



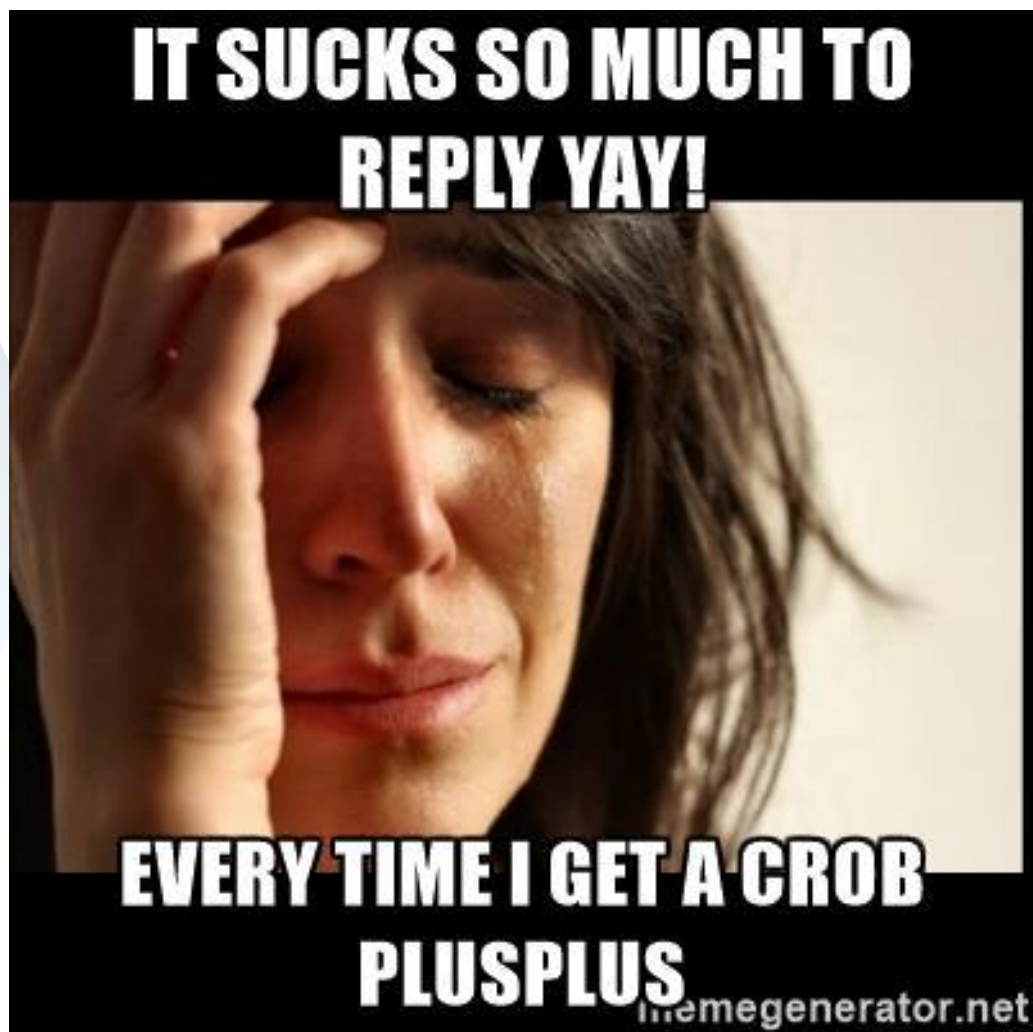
# The Future of Open Source is Trust

Christopher “CRob” Robinson

Director of Security Communications, Intel

@SecurityCRob

#ossummit



From 2017/09/06 #tam IRC post

```
[IE@OSS-EU ~]sh$ ./HelloWorld.
```

- CRob, n, adj, and v  
Pronunciation: U.S. (K-rowb)

41st level Dungeon Master  
24th level Securityologist



# Linux & Open Source were built on a foundation of trust



**Linus Benedict Torvalds**

17Sept1991



Hello everybody out there using minix -

I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system (due to practical reasons) among other things).

I've currently ported bash(1.08) and gcc(1.40), and things seem to work. This implies that I'll get something practical within a few months, and I'd like to know what features most people would want. Any suggestions are welcome, but I won't promise I'll implement them :-)

Linus ([torv...@kruuna.helsinki.fi](mailto:torv...@kruuna.helsinki.fi))

PS. Yes - it's free of any minix code, and it has a multi-threaded fs. It is NOT portable (uses 386 task switching etc), and it probably never will support anything other than AT-harddisks, as that's all I have :-).

# As OSS Evolved, so has the Threat Landscape



CVE-2014-0160  
04/07/2014



CVE-2014-6271  
09/24/2014



CVE-2016-0800  
03/01/2016



event-stream  
crypto miner  
Sept – Oct  
2018



CVE-2020-25705  
11/16/2020



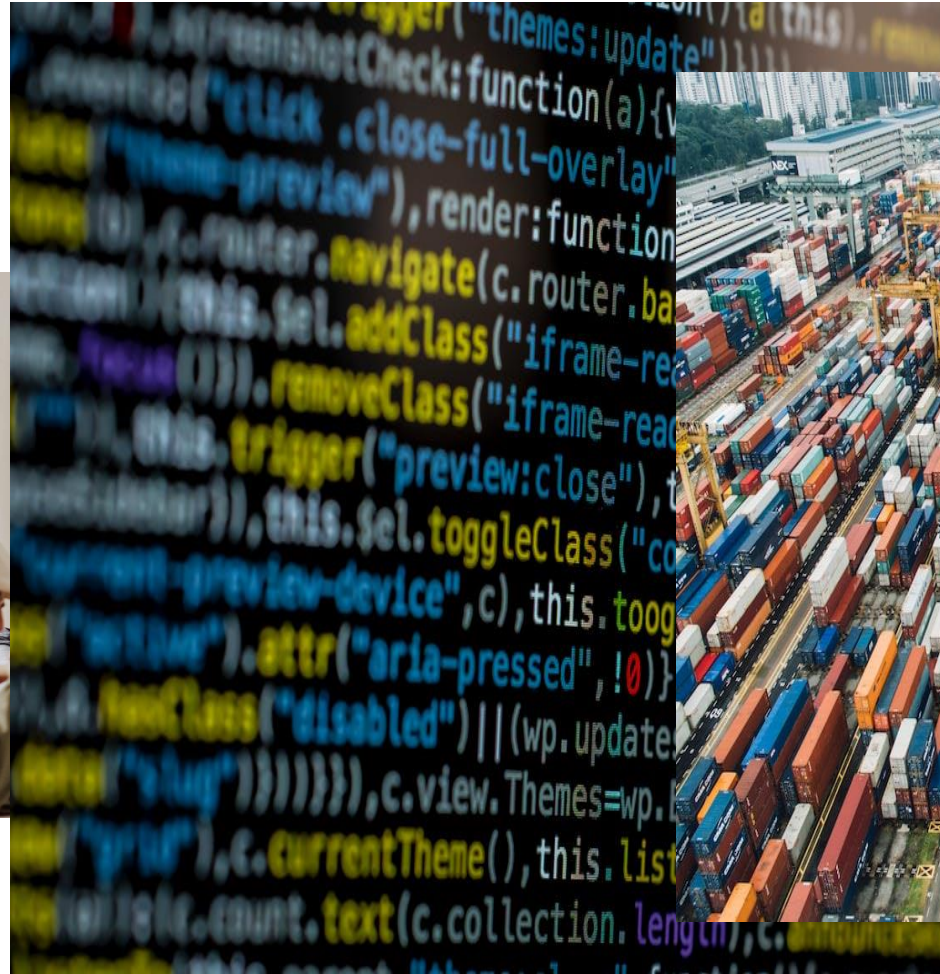
CVE-2021-44228  
12/10/2021



# Trust from the foundation, up and down the stack and supply chain



[source](#)



[source](#)

[source](#)

# The rising tide lifts all boats

## Best Practices for Open Source Developers

This group works to provide open source developers with best practices recommendations, and easy ways to learn and apply them.

[GitHub](#) | [Slack](#) | [Email List](#)

## Securing Critical Projects

This group exists to identify and help to allocate resources to secure the critical open source projects we all depend on.

[GitHub](#) | [Slack](#) | [Email List](#)

## Supply Chain Integrity

This group is helping people understand and make decisions on the provenance of the code they maintain, produce and use.

[GitHub](#) | [Slack](#) | [Email List](#)

## Specific Initiative Funds

In addition to the core working groups, OpenSSF is home to important, cross-cutting initiatives and projects that require focused resources and staff. SIFs leverage OpenSSF working groups, external open source projects, and member contributions to make a big impact on the open source ecosystem. Current SIFs are:

- [Sigstore](#)
- [Project Alpha-Omega](#)
- GNU Toolchain Infrastructure – coming soon

## Identifying Security Threats in Open Source Projects

This group enables informed confidence in the security of OSS by collecting, curating, and communicating relevant metrics and metadata.

[GitHub](#) | [Slack](#) | [Email List](#)

## Security Tooling

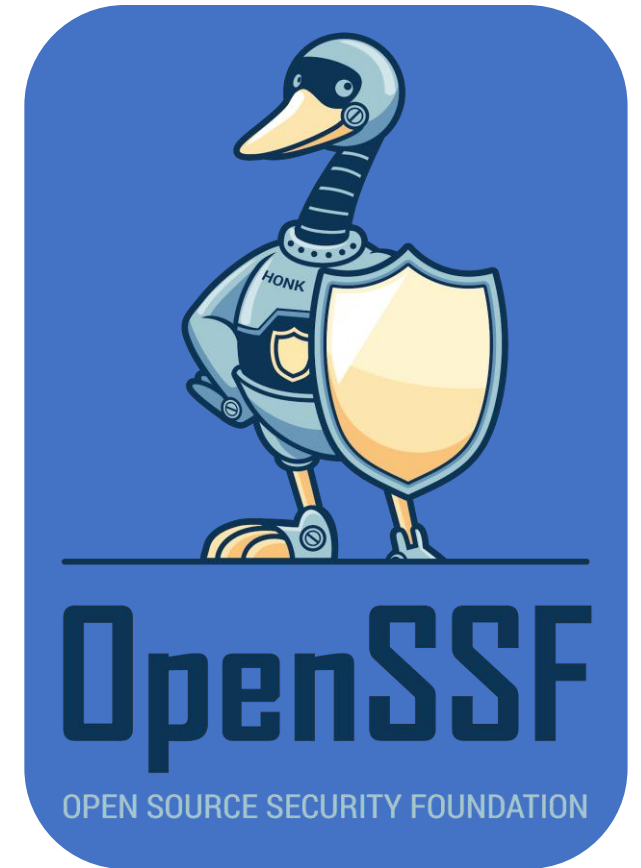
This group's mission is to provide the best security tools for open source developers and make them universally accessible.

[GitHub](#) | [Slack](#) | [Email List](#)

## Vulnerability Disclosures

This group is improving the overall security of the OSS ecosystem by helping advance vulnerability reporting and communication.

[GitHub](#) | [Slack](#) | [Email List](#)



<https://openssf.org/community/openssf-working-groups/>



# Someone IS doing something! (and you can help out, too!)



OpenSSF and The Linux Foundation propose 10 streams of investment to improve cybersecurity practices within open source development, code reviews, developer training, and software distribution.

[Read the Plan](#)

## 10 Streams of Investment for Open Source Security



Security Education



Risk Assessment



Digital Signatures



Memory Safety



Incident Response



Better Scanning



Code Audits



Data Sharing



SBOMs Everywhere



Improved Software  
Supply Chains

<https://openssf.org/oss-security-mobilization-plan/>





Eric S. Raymond, one of  
open source's founders:

“Given enough eyeballs,  
all bugs are shallow.”

He called it “Linus’s Law.”

# We Are Building Trust



@OpenAtIntel