

EUNIS InfoSEC 2024 Athens

37 years of personal story

Victoriano Giralt

Head of Systems Administration Unit
Central ICT Services
University of Málaga

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Late '80

- ▶ VAX 11/30
- ▶ X.25
- ▶ EARN/BitNet
- ▶ X.400
- ▶ DECnet
- ▶ Campus 10base5 Ethernet
- ▶ The terminal is king



Early '90s

- ▶ Ponds of 10base2 Ethernet
- ▶ Lucky ones have 10baseT
- ▶ 64Kb/s PtP
- ▶ 2Mb/s radiolinks in Andalusia
- ▶ TCP/IP with lots of /24 :-)
- ▶ Nothing is encrypted
(but no tcpdump)
- ▶ SMTP and POP appear
- ▶ tcpwrappers and ACLs



Late '90s

- ▶ The web explodes
- ▶ The commercial Internet
- ▶ Homes can connect thanks to PPP
- ▶ Linux democratizes the server
- ▶ First scanning attacks (Ipd hole)
- ▶ TCPwarpers are not enough
- ▶ ipchains
- ▶ first protocols with *S*



Initial 21st century

- ▶ First Gigabit links
- ▶ ADSL brings bandwidth to the home
- ▶ Lots of *bad guys* with time and bandwidth
- ▶ Transition to iptables
- ▶ Encryption has to be mandated
- ▶ *Know your baseline*
- ▶ Come the IDS
- ▶ It's not *if* anymore but *when*



Current times

- ▶ EDR, XDR, ...
- ▶ Deep packet inspection
- ▶ Content inspection (*split encryption*)
- ▶ *The cloud*
- ▶ Filters everywhere
- ▶ More *noise* than *signal*
- ▶ Lighting fast GPUs



What lays ahead

- ▶ *AI to the rescue?*

See:

“OpenAI’s GPT-4 Can Autonomously Exploit 87% of One-Day Vulnerabilities”

<https://www.techrepublic.com/article/openai-gpt4-exploit-vulnerabilities/>

- ▶ LLMs mixed control and dataplanes

See:

<https://www.schneier.com/essays/archives/2024/05/llms-data-control-path-insecurity.html>

- ▶ Quatum



Virustotal: the inception

- ▶ Bernardo Quintero, through Hispasec, was comparing antivirus results for PC Actual
- ▶ The group decides to automate the work
- ▶ This was transformed into a service where users could check their files
- ▶ VirusTotal independence allows antivirus companies to share results
- ▶ Thus, better results for everybody
- ▶ Everybody is happy :-)



Virustotal: condo house to Google Málaga

- ▶ Condition to Google for acquiring VirusTotal: the team **MUST** work from Málaga
- ▶ The American giant is forced to open office in Málaga
- ▶ The condo house is bought
- ▶ The house is too small due to business growth
- ▶ New office in Ada Byron building in UMA campus
- ▶ The old Army headquarters in Málaga is on sale
- ▶ Building is restored and Google settles by Málaga harbour



Why top businesses noticed Virustotal

- ▶ 2011: Bernardo Quintero tweets about stuxnet malware
- ▶ Stuxnet was the first cyberweapon with media coverage
- ▶ First time cyberwar is mentioned
- ▶ Bernardo offered information not even American intelligence had, thanks to Virustotal data



Thank you!



Thank you!

Questions?

answers not assured

