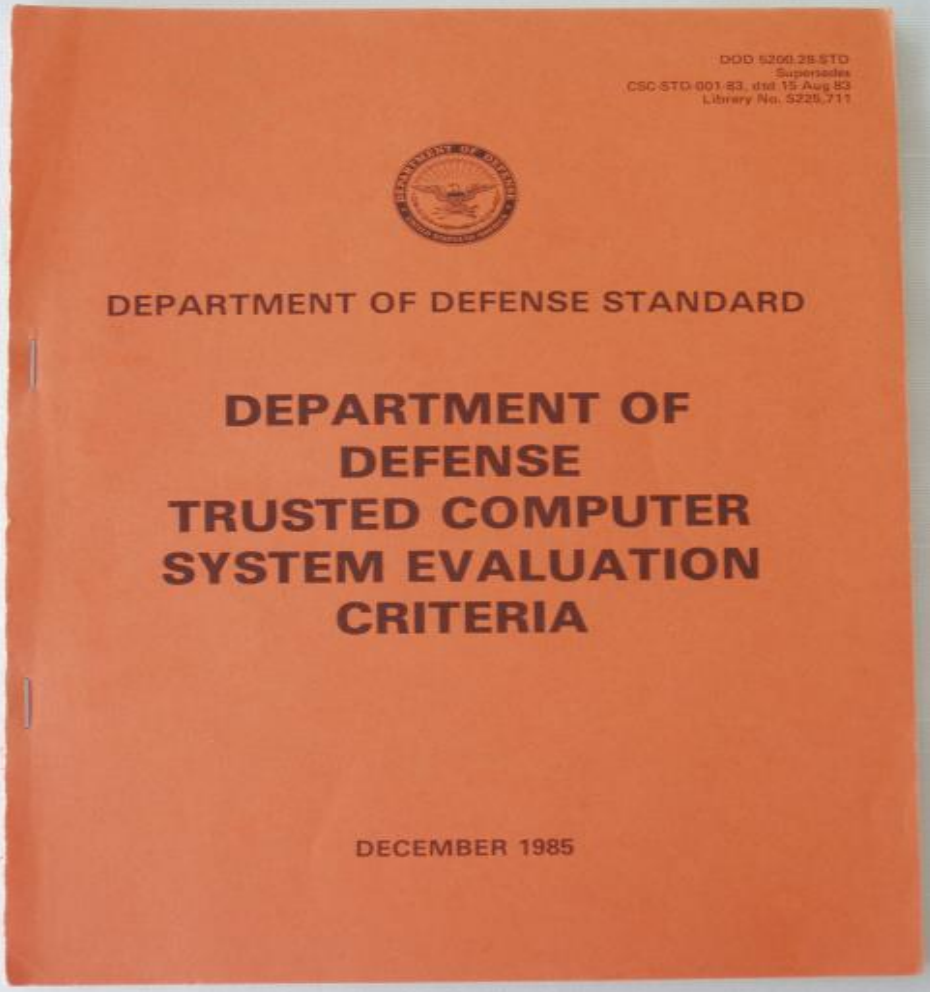
Chris Wysopal BruCON ‘17

How did we get here?

We made trouble.


DOD 5200.28-STD
Supersedes
CSC-STD-001-83, dtd 15 Aug 83
Library No. S225,711
DEPARTMENT OF DEFENSE STANDARD
DEPARTMENT OF DEFENSE TRUSTED COMPUTER SYSTEM EVALUATION CRITERIA
DECEMBER 1985

CERT

The Seminal Event

“Improving the Security of Your Site by Breaking Into It”

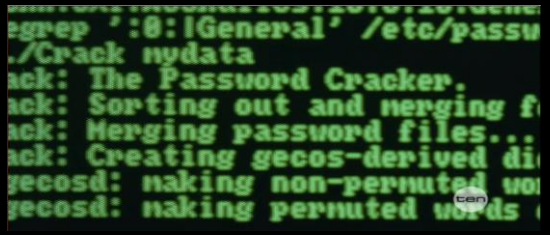
By Dan Farmer and Weitse Venema, 1993

Hackers Made Information Security a Participatory Sport

The First Hacker Tools

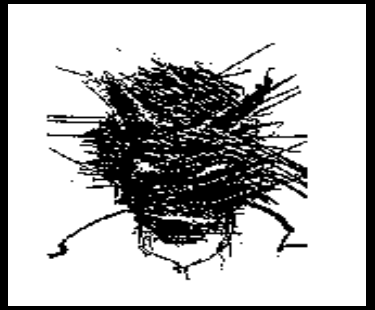
Crack – Alec Muffett - 1991

Targets guessable passwords



SATAN – Dan Farmer & Weitse Venema - 1995

Targets misconfiguration



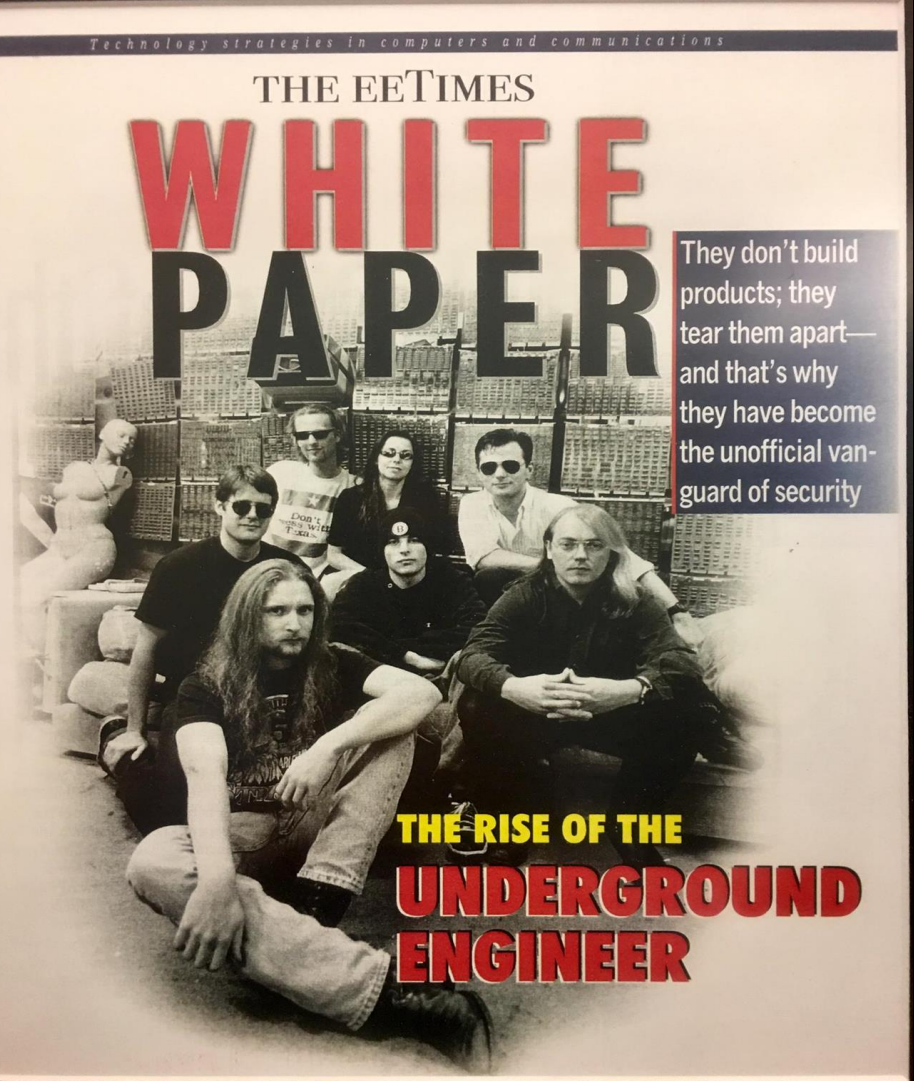
Netcat – Hobbit - 1996

Network swiss army knife

Hacker Information Resources

Bugtraq

Hackers Write *Commercial* Security Software



Improve the Security of Your *Product* by Breaking Into It

Product companies selling security features

Identity & Access Management
Encryption
Firewalls

BYPASS

Accountancies selling compliance

SAS 70
NIST 80-153

IGNORE

Into the light: *Once shadowy computer code warriors like Kingpin are going legit*

Using Good Hackers to Battle Bad Hackers

IF YOU HAVE A MURKY PAST AND DOUBT you could become a dot-com millionaire, think again. Last week a scraggly band of hackers known as "L0pht Heavy Industries" joined with some straitlaced tech execs to form @Stake, an Internet-security consulting firm.

Newsweek, January 17, 2000

In 2000 Launched @stake security consultancy

We conducted our own vulnerability research

We built our own attack/testing tools

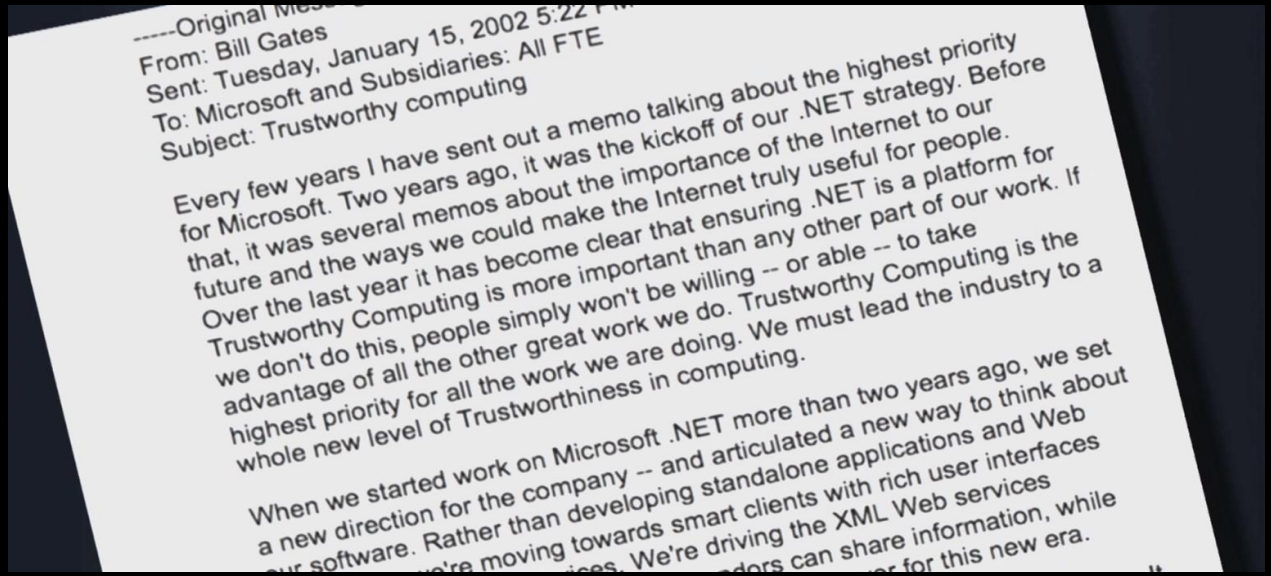
We secured applications by breaking into them

Others soon followed:

- Guardent (acquired by Verisign)
- Foundstone (acquired by McAfee)

The L0pht
+
Dan Geer

Remember the Microsoft SDLC



-----Original Message-----
From: Bill Gates
Sent: Tuesday, January 15, 2002 5:22 PM
To: Microsoft and Subsidiaries: All FTE
Subject: Trustworthy computing

Every few years I have sent out a memo talking about the highest priority for Microsoft. Two years ago, it was the kickoff of our .NET strategy. Before that, it was several memos about the importance of the Internet to our future and the ways we could make the Internet truly useful for people. Over the last year it has become clear that ensuring .NET is a platform for Trustworthy Computing is more important than any other part of our work. If we don't do this, people simply won't be willing -- or able -- to take advantage of all the other great work we do. Trustworthy Computing is the highest priority for all the work we are doing. We must lead the industry to a whole new level of Trustworthiness in computing.

When we started work on Microsoft .NET more than two years ago, we set a new direction for the company -- and articulated a new way to think about our software. Rather than developing standalone applications and Web [illegible]re moving towards smart clients with rich user interfaces [illegible]ices. We're driving the XML Web services [illegible]dors can share information, while [illegible]er for this new era.

What did we teach them?

- How to threat model
- How to exploit heap overflows
- How to fuzz software
- Built their first fuzzer – SPIKE
- How to use SysInternals Process Explorer to find attack surface
- Now Microsoft SDLC is the reference for the industry – literally, ISO 27034

Modern Security Era Is Born 2003 -

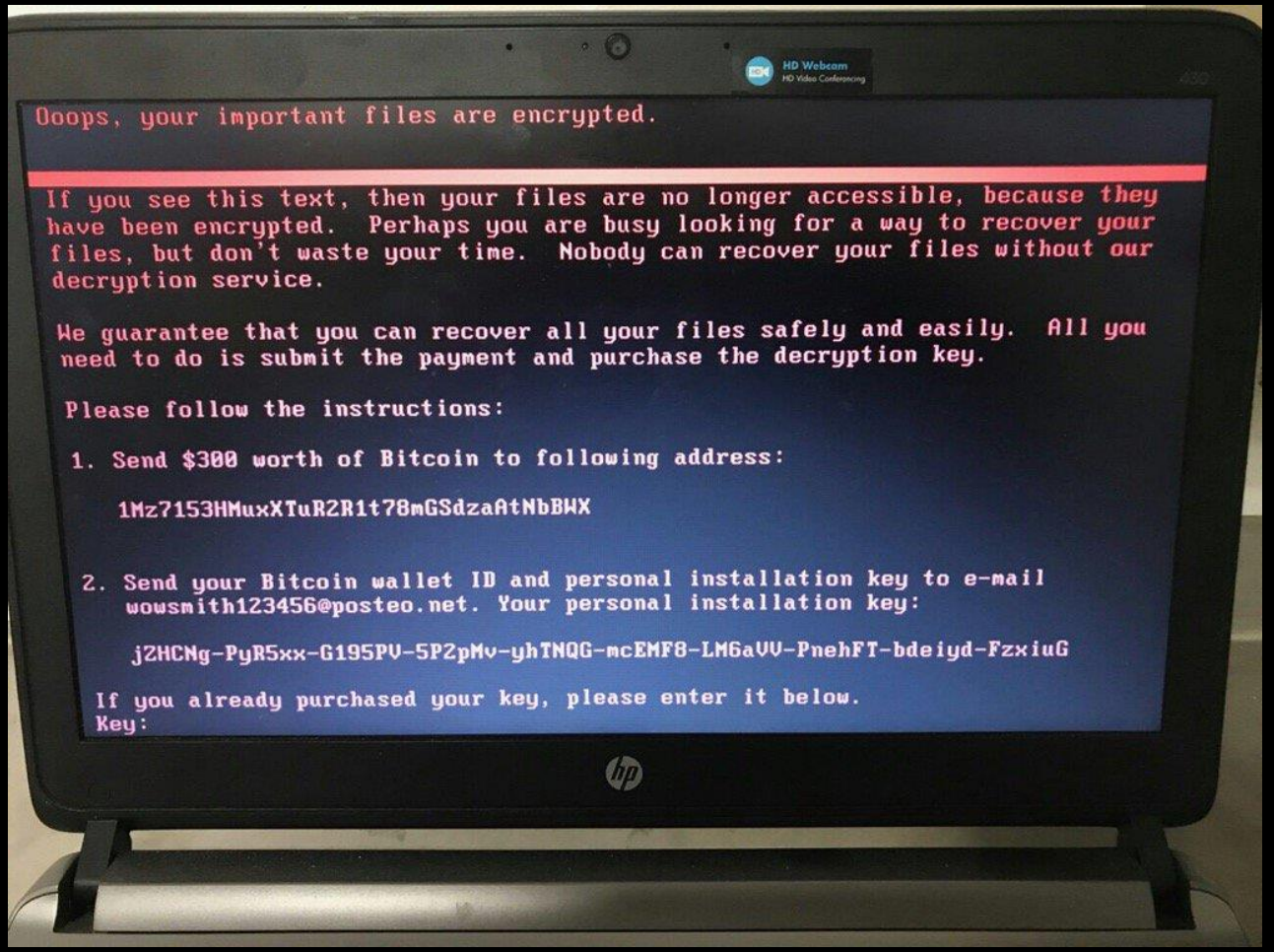
Penetration testing is a *requirement*.

Companies have a product security response team.

Development teams use hacker techniques for security Testing. Look to Microsoft as a model.

And later came Bug Bounties!

Nation States pretend to be criminal hackers



And Hackers are now Insiders

But we are **OLD** insiders

We need the next generation to keep making trouble

Make me nervous!

Security Champions

Weld Pond/Chris Wysopal

cwysopal@veracode.com

@weldpond