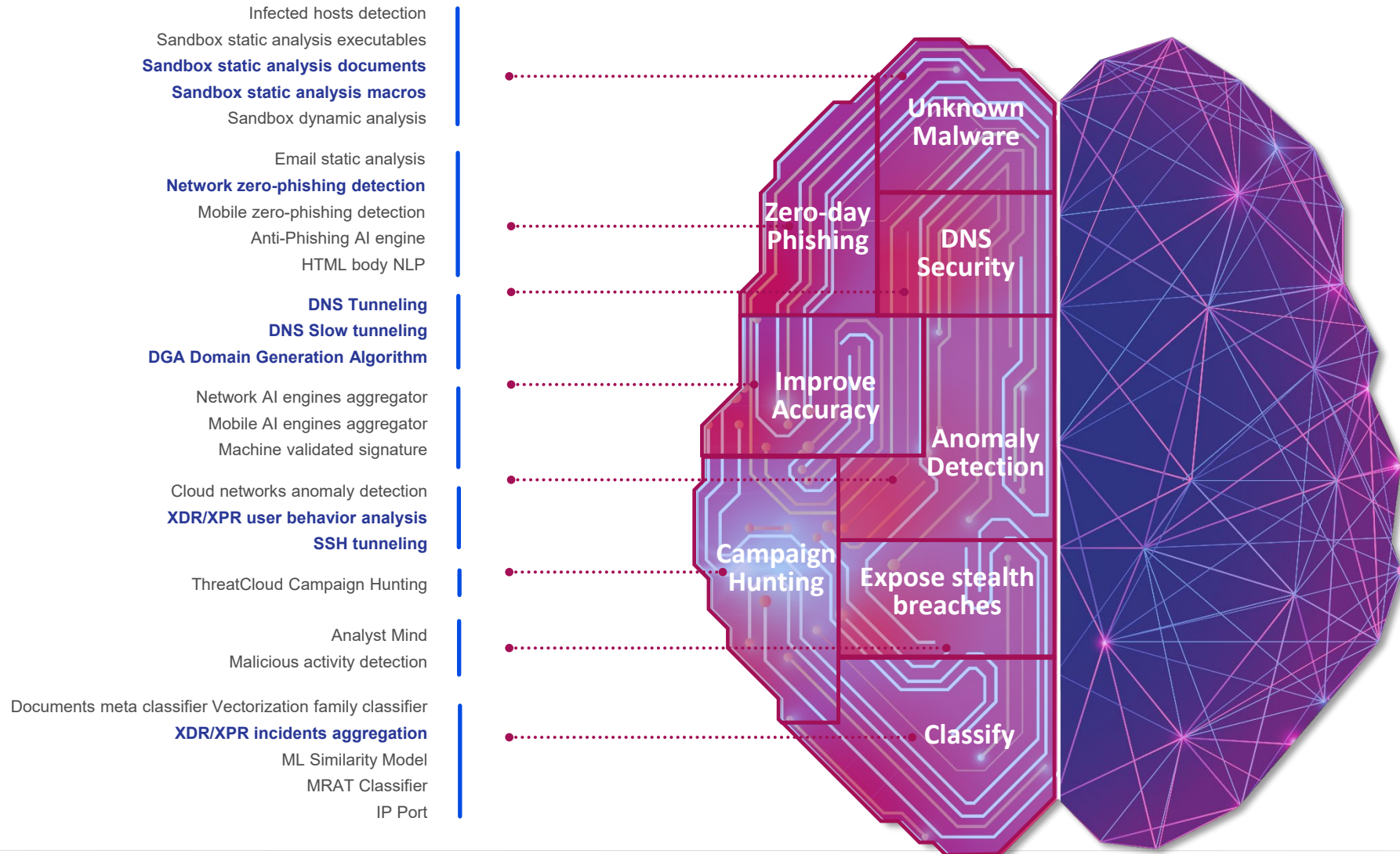
AI TECHNOLOGY
Identify and block threats



BIG DATA THREAT INTELLIGENCE
Most recent IoCs

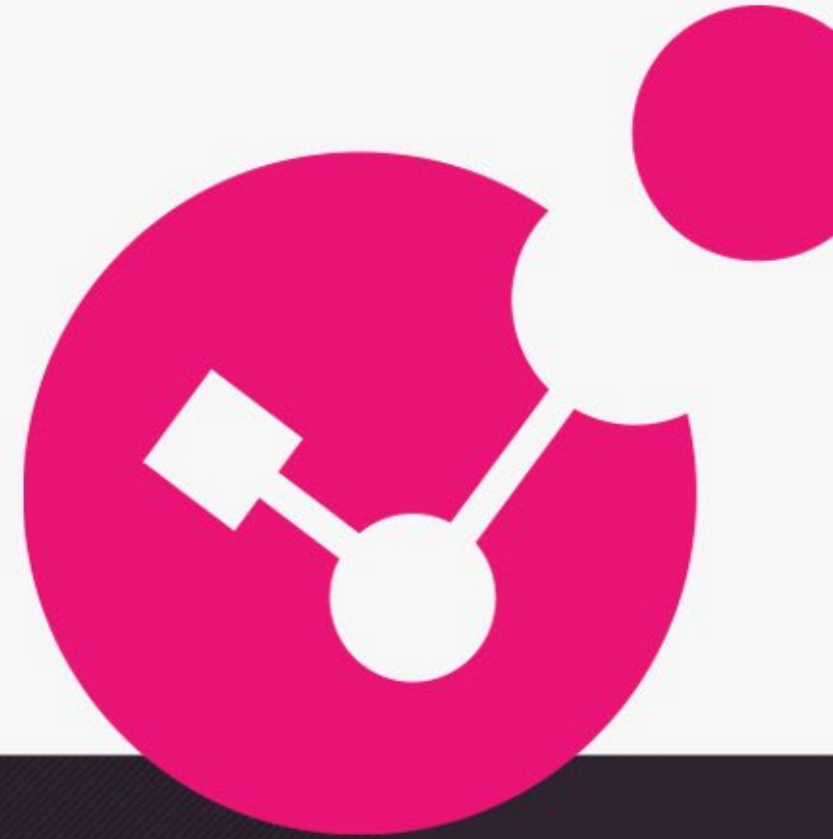
AI-BASED TECHNOLOGIES LEVERAGED BY THREATCLOUD

40+ engines across different security functionality





Thank you!



YOU DESERVE THE BEST SECURITY