The State of Third-Party Software Security in 2020

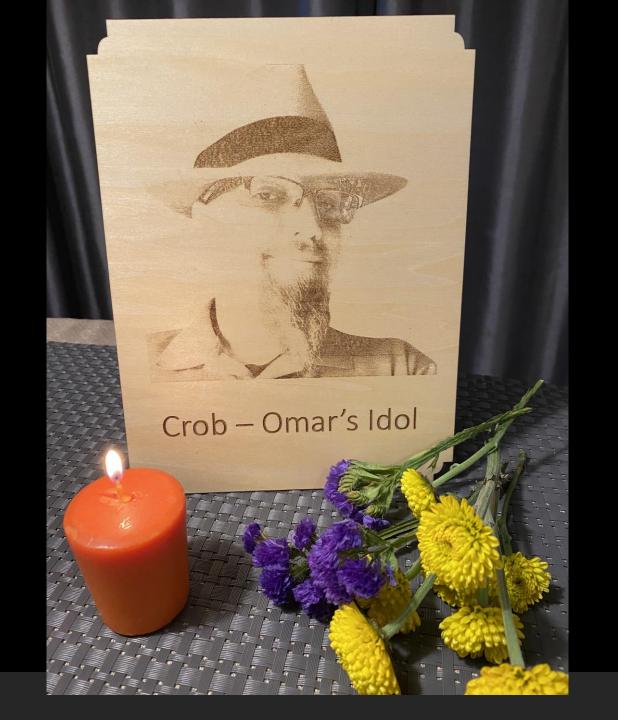
Omar Santos os@cisco.com







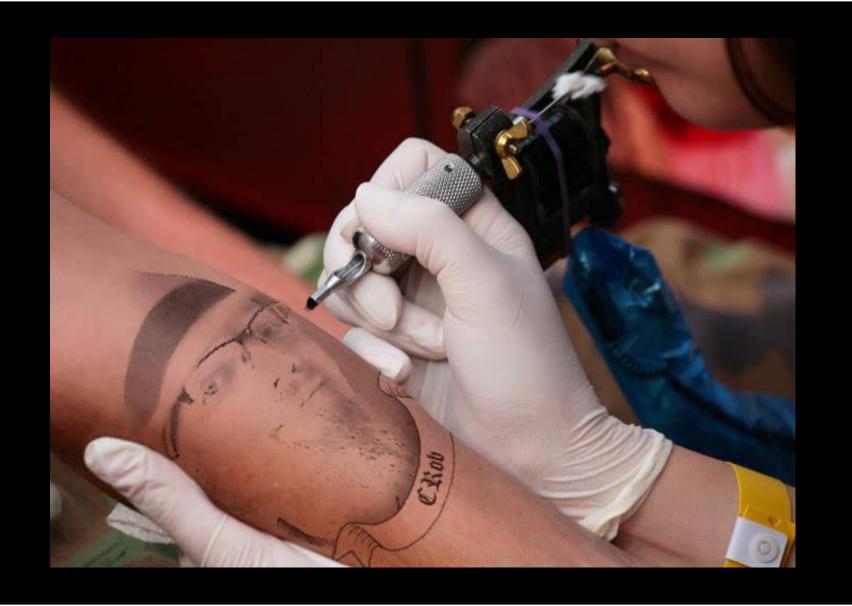
This presentation is dedicated to CRob

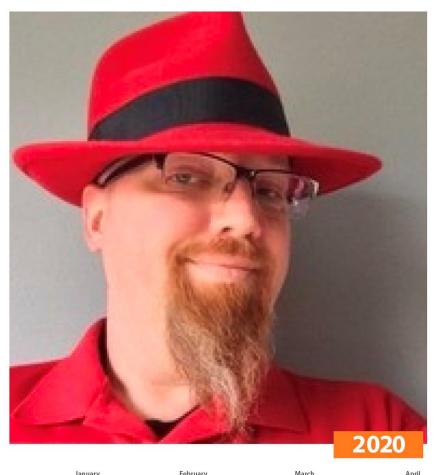












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Introduction to third-party software (commercial and open source) security challenges.



Third-party software (TPS) security tools.



PSIRT's role in TPS security.



Disclosing TPS vulnerabilities.



TPS security in the cloud.



Are you *#\$^& kidding me?

Active Discussion

WHO CAME UP WITH THE TERM "BIRDS OF A FEATHER"?



















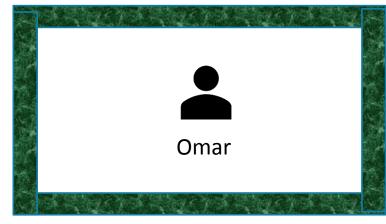


Trust Office



Several other teams





BASEMENT

TPS Security...
It's 2020... Are we better
than we were 10 years ago?

SLOs/SLAs in Contracts (Customer Contracts and Supplier Contracts)

Fixing Open Source is not one company's task...

Must READ: Warning over 'hidden apps' as mobile malware attacks increase - and get sneakier

Hackers are going after Cisco RV320/RV325 routers using a new exploit

Attacks on Cisco routers started hours after the publication of proof-of-concept code on GitHub.

By Catalin Cimpanu for Zero Day | January 27, 2019 -- 10:47 GMT



Cisco RV320 router

MORE FROM CATALIN CIMPANU



Security Let's Encrypt to revoke 3 million certificates on March 4 due to software bug



Security
Academics find 30 file
upload vulnerabilities in
23 web apps, CMSes,
and forums



Security Chinese security firm says CIA hacked Chinese targets for the past 11 years EDITION: US ▼

Must READ: Warning over 'hidden apps' as mobile malware attacks increase - and get sneakier

Seriously? Cisco put Huawei X.509 certificates and keys into its own switches

How did cryptographic certificates and keys issued to Huawei end up in Cisco gear?











By Liam Tung | July 4, 2019 -- 12:24 GMT (05:24 PDT) | Topic:

MORE FROM LIAM TUNG



ODMs (Contracts, SLOs/SLAs, Testing, SDLC, etc. etc...)

TPS and the Cloud... What about Disclosures?













Photographer: David Paul M

Technology

Cisco Enters Chip Market, Supplying Microsoft, Facebook



Software Composition Analysis (SCA) Tools Policy creation and enforcement

Some require IDE support

Build infrastructure

Reporting

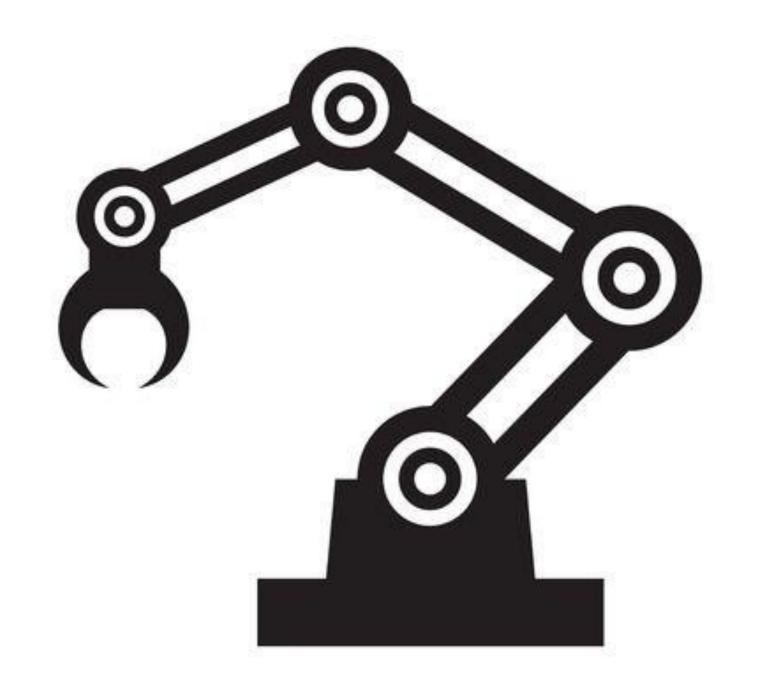
Language support

Container Decomposition

Performance

BMC/ILOs & Connected Power Supplies

Automated Vulnerability Disclosures

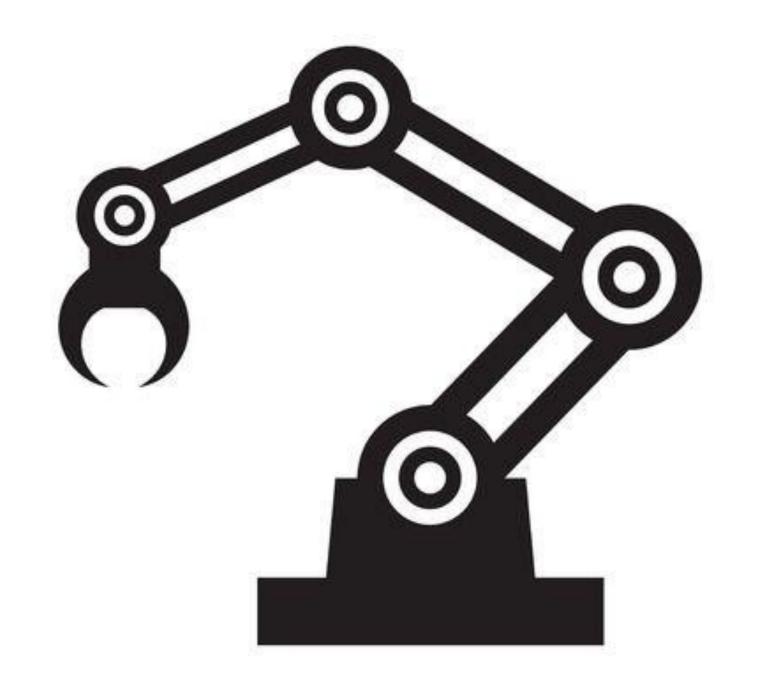


5000 CVEs per year

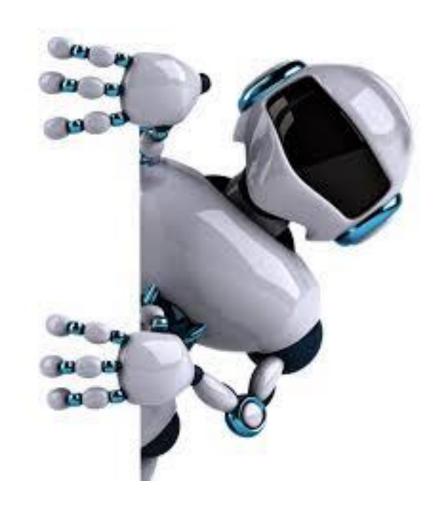
x 700 products (we have thousands of registered "projects" (a project can be a new major release or a new product)).

If 10% of them affect a product... $500 \times 700 = 350,000$ notifications / bugs

That's 958 potential disclosures per day. Even if you consolidate, there could be over 1,000 per week! So...
Automated
Vulnerability
Disclosures...



Triage?
CVSS from NVD?
Does it work for automation?



What if you develop Open Source? How do you disclose?





Thank you!