

The Global Cyber Alliance

How technology can advance Cyber Security

ANDY BATES

EXEC DIRECTOR

EU , MIDDLE EAST , AFRICA

3RD NOVEMBER

MY JOB IS TO STOP CRIME ON THE INTERNET



GCA Founders



GLOBAL PARTNERS

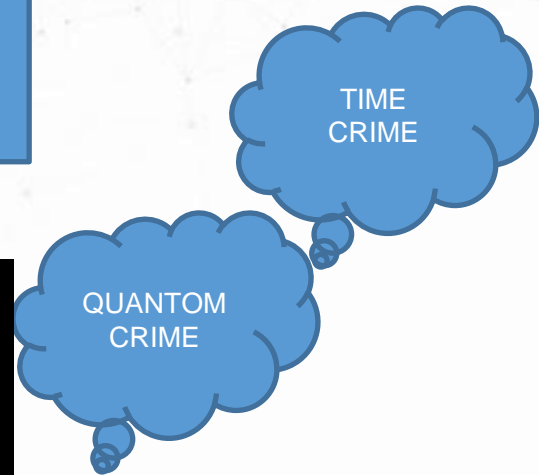


Belgium: 1
China: 1
Egypt: 1
Finland: 1
France: 6
Georgia: 1
Germany: 2
India: 1
Ireland: 1
Israel: 1
Jamaica: 1
Japan: 1

Netherlands: 3
Nigeria: 1
Norway: 1
Oman: 1
Russia: 1
Spain: 1
Switzerland: 2
Uganda: 1
United Kingdom: 49
United States: 106



REMEMBER: CYBER CRIME IS JUST CRIME







Addressing Systemic Cyber Risks

Systemic cyber risks affect more than one organization, are above the enterprise level, and are material

How was the internet formed?





43.7 per cent of all statistics
are made up on the spot.

Steven Wright

**PHISHING IS THE ROOT OF 80% OF CYBER
CRIME**

77% OF MAIL DOMAINS CAN BE SPOOFED

**3% OF PEOPLE OPEN MARKETING EMAILS
7% OF PEOPLE OPEN PHISHING MAILS**

SOLUTION:

D M A R C



A PROVEN WAY TO MITIGATE RISK

Domain-based Message Authentication, Reporting and Conformance (DMARC)
It's like an identity check for your organization's domain name.

The Power of DMARC: Aetna Case Study



Aetna followed leading banks and Internet Service Providers (ISPs) by implementing a trusted email program based on the DMARC standard in early 2015. This program was carefully planned and executed to include all third parties sending email on behalf of Aetna. Today, Aetna email subscribers do not receive SPAM or illegitimate email – including phishing attempts – from any email address associated with Aetna.

Each year, the program prevents approximately **60 million fraudulent email messages from being delivered**. The result is lower risk and better engagement: click-through rates on Aetna emails improve by 10 percent every year. DMARC adds a trust component to emails and is a core component to Aetna’s trusted email program.

The Power of DMARC: UK HMRC Case Study

In one year we've stopped **300 million phishing emails that were fraudulently using our email address.** If we can do it anyone can! GCA is doing a great job helping organisations with practical solutions to loading DMARC.

– Ed Tucker, Head of Her Majesty's Revenue and Customs Cyber Security



Efficacy to Date

- Tool launched October 2016
- More than 9,400 users of the Setup Guide
- From more than 150 countries
- More than 3,100 cities
- Almost 10,000 unique domains tested
- More than 19% conversion rate (1,900+ domains)

NOT VALID

**B.I.M.I.
BRAND INDICATORS FOR MESSAGE
IDENTIFICATION**

<https://authindicators.github.io/rfc-brand-indicators-for-message-identification/>

VALID

Internet Immune System

Protecting Users and Networks via DNS



GLOBAL
CYBER
ALLIANCE

PCH
Packet Clearing House

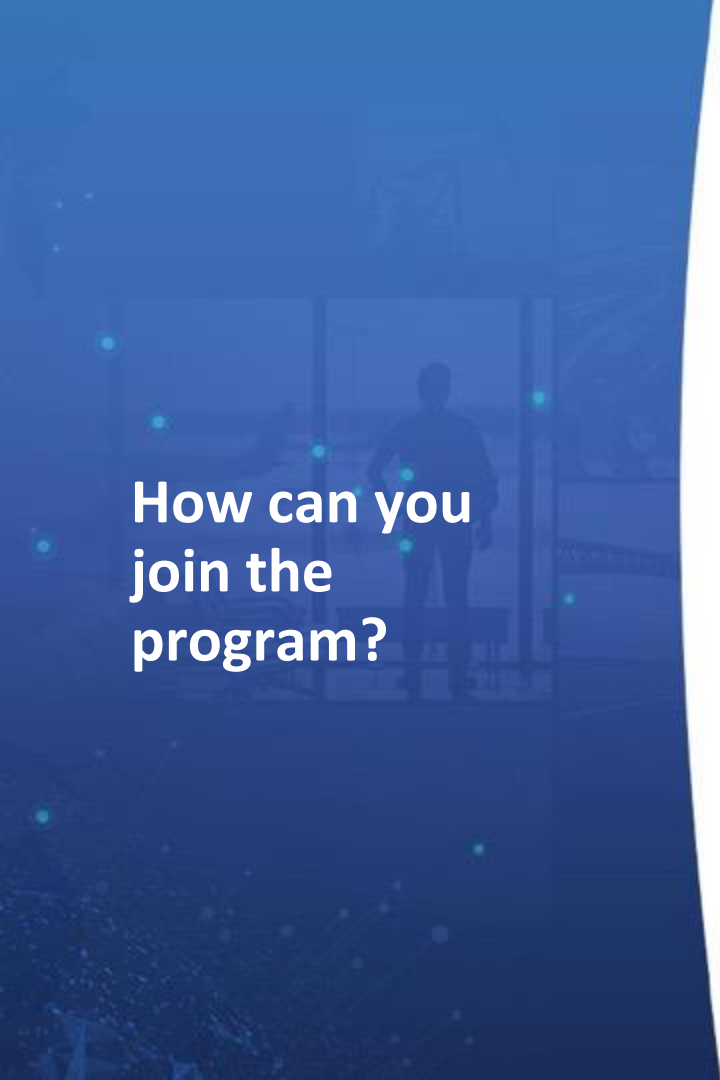
How Our DNS Project is Different

- Focus on “operationalizing” Threat Intel that is “at rest” in a DNS filtering sense from security vendors
- A strong focus on preserving privacy for users
- **We do not provide individualized reports/reporting**
- We focus on malware c2 domains, exploit kit domains, phishing domains, etc.
- Platform is populated by crowdsourcing threat intel from many providers (commercial and non-commercial)
- Creates a compound view of the threat landscape!



Efficacy to Date

- Average of 60-120M queries a day
- Peak of 1M blocks a day
- Average up to 30K a day
- 1M domains in list (varies)
- 18 threat intelligence feeds
- Deployed on 5 continents
- One adopter saw 50% decrease in AV alerts, and 30% decrease in IDS alerts
- 35 resolvers



How can you
join the
program?

WE LAUNCH ON 16TH
NOVEMBER 2017
TUNE IN !!

gca-dns@globalcyberalliance.org
[@andycyberbates](https://twitter.com/andycyberbates)



EVERYONE HAS AN INTERNET
CONNECTION

INCLUDING THE BAD GUYS

SO THAT'S ALWAYS A GOOD
PLACE TO START THE CLEANUP

150,000,000?

45,000 LISTED

INTERNET
PROVDIERS
1000 ?

GLOBAL ISP
* 100 ?

WHERE NEXT ?

IOT, IOT & IOT

GDPR

COMMON CYBER RANGE

INTEL SHARING

BETTER REPORTING





CYBER
DEFENCE
ALLIANCE



GLOBAL
CYBER
ALLIANCE

THE BAD GUYS SHARE INTEL BUT THE GOOD GUYS FIND THIS DIFFICULT,
SO WHO IS SMARTER ?

THE BAD GUYS ARE AN INTERNATIONAL STATELESS FORCE

SO AM I ? ARE YOU ?



WHAT NEXT



- WE BUILD THINGS TO MAKE THE INTERNET SAFER
- WE GIVE THEM AWAY
- BRING US YOUR IDEAS
- YOU ARE NOT ALONE
- WE WILL WORK WITH YOU TO BUILD COMMON SOLUTIONS TO GLOBAL PROBLEMS

FINALLY....



MACHINES BUILD CARS BUT PEOPLE WRITE CODE??????

PEOPLE ARE FALLIBLE SO HACKERS GET THROUGH VULNERABILITIES

CODE IS EXPENSIVE SO WE COPY IT MILLIONS OF TIMES

SO WHY DON'T MACHINES WRITE CODE??

H.P.R.A.D.

**10,000,000,000 reduction in attack
surface**



DON'T SWITCH THIS OFF WHEN
YOU SWITCH TECHNOLOGY ON

BUT
DO AUGMENT IT WITH AI AND
MACHINE LEARNING

Thank You!

www.GlobalCyberAlliance.org

abates@GlobalCyberAlliance.org

[@GlobalCyberAlln](#)

[@andycyberbates](#)