@dadideo

La sécurité par où commencer ? Install Party

David Aparicio

Touraine Tech, Salle TD1
Vendredi 20 Janvier 2023, 10h10

@dadideo

David Aparicio

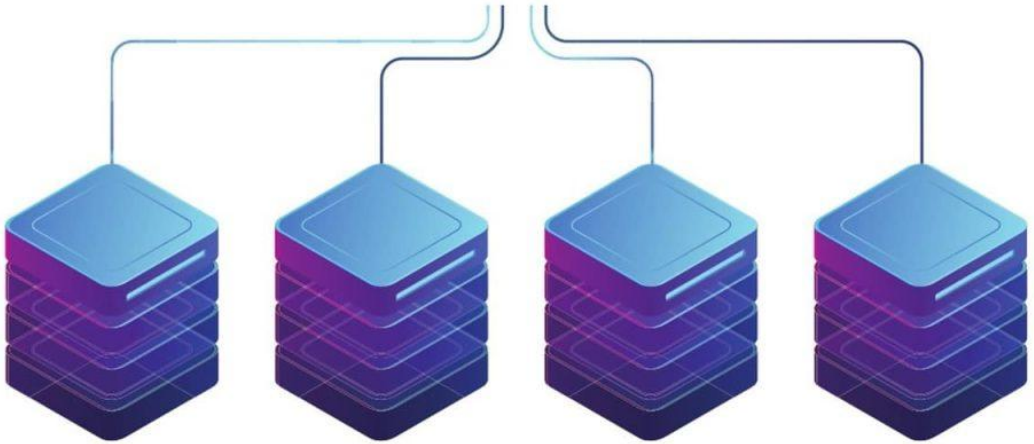
15/ DD INSA de Lyon / UNICAMP (Brésil)

Facebook Open Academy / MIT AppInventor

17/ Dev(Sec)Ops @ AMADEUS (Nice, 2 ans)

19/ Data(Sec)Ops @ OVHcloud (Lyon, 3 ans)

OVHcloud



400 000 serveurs

1,6 million de clients

Leader européen

2021 IPO

Café de la Bourse

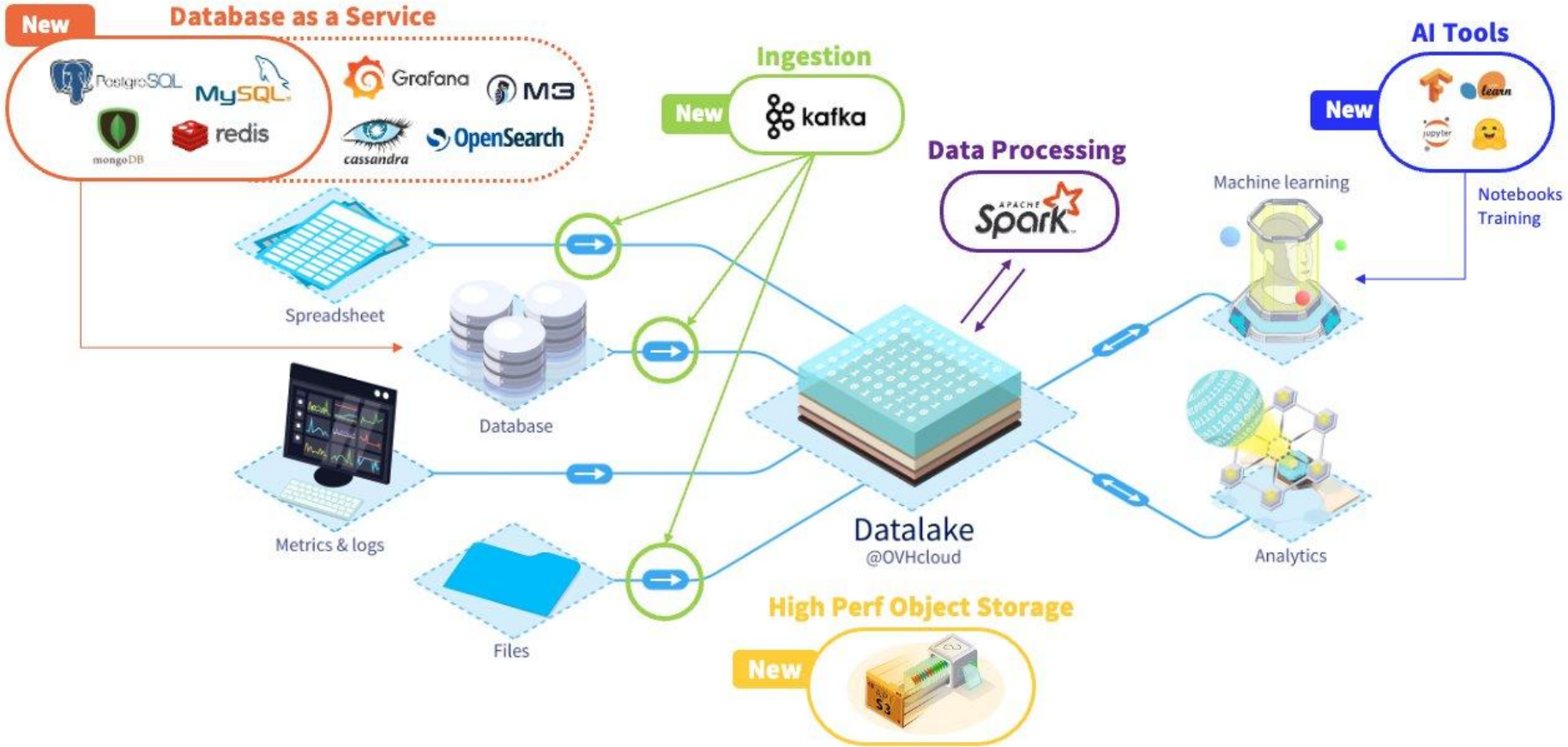
30 Datacenters

gaia-x

SecNumCloud
Depuis Déc 2020

GIS-DATA

@dadideo



careers.ovhcloud.com

Agenda

Introduction

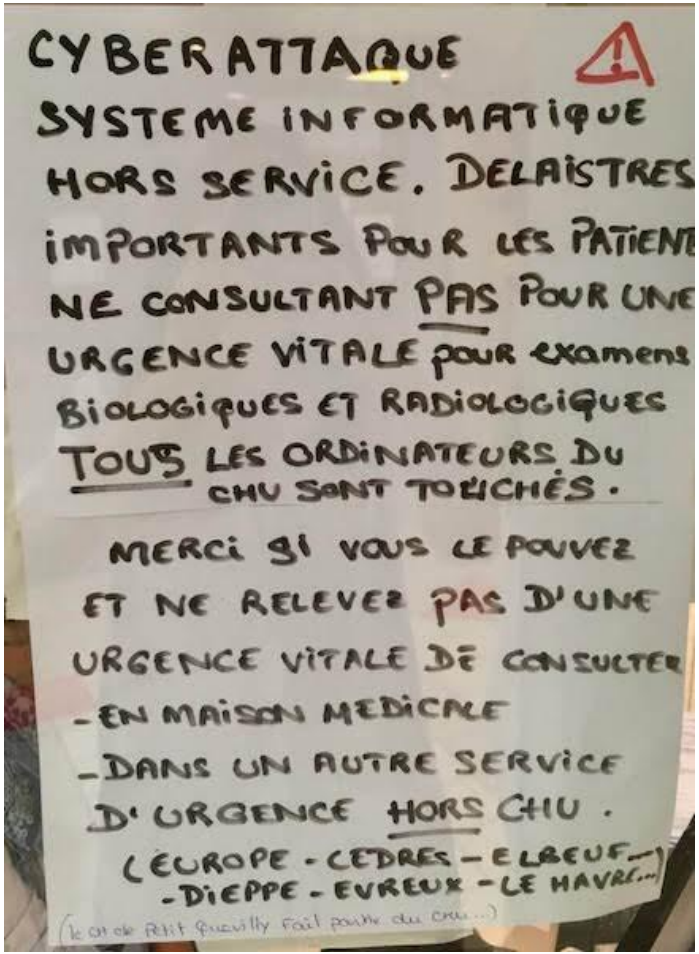
Conseils

Outils

Conclusion

Introduction

Pourquoi ce talk ?



Thread @zigazou

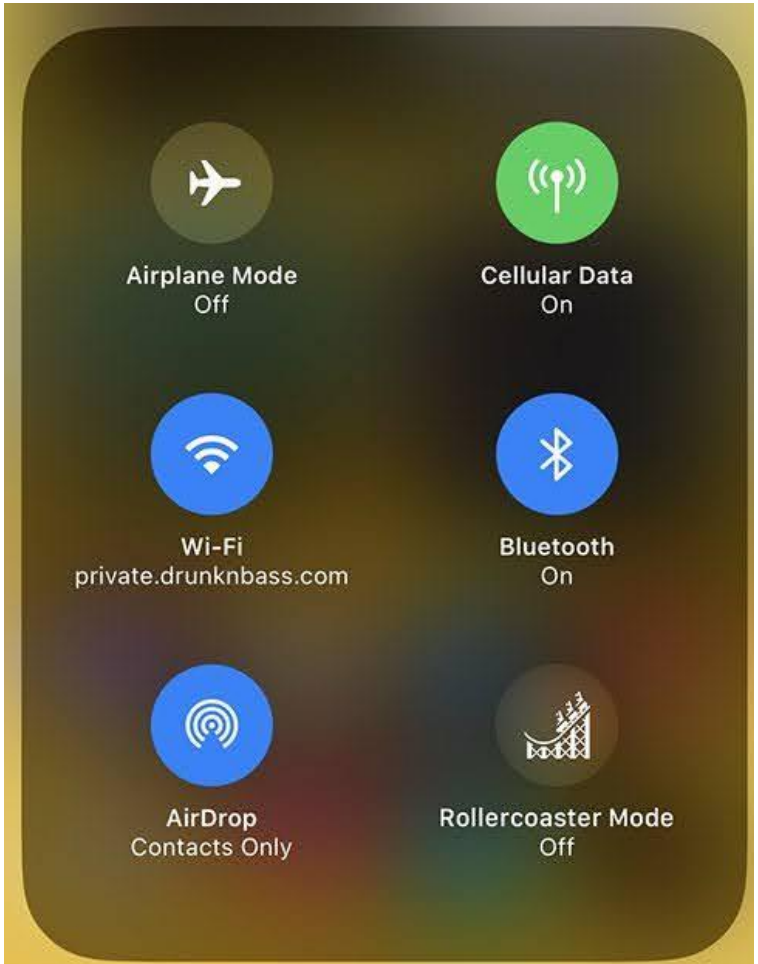
Dès la Conception !!

Y a-t-il un pilote à jour dans l'avion ?

En 2015, les autorités états-uniennes de l'aviation alertaient les compagnies aériennes : le Boeing 787 Dreamliner devait être redémarré tous les 248 jours pour contourner un bogue pouvant entraîner une coupure de courant généralisée dont on peut imaginer les conséquences en vol. Cette fois, elles ont annoncé qu'il faut éteindre et rallumer ces mêmes avions tous les 51 jours pour éviter des problèmes informatiques catastrophiques en raison d'une mémoire saturée de données sinon. Mesdames et Messieurs, veuillez regagner vos places et attacher vos ceintures de sécurité, nous allons bientôt rebouter !

Octobre 2020, Le Virus Informatique n°44 (papier/en ligne)

Autre exemple récent

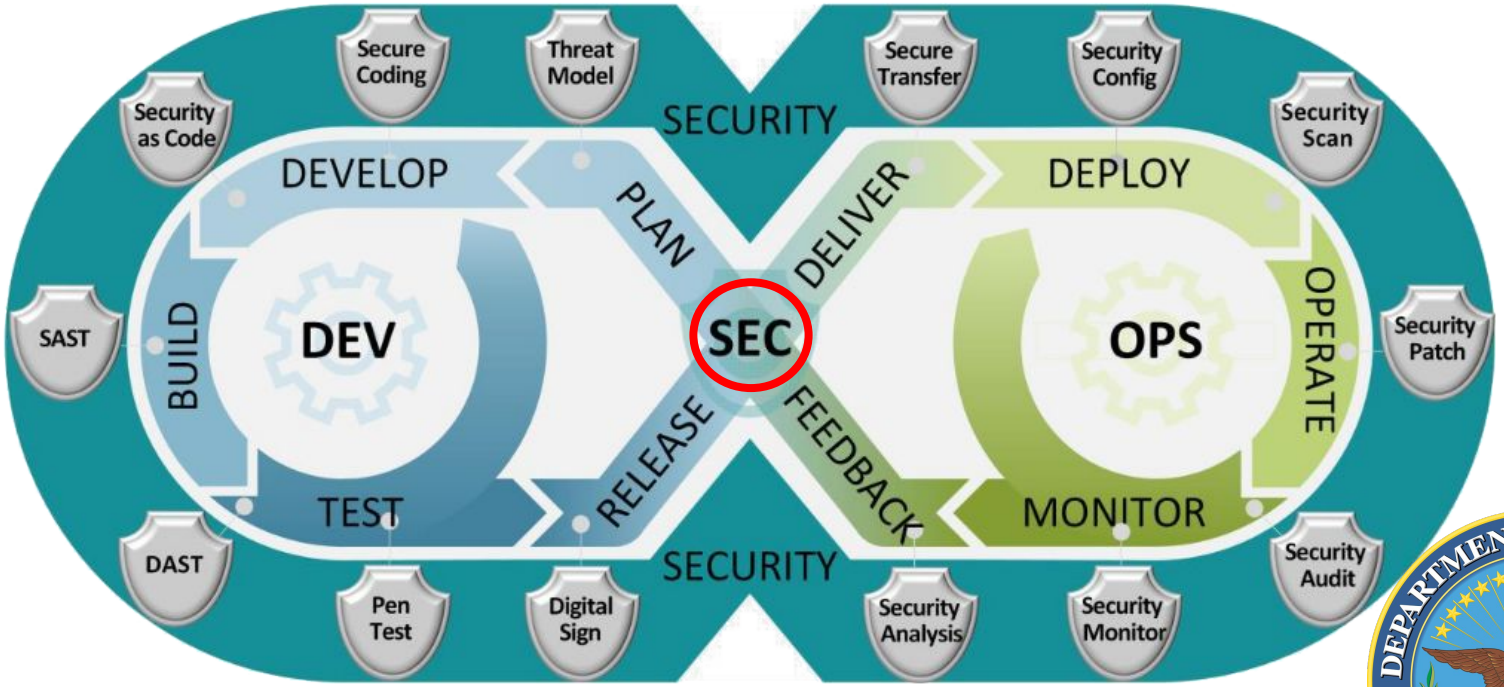


Sécurité dès la conception

Du domaine du **Génie Logiciel**
Souvent associé à **Privacy By Design**
Considérer la sécurité comme une **partie intégrante**
Conception d'architecture **robuste**
Résistant aux attaques **bien connues**
Utilisant des techniques **réutilisables**
Minimiser l'impact **en prévision** des vulnérabilités

Exigences dans de **multiples domaines** (auth., intégrité, confidentialité, etc..,)
Même lorsque le système est attaqué
Préserver l'architecture pendant l'**évolution du logiciel**
Mise en oeuvre durant tout le **cycle de vie**, jusqu'à la fin du support, et donc une date de **décommissionnement**

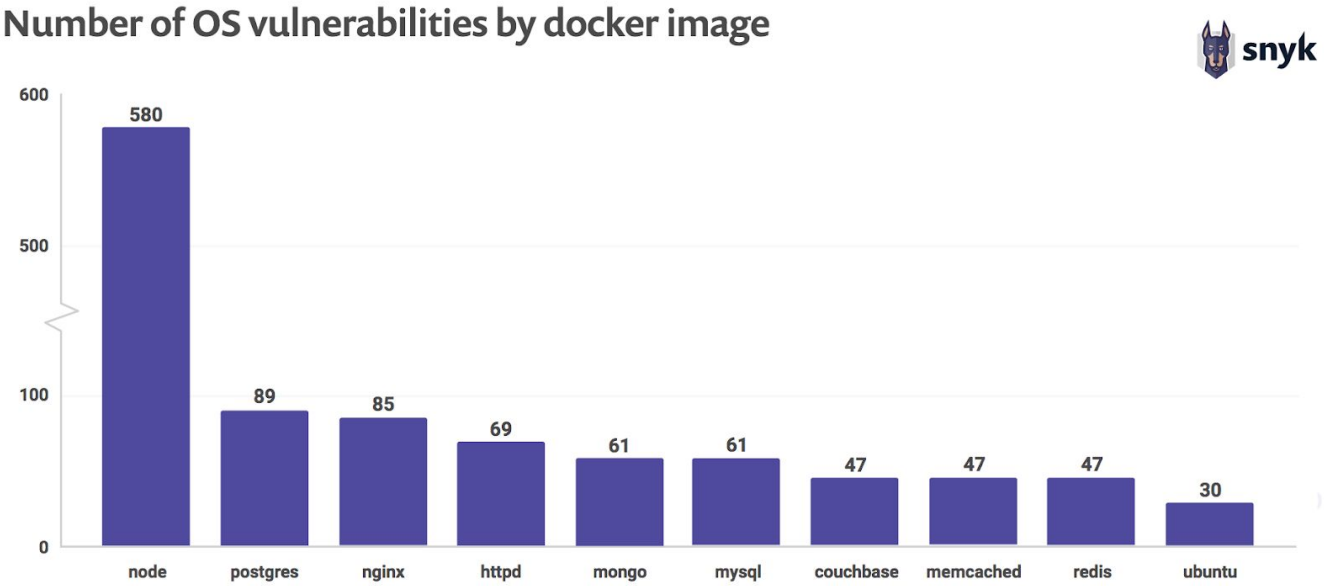
Shift-left Security



dodcio.defense.gov

Conseils

Attention avec Docker



🎯 The state of open source security – 2019

Attention avec vos dépendances

Open Source Security report

- 78% of vulnerabilities are found in indirect dependencies

🎯 The state of open source security – 2019

Attention avec vos dépendances

🎯 PCWorld - Remote Code Execution Exploit (Write-up)

Ne pas afficher des données personnelles (PII)

Site d'Ameli.fr (numéro modifié pour illustrer)

[CNIL - Donnée personnelle, Personally identifiable information (PII)]

Ne pas utiliser les configurations par défaut

WEBSITE PLANET

US$

> Blog > Report: Hotel Reservation Platform Leaves Millions of People Exposed in Massive Data Breach

Report: Hotel Reservation Platform Leaves Millions of People Exposed in Massive Data Breach

Mark Holden November 06, 2020

Inside this Article

Company: Prestige Software, based in Spain.

Severity: High

Size: 24.4 GB, totaling 10,000,000+ exposed files

Data Storage Format: Misconfigured AWS S3 bucket

Countries Affected: Worldwide

Courtesy of our security team at Website Planet, we can reveal that a hotel reservation platform has been exposing highly sensitive data from millions of hotel guests worldwide, dating as far back as 2013 and including credit card details for 100,000s of people.

Based in Madrid and Barcelona, Prestige Software sells a channel management platform called Cloud Hospitality to hotels that automates their availability on online booking websites like Expedia and Booking.com.

The company was storing years of credit card data from hotel guests and travel agents without any protection in place, putting millions of people at risk of fraud and online attacks.

Customer Data Exposed

- **PII data:** Full names, email addresses, national ID numbers, and phone numbers of hotel guests

Prestige Software doesn't list
that appeared to originate fror
including, but not limited to:

- Agoda
- Amadeus
- Booking.com
- Expedia
- Hotels.com
- Hotelbeds
- Omnibees
- Sabre
- and many others

🎯 Hotel Reservation Platform Leaves Millions of People Exposed in Massive Data Breach

Ne pas utiliser les configurations par défaut

mackeeper | Blog Menu

BREAKING: Massive Breach of Mexican Voter Data

See the interview with Chris Vickery commenting on this breach.

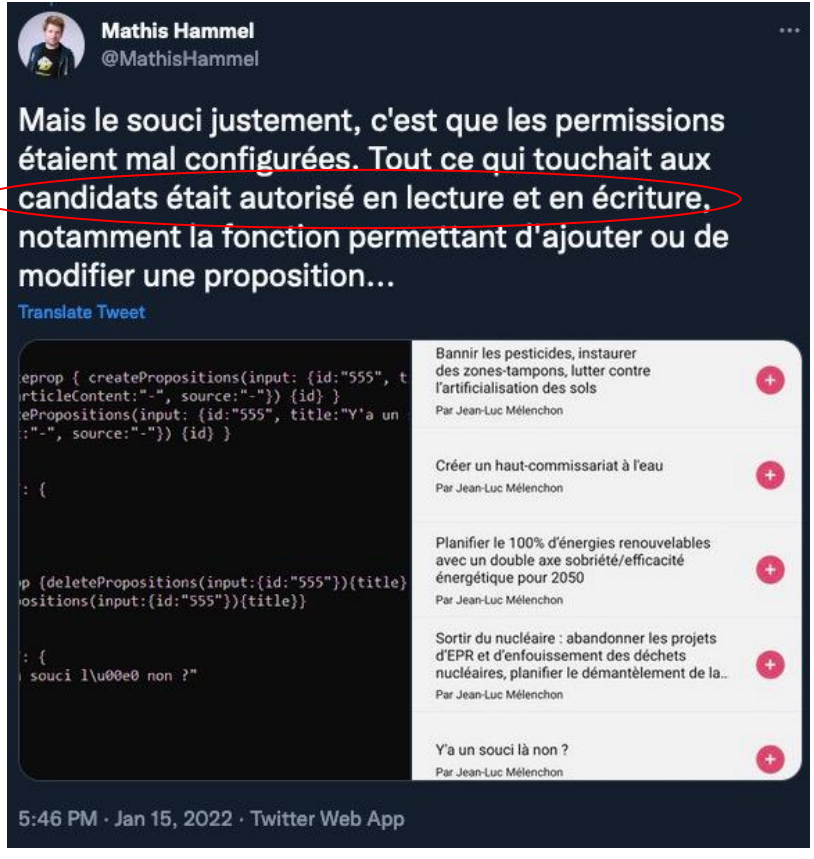
Before going any further, let's make one thing very clear. I'm not the one who transmitted the data out of Mexico. Someone else will have to answer for that. However, eight days ago (April 14th), I did discover a publicly accessible database, hosted on an Amazon cloud server, containing these records. There was no password or authentication of any sort required. It was configured purely for public access. Why? I have no clue.

After reporting the situation to the US State Department, DHS, the Mexican Embassy in Washington, the Mexican Instituto Nacional Electoral (INE), and Amazon, the database was finally taken offline April 22nd, 2016.

Under Mexican law, these files are "strictly confidential", carrying a penalty of up to 12 years in prison for anyone extracting this data from the government for personal gain. We're talking about names, home addresses, birthdates, a couple of national identification numbers, and a few other bits of info.

Massive Breach of Mexican Voter Data

Ne pas utiliser les permissions par défaut



🎯 [Thread @MathisHammel]

Attention au risque humain

ars TECHNICA BIZ & IT TECH SCIENCE POLICY CARS GAMING & CULTURE STO

ELON SPEAKS —

Russian tourist offered employee $1 million to cripple Tesla with malware

"This was a serious attack," Elon Musk says.

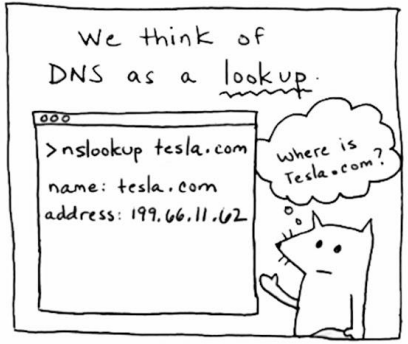
DAN GOODIN - 8/28/2020, 4:12 AM

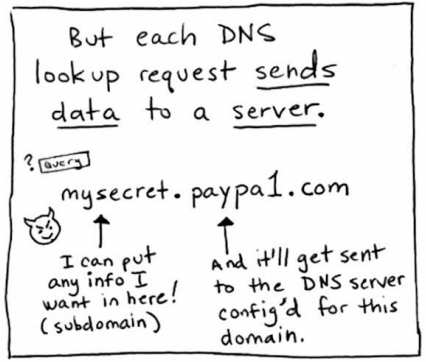
Enlarge

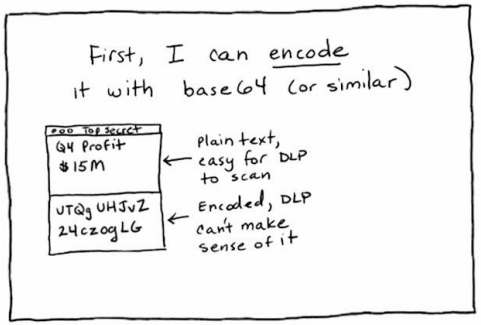
Ars Technica [EN]

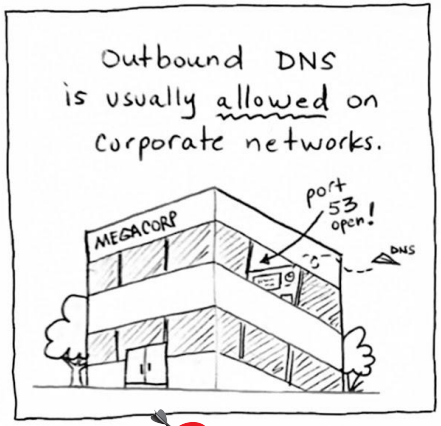
Attention au traffic sortant aussi !

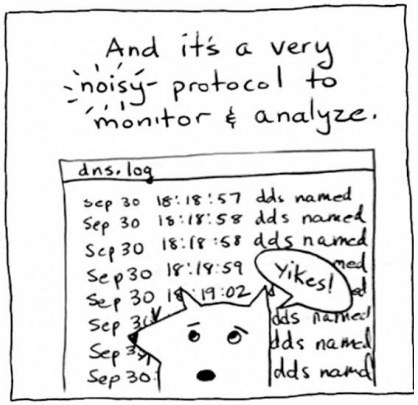
Introduction à DNSSEC

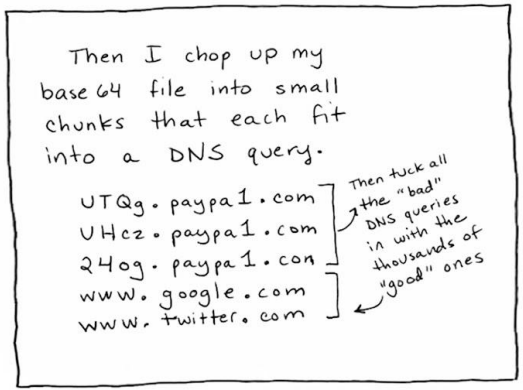


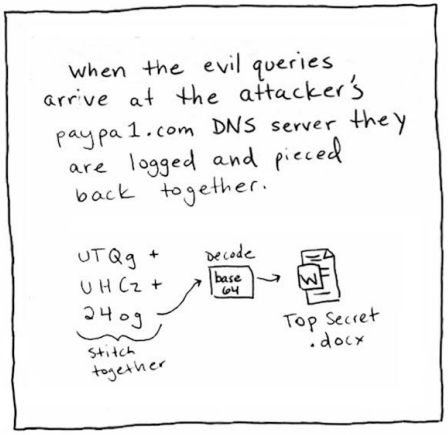












Exfiltration DNS @Rob Sobers

Quelques bonnes pratiques

- Diminuer surface d'attaque (scratch, distroless, ubi-minimal)
- Principe de moindre privilège (!root, 1 user = 1 appli)
- Défense en profondeur (bastion, traceability, siem)
- Détection de connexion, proposer/activer MFA
- Pas de configuration/permissions par défaut (K8s, MongoDB)
- Pas de secrets dans les Docker images ou les repositories Git (Vault, .gitignore)
- Pas de données sensibles dans les GUI (cf slide suivante)
- Ne pas afficher de stacktrace (pas debug | Fail securely)
- Ni de version/nom de framework
- Vérifier les entrées/sorties des clients/noeuds (injection/XSS, protocoles)
- Faire des backups régulièrement et déconnectées du réseau
- Mettre à jour infra/docker images (CI/CD|GitOps)
- PaaS (BUILD/RUN) 🇪🇺 OVHcloud/CleverCloud

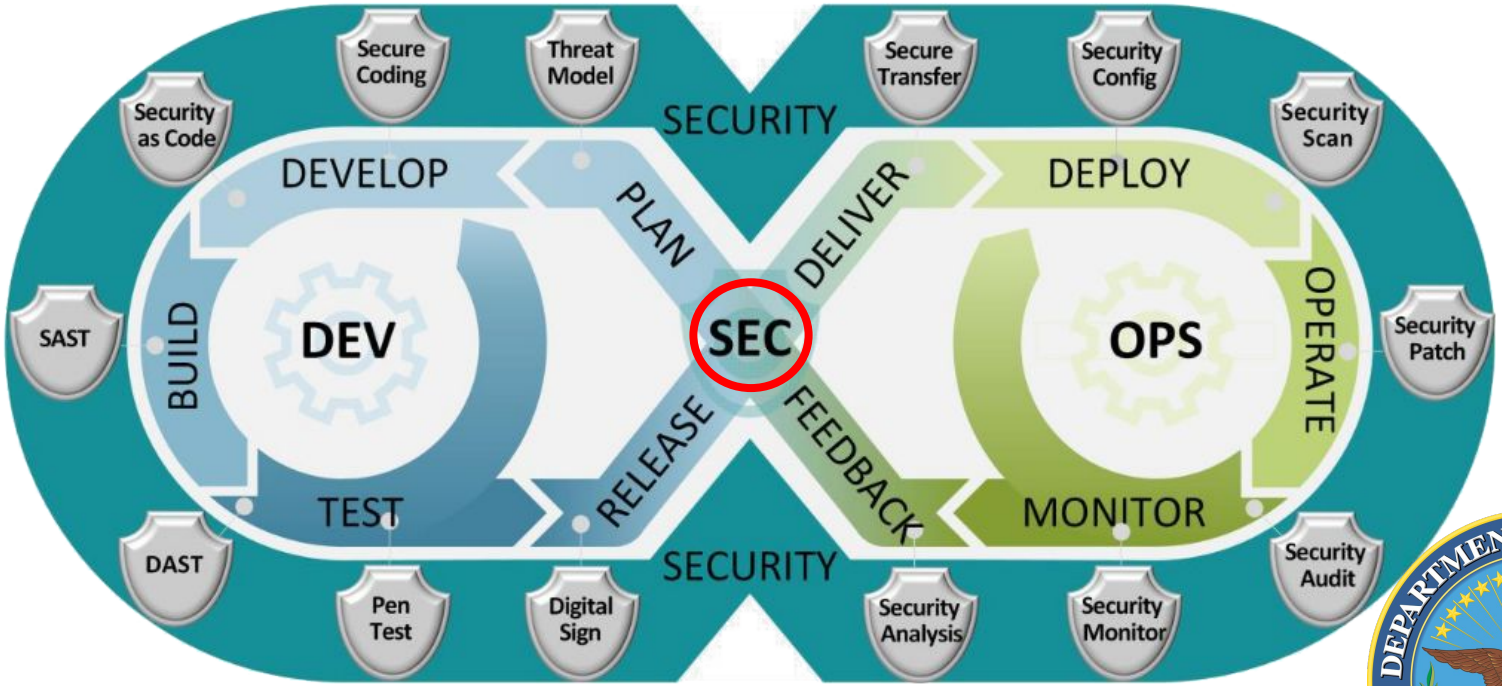
Pourquoi ?

2013	2017 (new, * from the community)	2021 (new, * from the survey)
A1 - Injection	A1 - Injection	A1 - Broken Access Control
A2 - Broken Authentication & Session Management	A2 - Broken Authentication	A2 - Cryptographic Failures
A3 - Cross-Site Scripting (XSS)	A3 - Sensitive Data Exposure	A3 - Injection
A4 - Insecure Direct Object References	A4 - XML External Entities (XXE)	A4 - Insecure Design
A5 - Security Misconfiguration	A5 - Broken Access Control [MERGED A4+A7]	A5 - Security Misconfiguration
A6 - Sensitive Data Exposure	A6 - Security Misconfiguration	A6 - Vulnerable and Outdated Components
A7 - Missing Function Level Access Control	A7 - Cross-Site Scripting (XSS)	A7 - Identification and Authentication Failures
A8 - Cross-Site Request Forgery (CSRF)	A8 - Insecure Deserialization *	A8 - Software and Data Integrity Failures
A9 - Using Components with Known Vulnerabilities	A9 - Using Components with Known Vulnerabilities	A9 - Security Logging and Monitoring Failures *
A10 - Unvalidated Redirects and Forwards	A10 - Insufficient Logging & Monitoring *	A10 - Server-Side Request Forgery (SSRF) *
OWASP TOP 10		

🎯 OWASP Top 10

Outils

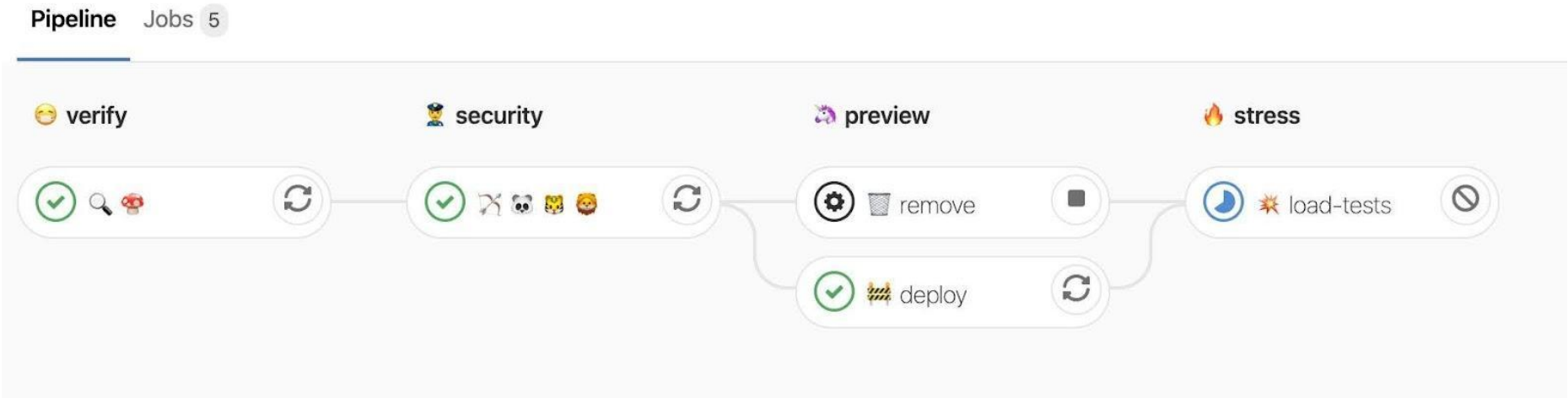
Shift-left Security



dodcio.defense.gov

DevOps

CI/CD



🎯 Philippe Charrière (Twitter)

Plan: Threat Model

Bonnes pratiques
ANSSI

Se documenter, se former
Lire les guides de l'ANSSI
Comparer les technologies, les langages de programmation
Effectuer l'analyse des risques
Identifier le modèle de l'attaquant pour ce produit en particulier
Préparer des spécifications / des ateliers
Participer à des conférences Sécurité
Choix du système hôte (OS hardening)
Veille technologique (Feedly/RSS)

🎯 Bonnes pratiques de sécurité numérique (ANSSI)

Dev: Secure Coding/SaC

Linters
Go

Un linter est un outil d'analyse statique de code source. Il sert à détecter : des erreurs (très utile sur des langages interprétés comme JavaScript qui n'ont pas de phase de compilation) ; des problèmes de syntaxe et de non-respect de style (tabulation vs espaces, indentation, etc.)

STATIC LINTS WITH GOLANG-CI


```
linters:
  disable-all: true
  enable:
    - bodyclose
    - deadcode
    - depguard
    - dogsled
    - dupl
    - errcheck
    - funlen
    - goconst
    - gocritic
    - gocyclo
    - gofmt
    - goimports
    - golint
    - gomnd
    - goprintffuncname
    - gosec
    - gosimple
    - govet
    - ineffassign
    - interfacer
    - misspell
    - nakedret
    - rowserrcheck
    - scopelint
    - staticcheck
  # - ...
```

Customize: linters list, values...

In few situations you can bypass the linters with nolint directive.

```
//nolint
```

🎯 "Common mistakes" en Go, Aurélie Vache (Async 2021)

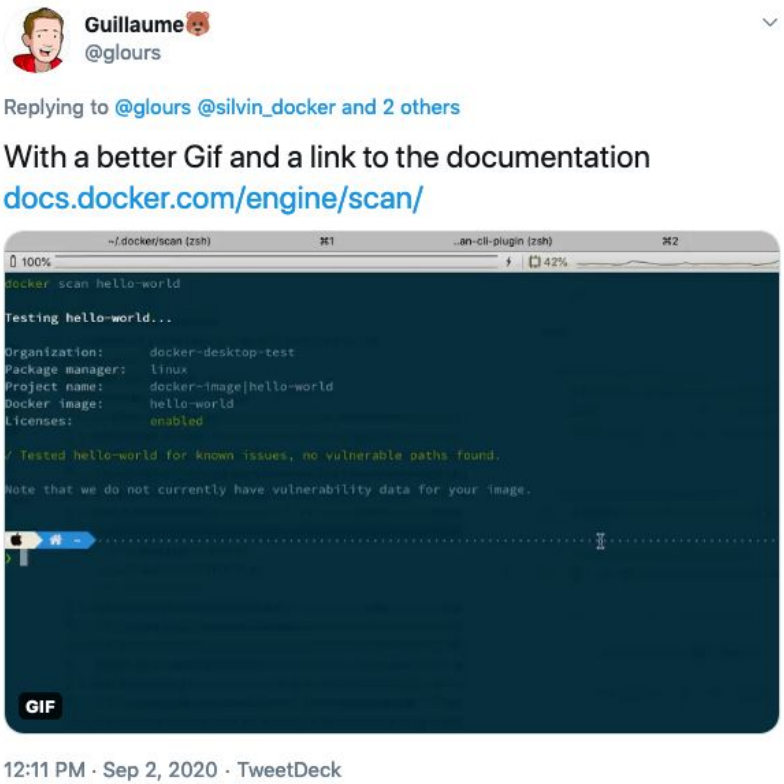
Linters
Shell

Il permet d'avoir un code avec moins d'effets de bord
Disponible dans (quasiment) tous les languages

```
$ shellcheck myscript

Line 4:
if ! grep -q backup=true.* "~/.myconfig"
           ^-- SC2062: Quote the grep pattern so the
                         ^-- SC2088: Tilde does not

Line 6:
  echo 'Backup not enabled in $HOME/.myconfig, exiting
       ^-- SC2016: Expressions don't expand in single

Line 10:
if [[ $1 =~ "-v(erbose)?" ]]
          ^-- SC2076: Don't quote right-hand side of

Line 12:
  verbose='-printf "Copying %f\n"'
         ^-- SC2089: Quotes/backslashes will be treat

Line 16:
  -iname *.tar.gz \
        ^-- SC2061: Quote the parameter to -iname so
        ^-- SC2035: Use ./*glob* or -- *glob* so name
```

🎯 ShellCheck, finds bugs in your shell scripts

Docker CLI



🎯 Vulnerability scanning - Docker Documentation

19/10/20

https://securite.developpez.com/actu/309772/Quatre-packages-npm-trouves-en-train-d-ou

Quatre packages npm trouvés en train d'ouvrir des shells sur des systèmes Linux et Windows.

Tout ordinateur avec l'un de ces packages installés « doit être considéré comme totalement compromis »

Le 19 octobre 2020 à 12:27, par Stan Adkens | 6 commentaires

364 PARTAGES | 15 | 0

L'équipe de sécurité de npm a supprimé la semaine dernière quatre packages hébergés sur son dépôt, découverts en train d'ouvrir des shells afin d'établir une connexion à des serveurs distants pour exfiltrer les données des utilisateurs à partir des systèmes Linux et Windows infectés. Selon l'équipe de sécurité, chaque bibliothèque a été téléchargée des centaines de fois depuis son chargement sur le portail npm.

Les noms des quatre packages npm sont : plutov-slack-client, nodetest199, nodetest1010 et npmpubman. Les packages ont été mis en ligne sur le portail npm en mai 2018 (en ce qui concerne le premier) et en septembre de la même année (pour le reste). Jeudi dernier, le personnel du npm a retiré les quatre paquets JavaScript du portail npm parce qu'ils contenaient du code malveillant.

npm est le plus grand dépôt de packages pour tous les langages de programmation. L'équipe de sécurité de npm scanne régulièrement sa collection de bibliothèques JavaScript, considérée comme le plus important dépôt. Bien que les pacquages malveillants soient régulièrement supprimés, la suppression de la semaine dernière est la troisième grande mesure de répression de ces trois derniers mois.

Selon les avis publiés par l'équipe de sécurité de npm, les quatre bibliothèques JavaScript ont ouvert des shells sur les ordinateurs des développeurs qui ont importé ces packages dans leurs projets. Les shells permettaient aux acteurs de la

🎯 4 packages npm ouvrent des shells [Linux/Windows]

npm-audit
Javascript

Auditer les vulnérabilités connues des librairies et des dépendances associées

```
High          | Arbitrary File Overwrite
Package       | tar
Patched in    | >=4.4.2
Dependency of | libnpm
Path          | libnpm > npm-lifecycle > node-gyp > tar
More info     | https://npmjs.com/advisories/803

High          | Arbitrary File Overwrite
Package       | tar
Patched in    | >=4.4.2
Dependency of | npm-lifecycle
Path          | npm-lifecycle > node-gyp > tar
More info     | https://npmjs.com/advisories/803

found 19 vulnerabilities (8 moderate, 11 high) in 11360 scanned packages
run `npm audit fix` to fix 4 of them.
12 vulnerabilities require semver-major dependency updates.
3 vulnerabilities require manual review. See the full report for details.
```

🎯 npm-audit | npm Docs

Github
Code Scanning

Il permet d'avoir un retour rapide directement dans son code (sur les failles)

🎯 Github Code Scanning / Démo TelecomValley

Pas copier-coller depuis StackOverFlow

98% snippets sécu/crypto sont insecures

🎯 Fisher et al., 2017; Nadi et al., 2016; Das et al., 2014, Prevent cryptographic pitfalls by design

PS: Copilot aussi

GitHub Copilot Security Study: 'Developers Should Remain Awake' in View of 40% Bad Code Rate

By David Ramel 08/26/2021

Researchers published a scholarly paper looking into security implications of GitHub Copilot, an advanced AI system now being used for code completion in Visual Studio Code and possibly headed for Visual Studio after its current preview period ends.

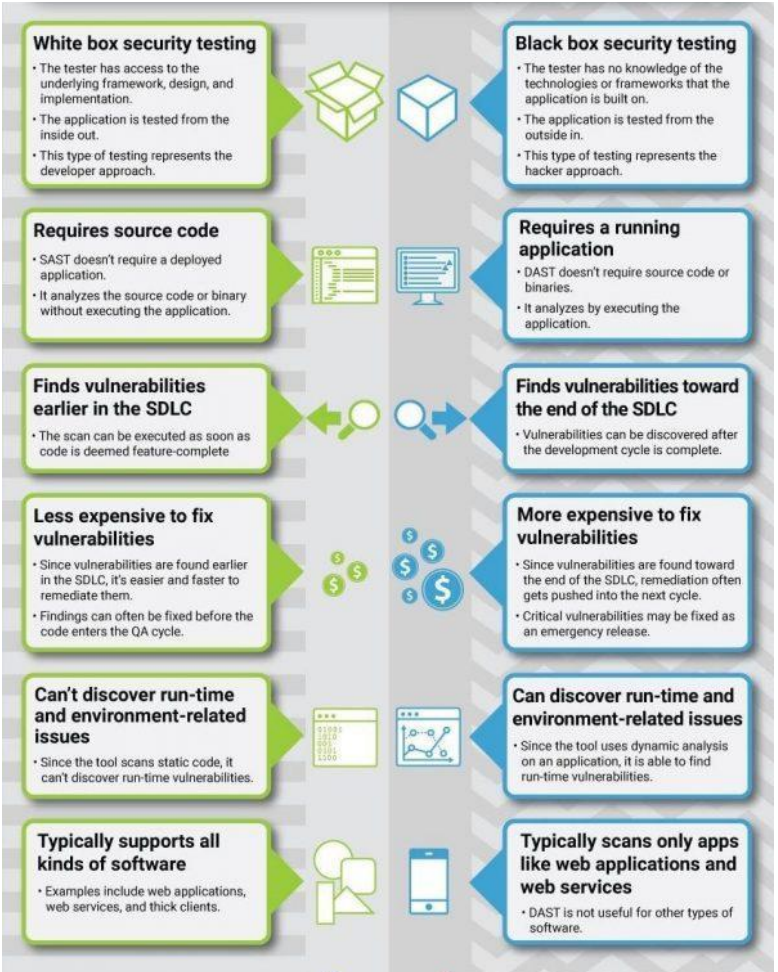
In multiple scenario testing, some 40 percent of tested projects were found to include security vulnerabilities.

GitHub Copilot is described as an "**AI pair programmer**" whose advanced AI

🎯 40% of Code Produced by GitHub Copilot Vulnerable to Threats

Build: SAST / DAST / IAST

SAST
DAST
IAST
App Security Test



AWS git-secrets / GitGuardian

GitGuardian

1 policy break detected!

ca-certificates.crt – FILE EXTENSIONS

2022-10-11 10:35:19 pm (UTC)

davidaparicio/namecheck

See on GitGuardian

SEE ON GITHUB

GitGuardian is an automated secrets detection service.
We help developers and security teams secure the modern software development process.

Sonar

```
246  if (Provider.class == roleTypeClass) {
247      Type providedType = ReflectionUtils.getLastTypeGenericArgument(dependen
248  2   Class providedClass = 1 ReflectionUtils.getTypeClass(providedType);
249
250      if (this.componentManager.hasComponent(providedType, dependencyDescript
251          || 3 providedClass.isAssignableFrom(List.class) || providedClass.
```

A "NullPointerException" could be thrown; "providedClass" is nullable here.

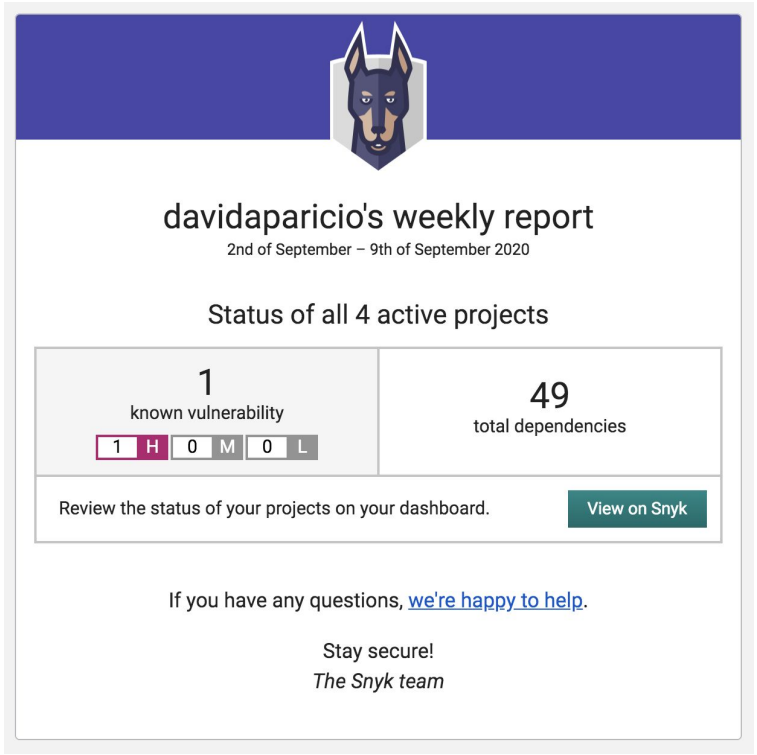
Bug Major cert, cwe

```
252          continue;
253      }
```

			New code Since last release	
Reliability				
Bugs	2	B	1	B
Security				
Security Vulnerabilities	0	A	0	A
Security Hotspots	39	-	0	-
Maintainability				
Technical Debt	6 days	C	0	A
Code Smells	319	-	0	-

 Sonar Dashboard

Snyk



🎯 Email report

DAST (Gitlab)

Language (package managers) / framework	Scan tool
.NET Core	Security Code Scan
C/C++	Flawfinder
Go	Gosec
Helm Charts	Kubesec
Java (Ant, Gradle, Maven, SBT)	SpotBugs with find-sec-bugs
Java / Kotlin (Android)	MobSF (beta)
JavaScript	ESLint security plugin
Kubernetes manifests	Kubesec
Node.js	NodeJsScan
PHP	phpcs-security-audit
Python (pip)	bandit

Available rules

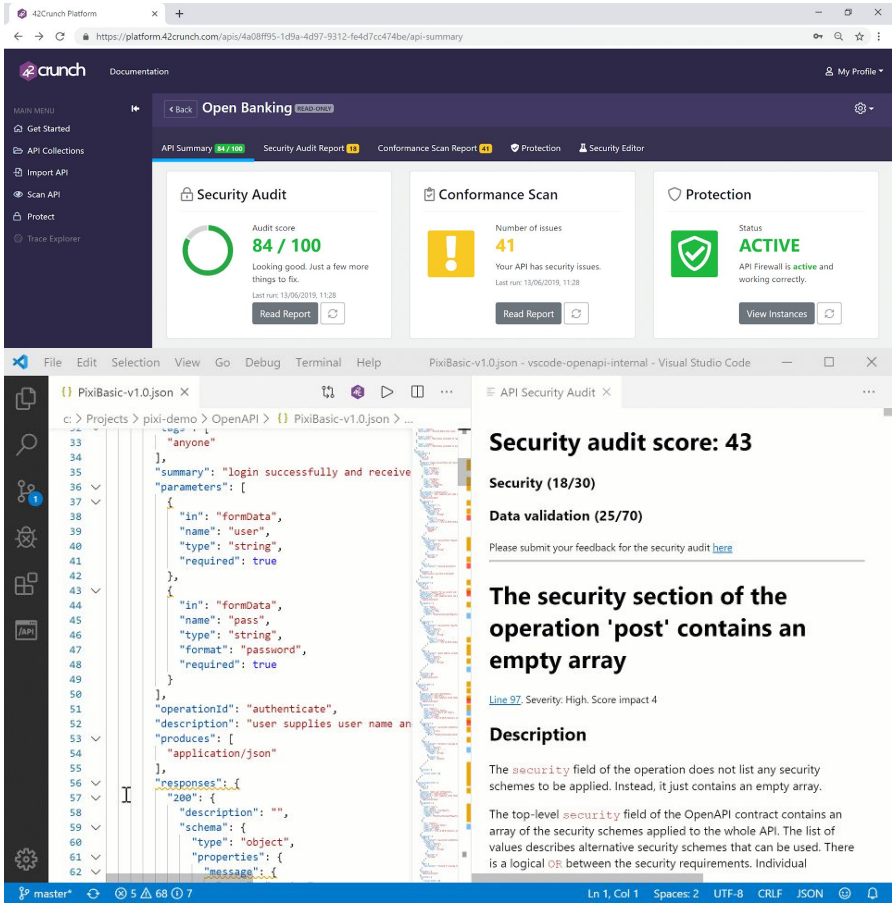
- G101: Look for hard coded credentials
- G102: Bind to all interfaces
- G103: Audit the use of unsafe block
- G104: Audit errors not checked
- G106: Audit the use of ssh.InsecureIgnoreHostKey
- G107: Url provided to HTTP request as taint input
- G108: Profiling endpoint automatically exposed on /debug/pprof
- G109: Potential Integer overflow made by strconv.Atoi result conversion to int16/32
- G110: Potential DoS vulnerability via decompression bomb
- G201: SQL query construction using format string
- G202: SQL query construction using string concatenation
- G203: Use of unescaped data in HTML templates
- G204: Audit use of command execution
- G301: Poor file permissions used when creating a directory
- G302: Poor file permissions used with chmod
- G303: Creating tempfile using a predictable path
- G304: File path provided as taint input
- G305: File traversal when extracting zip/tar archive
- G306: Poor file permissions used when writing to a new file
- G307: Deferring a method which returns an error
- G401: Detect the usage of DES, RC4, MD5 or SHA1
- G402: Look for bad TLS connection settings
- G403: Ensure minimum RSA key length of 2048 bits
- G404: Insecure random number source (rand)
- G501: Import blocklist: crypto/md5
- G502: Import blocklist: crypto/des
- G503: Import blocklist: crypto/rc4
- G504: Import blocklist: net/http/cgi
- G505: Import blocklist: crypto/sha1
- G601: Implicit memory aliasing of items from a range statement

Retired rules

- G105: Audit the use of math/big.Int.Exp - CVE is fixed

42Crunch
Scanner d'API

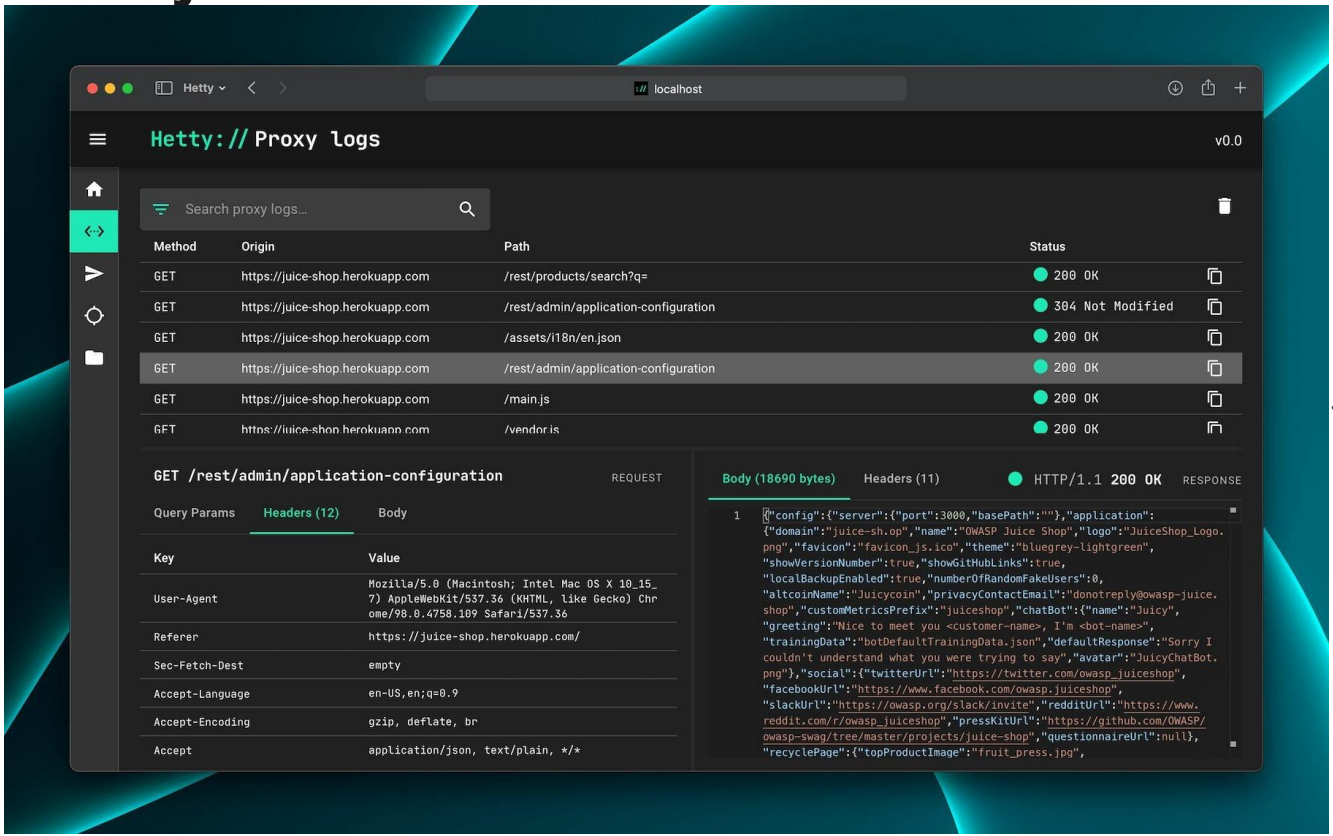
Utilise la spécification OpenAPI / Swagger pour identifier les faiblesses de votre API



🎯 [Protection contre le Top 10 de la sécurité de l'API de l'OWASP]

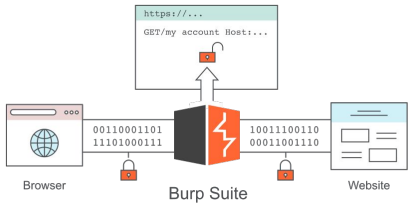
Test: PenTest

Proxy



🎯 [Security Bug Hunting with Proxies (Black Box)]

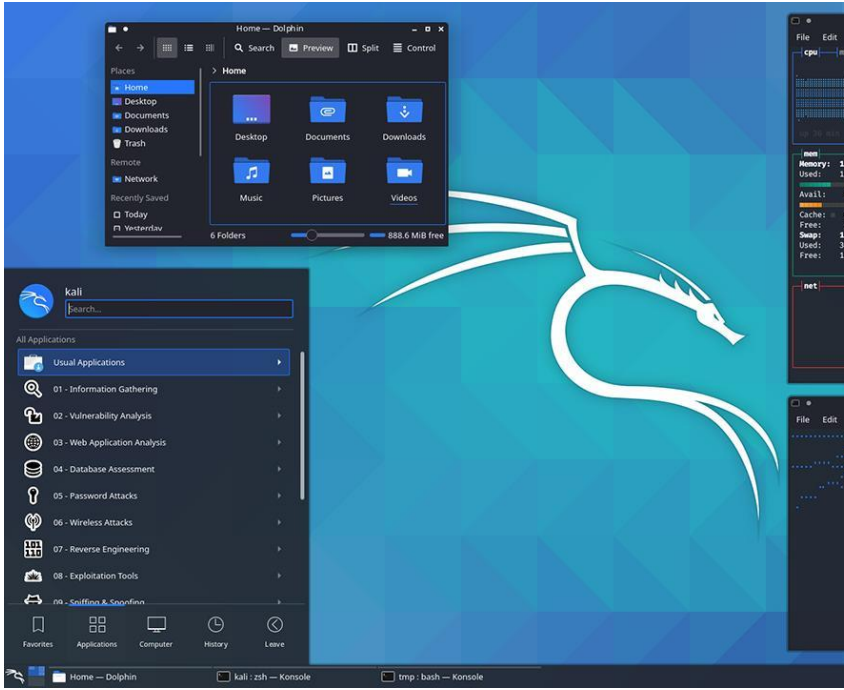
Hetty, Burp Suite, OWASP ZAP, mitmproxy, charles



Kali Linux / Parrot OS
Boîte à outils

Les tests d'intrusion sont un moyen de trouver et de colmater des brèches. Objectif: Simuler des attaques pour tester la robustesse de la plate-forme

- Nmap
- Metasploit
- Wireshark
- John The Ripper
- Hashcat
- Hydra
- Burp Suite
- Zed Attack Proxy (ZAP)
- sqlmap
- aircrack-ng



🎯 11 outils pour s'initier au pentest

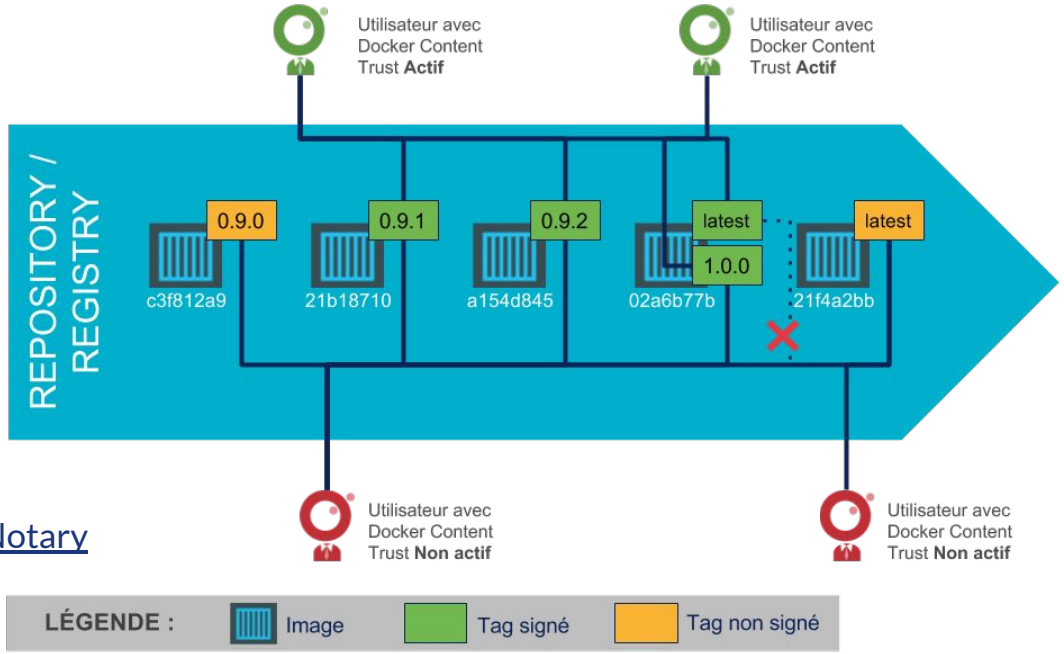
Hackers as a Service

🎯 YesWeHack / Yogosha

Release: Digital Signature

Docker Notary
Ready for PROD

Signer pour certifier et être avoir la garantie sur la provenance (non-altération)

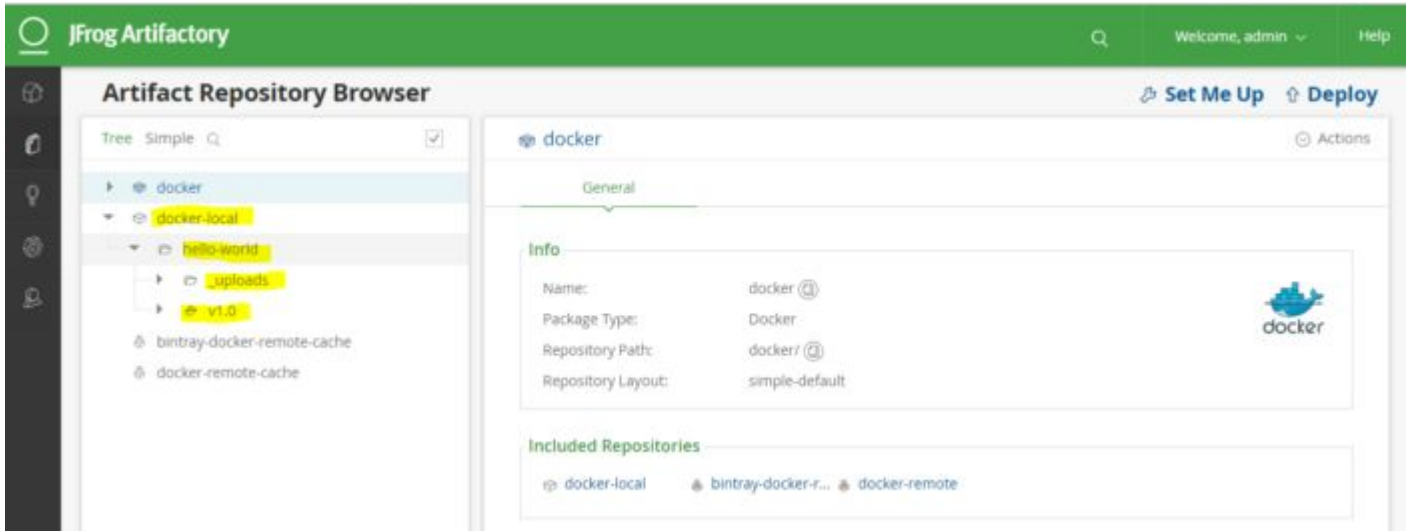


🎯 Documentation Docker Notary [EN]
La signature d'images Docker sur une Registry avec Notary

Deliver: Secure Transfer

JFrog Artifactory
Repository

Signer pour certifier, être avoir la garantie sur la provenance (non-altération), archiver et faciliter les rollbacks



Deploy: Security Conf/Scan

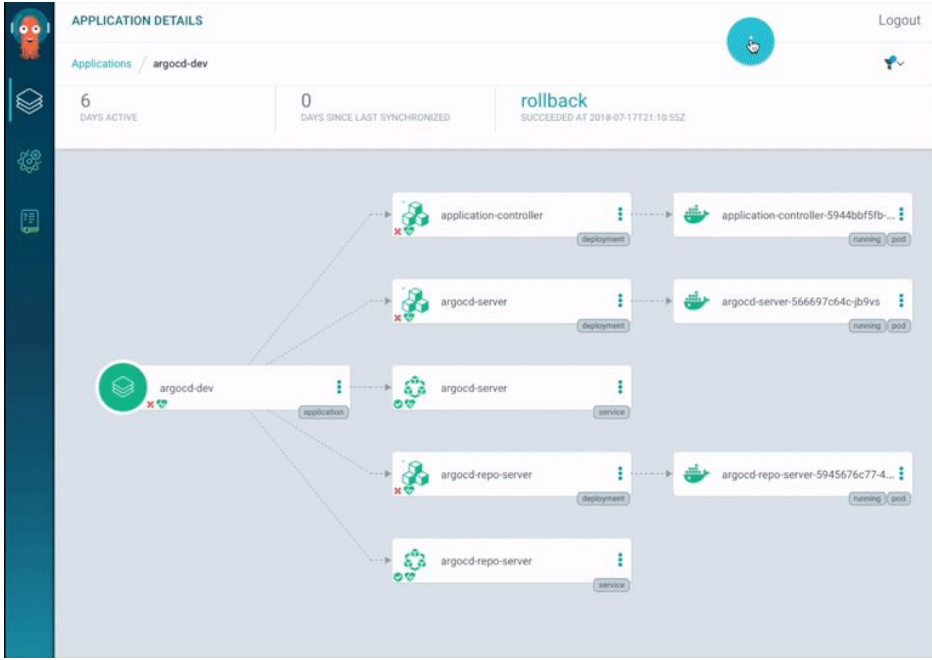
Argo CI + Vault

Keep immutable

Les définitions, configurations et environnements des applications doivent être déclaratifs et contrôlés par version. Le déploiement et la gestion du cycle de vie des applications doivent être automatisés, contrôlables et faciles à comprendre

-> Maintenir un système iso aux specs

🎯 Why Argo CD? [EN]



Operate: Secu. Patch/Audit

Ansible / Chef / Puppet
Patch & Reboot

Maintenir un système à jour en installant les patchs de sécurité

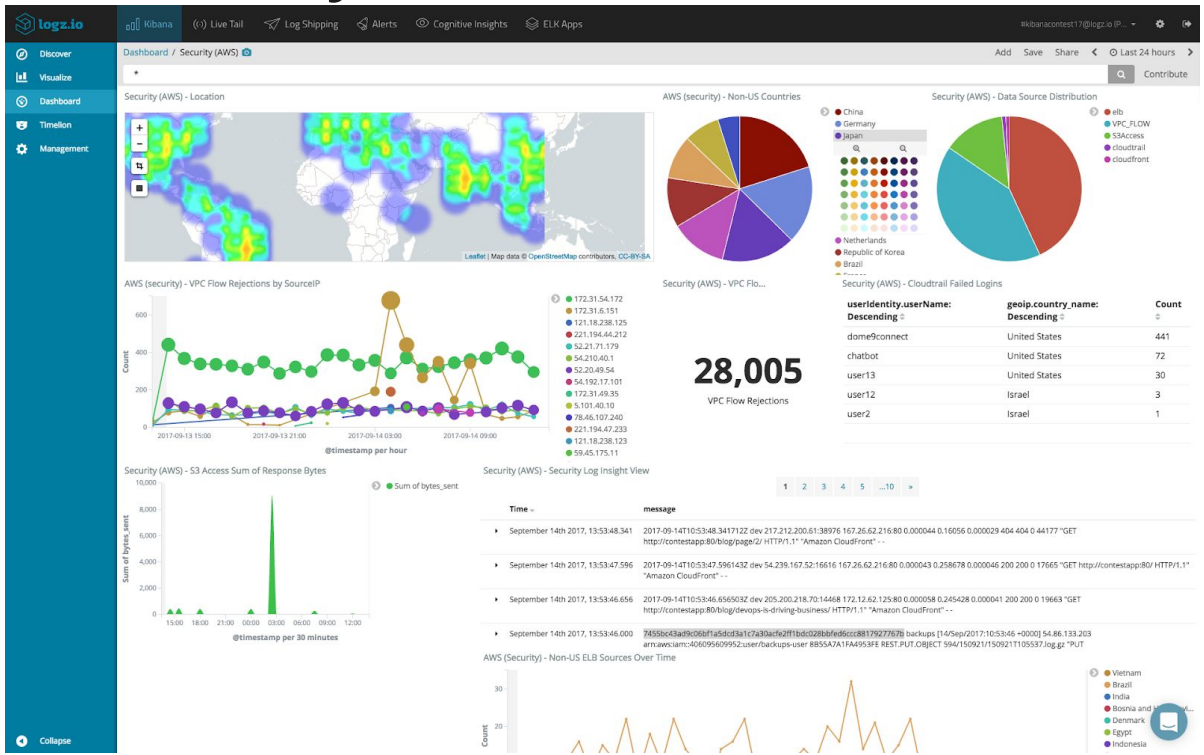
- Linux
- Windows
- Mac OS
- iOS
- Android
- /e/
- etc...

🎯 Playbook: apply patches & perform a reboot if required

```yaml
---
- name: Patch and reboot servers
  hosts: all
  vars:
    yum_name: "*"
    yum_state:  latest
    yum_securityrepo: yes
    yum_enablerepo: "rhel-?-server-rpms,rhel-?-server-satellite-tools-6.?-rpms"
    yum_disablerepo: "*"
    yum_exclude: ""
  tasks:
    - name: upgrade packages via yum
      yum:
        name={{ yum_name }}
        state={{ yum_state }}
        security={{ yum_securityrepo }}
      become: "yes"
      register: yumcommandout
      when:
        - (ansible_facts['distribution_major_version'] == '6') or
          (ansible_facts['distribution_major_version'] == '7')

    - name: display security packages
      debug:
        msg: "security patches for: {{ yumcommandout.changes.updated }}"
      when: yumcommandout.changes is defined

    - name: check to see if we need a reboot
      command: needs-restarting -r
      register: result
      ignore_errors: yes
      changed_when: false #avoid changed

    - name: Reboot Server if Necessary
      command: shutdown -r now "Ansible Updates Triggered"
      become: true
      async: 30
      poll: 0
      when: result.rc is defined and result.rc == 1
```

Monitor: Security Monitoring

Elastic Security



[SIEM at the speed of Elasticsearch]

Falco

- Runtime detection
- Alerts

Falco

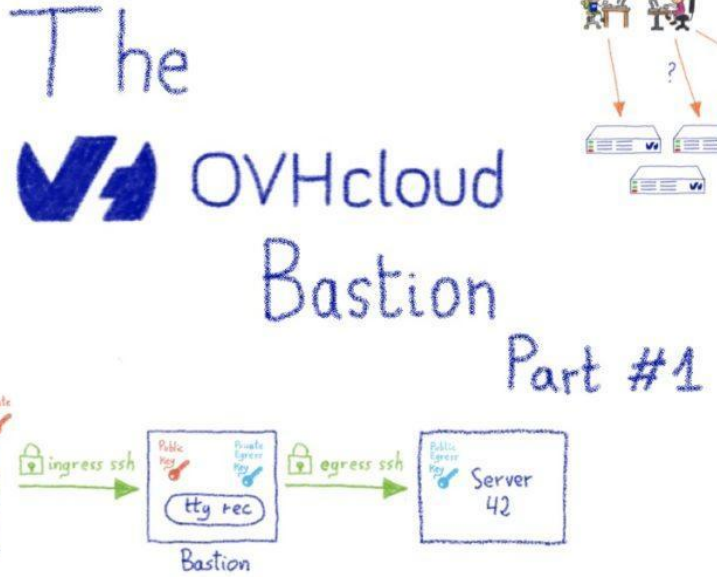
Build	Run	Respond
• Image Scanning • Configuration Validation	• Runtime prevention • Automated policy creation using ML • Policy editor and rules library • Automatic remediation • Falco Tuning	• Incident Response • Forensics • Audit

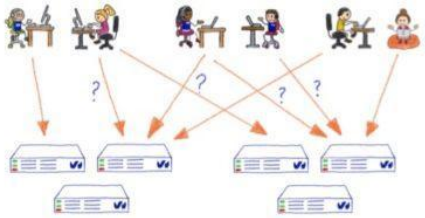
sysdig

← Continuous Compliance (PCI, NIST, CIS, etc.) →

🎯 Kris Nova, Fixing the Kubernetes clusterfuck @FOSDEM

OVH Bastion (SSH proxy)



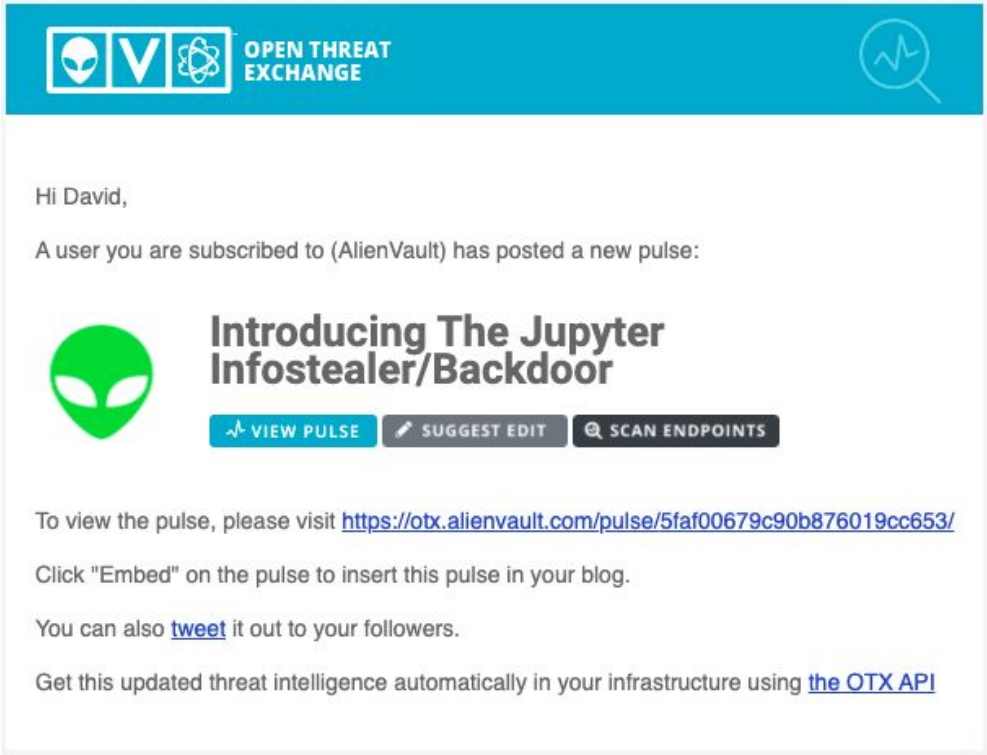


```
slesimpl@                    :~$ zdevbst --osh help
*------------------------------------------------------------------------------*
|THIS IS A PRIVATE COMPUTER SYSTEM, UNAUTHORIZED ACCESS IS STRICTLY PROHIBITED.|
|ALL CONNECTIONS ARE LOGGED. IF YOU ARE NOT AUTHORIZED, DISCONNECT NOW.        |
*------------------------------------------------------------------------------*
Enter PIN for 'PIV Card Holder pin (PIV_II)':
---                                    ----------------the-bastion-2.99.99-rc9.2-ovh1---
=> OSH help
------------------------------------------------------------------------------
~  > MANAGE YOUR ACCOUNT
~     - manage your ingress credentials (you->bastion):
~       selfListIngressKeys                    selfAddIngressKey selfDelIngressKey
~
~
~     - manage your egress credentials (bastion->server):
~       selfListEgressKeys selfGenerateEgressKey
~     - manage your accesses to servers:
~       selfListAccesses selfAddPersonalAccess selfDelPersonalAccess
~
~
~
~
```

Blog article / Documentation / Source Code

Feedback: Secu. Analysis

AlienVault OTX



🎯 OTX: Open Threat Exchange [EN]

AlienVault OTX

Browse | Scan Endpoints | Create Pulse | Submit Sample | API Integration | All | Search OTX

Introducing The Jupyter Infostealer/Backdoor

CREATED 2 DAYS AGO by AlienVault | Public | TLP: White

During what began as a routine incident response process, Morphisec has identified (and prevented) a new .NET infostealer variant called Jupyter. Morphisec discovered this variant as part of assisting a higher education customer in the U.S. with their incident response. Jupyter is an infostealer that primarily targets Chromium, Firefox, and Chrome browser data. However, its attack chain, delivery, and loader demonstrate additional capabilities for full backdoor functionality.

REFERENCE: https://www.morphisec.com/hubfs/eBooks_and_Whitepapers/Jupyter%20Infostealer%20WEB.pdf

TAGS: Jupyter Loader, Infostealer, Backdoor, Academia, Russian Actors, Docx2Rtf, Magix Photo Manager, Jupyter Client, PoshC2

INDUSTRY: Education

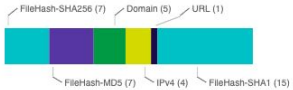
MALWARE FAMILIES: PoshC2 - S0378, Jupyter Loader, Jupyter Client

ATT&CK IDS:

T1564 - Hide Artifacts, T1033 - System Owner/User Discovery, T1082 - System Information Discovery, T1140 - Deobfuscate/Decod
T1127 - Trusted Developer Utilities Proxy Execution, T1059.001 - PowerShell, T1055.012 - Process Hollowing, T1036 - Masquerading,
T1217 - Browser Bookmark Discovery, T1560.001 - Archive via Utility, T1059.003 - Windows Command Shell, T1547.001 - Registry Run
T1049 - System Network Connections Discovery, T1016 - System Network Configuration Discovery

ENDPOINT SECURITY Scan your endpoints for IOCs from this Pulse!

Indicators of Compromise (39) | Related Pulses (8) | Comments (0) | History (0)



TYPES OF INDICATORS

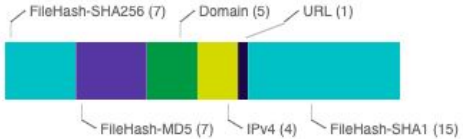
THREAT INFRASTRUCTURE

Show 10 entries

TYPE	INDICATOR	ROLE	TITLE
IPv4	91.241.19.21		

© COPYRIGHT 2020 ALIENVAULT, INC. | LEGAL | STATUS |

Indicators of Compromise (39) | Related Pulses (8) | Comments (0) | History (0)



TYPES OF INDICATORS

THREAT INFRASTRUCTURE

Show 10 entries

TYPE	INDICATOR	ROLE	TITLE
IPv4	91.241.19.21		
IPv4	45.146.165.219		
IPv4	45.146.165.222		
IPv4	45.135.232.131		
FileHash-SHA1	6ad28e1810eb1be26e835e5224e78e13576887b9		

🎯 Introducing The Jupyter Infostealer/Backdoor

OpenCVE

SAUCS

Search... Sign in Register

Have an account ?

- Vulnerabilities (CVE)
- Vendors (CPE)
- Categories (CWE)

FILTER

Search

ALL LOW MEDIUM HIGH

130145 total CVE

CVE	Vendors	Products	Updated	CVSS
CVE-2019-2215	1 Google	1 Android	2019-10-16	4.6
A use-after-free in binder.c allows an elevation of privilege from an application to the Linux Kernel. No user interaction is required to exploit this vulnerability, however exploitation does require either the installation of a malicious local...				
CVE-2019-2183	1 Google	1 Android	2019-10-16	2.1
In generateServicesMap of RegisteredServicesCache.java, there is a possible account protection bypass due to a caching optimization. This could lead to local information disclosure with no additional execution privileges needed. User interaction...				
CVE-2019-9533	1 Cobham	1 Explorer 710 Firmware	2019-10-16	10.0
The root password of the Cobham EXPLORER 710 is the same for all versions of firmware up to and including v1.08. This could allow an attacker to reverse-engineer the password from available versions to gain authenticated access to the device.				
CVE-2019-2187	1 Google	1 Android	2019-10-16	2.1
In nfc_ncif_decode_rf_params of nfc_ncif.cc, there is a possible out of bounds read due to an integer underflow. This could lead to local information disclosure with no additional execution privileges needed. User interaction is not needed for...				
CVE-2019-17420	2 Oisf, Suricata-ids	2 Libhtp, Suricata	2019-10-16	5.0
In OISF LibHTP before 0.5.31, as used in Suricata 4.1.4 and other products, an HTTP protocol parsing error causes the http_header signature to not alert on a response with a single \r\n ending.				
CVE-2019-2184	1 Google	1 Android	2019-10-16	9.3
In PV_DecodePredictedIntraDC of dec_pred_intra_dc.cpp, there is a possible out of bounds write due to a missing bounds check. This could lead to remote code execution with no additional execution privileges needed. User interaction is needed for...				

Site Web OpenCVE

OpenCVE / Vue d'une CVE

CVE-2019-2215

CVE-2019-2215

A use-after-free in binder.c allows an elevation of privilege from an application to the Linux Kernel. No user interaction is required to exploit this vulnerability, however exploitation does require either the installation of a malicious local application or a separate vulnerability in a network facing application.Product: AndroidAndroid ID: A-141720095

CVSS v3.0 7.8 HIGH | CVSS v2.0 4.6 MEDIUM

7.8 /10
CVSS v3.0 : HIGH
V3 Legend

Attack Vector	LOCAL	Confidentiality Impact	HIGH
Attack Complexity	LOW	Integrity Impact	HIGH
Privileges Required	LOW	Availability Impact	HIGH
User Interaction	NONE	Scope	UNCHANGED

Vector :

Exploitability : 1.8 / **Impact :** 5.9

References

Link	Resource
http://packetstormsecurity.com/files/154911/Android-Binder-Use-After-Free.html	
http://packetstormsecurity.com/files/155212/Slackware-Security-Advisory-Slackware-14.2-kernel-Updates.html	
http://packetstormsecurity.com/files/156495/Android-Binder-Use-After-Free.html	
http://seclists.org/fulldisclosure/2019/Oct/38	

CERT-FR (Flux RSS)

Menaces et incidents

MENACES ET INCIDENTS

LE MALWARE-AS-A-SERVICE EMOTET

CERTFR-2020-CTI-010 • *Publié le 2 novembre 2020*

Observé pour la première fois en 2014 en tant que cheval de Troie bancaire, Emotet a évolué vers une structure modulaire à partir de 2015. Depuis 2017, Emotet …

DEVELOPMENT OF THE ACTIVITY OF THE TA505 CYBERCRIMINAL GROUP

CERTFR-2020-CTI-009 • *Publié le 27 août 2020*

The intrusion set TA505 has been active since at least 2014 when it initially stole financial information through the use of Dridex and mass distributed ransomwares. It evolved and …

THE MALWARE DRIDEX: ORIGINS AND USES

CERTFR-2020-CTI-008 • *Publié le 17 juillet 2020*

Surfacing in June 2014 as a variant of the banking trojan Bugat, Dridex is a malware which has evolved a lot since then in terms of functionalities and uses. This report provides …

Lifecycle: Decommission

Planification (LTS/Migration/EoL)

techradar.pro IT INSIGHTS FOR BUSINESS US Edition

News Security Web hosting VPN Website builder Resourc

Home > News > Computing

ATM security still running Windows XP

By Anthony Spadafora November 15, 2018

New study reveals ATM security is mostly for show

New research from Positive Technologies has revealed that ATM machines are vulnerable to a number of basic attack techniques that could allow hackers to steal thousands in cash.

The company's researchers studied over two dozen different models of ATMs and discovered that almost all of them are vulnerable to network or local access attacks that would allow hackers to obtain money from them illegally.

Positive Technologies' study had its researchers try to penetrate 26 machines from various manufacturers and service providers.

The researchers found that 15 of the ATMs were running Windows XP, 22 were vulnerable to a "network spoofing" attack, 18 were vulnerable to 'black box' attacks, 20 could be forced to exit kiosk mode via USB or PS/2 and 24 had no data encryption in place on their hard drives.

PAYMENTS INDUSTRY INTELLIGENCE Payments Cards & Mobile

NEWS PUBLICATIONS RESEARCH CONSULTING CONFERENCES / ADVERTISE / WEBINA

HOME > DAILY NEWS > ATM MIGRATION TO WINDOWS 10 – THE TIME IS NEAR!

ATM migration to Windows 10 – the time is near!

BY ALEX ROLFE DECEMBER 11, 2019 DAILY NEWS SHARE: 2,903 VIEWS

The banking sector will face a big ATM migration challenge in 2020. Microsoft made the official announcement: Windows 7 (operating system for many ATMs) extended support will end on January 14, 2020. Consequently, all banks have to update their entire ATM network by installing a new operating system caring about data security.

There are about 3.2 million ATMs in the world. They are used daily by billions of people, but only a few know that most ATMs work on the Windows operating system.

ATM migration to Windows 10 – the time is near!

A lot of ATMs around the globe are still running Windows XP embedded, long after Microsoft ceased support with security and stability patches. Support for Windows XP was discontinued in 2014, which means that since then the Microsoft Company has not rolled out any security updates for this Windows version.

In June 2018, The Central Bank of India issued a statement saying that all ATMs in the country should be updated from Windows XP to the newer platform by December 2019. It is estimated that about 50% of ATMs use Windows XP operating system.

Synthèse

DevSecOps Toolbox

- Secure Coding
  - Linters, gosec, npm-audit, git-secrets/GitGuardian, 42Crunch
- Security as Code
  - Cilium (Network), gVisor/Kata (Sandbox), Istio/maesh (SSL)
- SAST / DAST / IAST
  - SonarQube, Gitlab SAST/GitHub, Clair/Anchore/Dagda (CVE)
- Pentest
  - Parrot/Kali OS, YesWeHack/Yogosha, Hetty/Burp Suite/SuperTruder/ffuf, OWASP ZAP
- Digital signature / Secure Transfer
  - Notary, JFrog Artifactory
- Security Configuration, Security Scan
  - Argo+Vault, OpenSCAP
- Security Patching, Security Audit
  - Puppet, Chef, Ansible Playbook/AWX ou RedHat Tower
- Security Monitoring
  - Elastic Security, Falco, OVH Bastion
- Security Analysis
  - OpenCVE, AlienVault OTX

And more… (not exhaustive) 🤓

Open Source Security Scanning -- focus on cloud native

Vulnerability Scans

- Trivy
- Clair
- Syft

IaC Misconfiguration Scans

- Trivy
- tfsec
- terrascan
- KICS
- checkov

Secret Scanning

- tfsec (terraform)
- Trivy (K8s)
- squealer
- gittyleaks
- gitleaks
- git-all-secrets

many-more non cloud native

Compliance Scans

- kube-bench CIS
- kube-beacon CIS
- Starboard NSA
- Kubescape NSA

SBOM

- Trivy
- Syft

In-Cluster Scans

- Trivy
- Kubescape
- kube-hunter

chain-bench

Conclusion

TL;DR - The state of open source security 2019 report, at a glance

Open source adoption

- Growth in indexed packages, 2017 to 2018
  - Maven Central - 102%
  - PyPI - 40%
  - npm - 37%
  - NuGet - 26%
  - RubyGems - 5.6%
- npm reported 304 billion downloads for 2018
- 78% of vulnerabilities are found in indirect dependencies

Known vulnerabilities

- 88% growth in application vulnerabilities over two years
- In 2018, vulnerabilities for npm grew by 47%. Maven Central and PHP Packagist disclosures grew by 27% and 56% respectively
- In 2018, we tracked over 4 times more vulnerabilities found in RHEL, Debian and Ubuntu as compared to 2017

Known vulnerabilities in docker images

- Each of the top ten most popular default docker images contains at least 30 vulnerable system libraries
- 44% of scanned docker images can fix known vulnerabilities by updating their base image tag

Vulnerability identification

- 37% of open source developers don't implement any sort of security testing during CI and 54% of developers don't do any docker image security testings
- The median time from when a vulnerability was added to an open source package until it was fixed was over 2 years

Who's responsible for open source security?

- 81% of users feel developers are responsible for open source security
- 68% of users feel that developers should own the security responsibility of their docker container images
- Only three in ten open source maintainers consider themselves to have high security knowledge

Snyk stats

- In the second half of 2018 alone, Snyk opened more than 70,000 Pull Requests for its users to remediate vulnerabilities in their projects
- CVE/NVD and public vulnerability databases miss many vulnerabilities, only accounting for 60% of the vulnerabilities Snyk tracks
- In 2018 alone, 500 vulnerabilities were disclosed by Snyk's proprietary dedicated research team

[The state of open source security – 2019]

Analogie

« Nul n’est censé ignorer la loi »

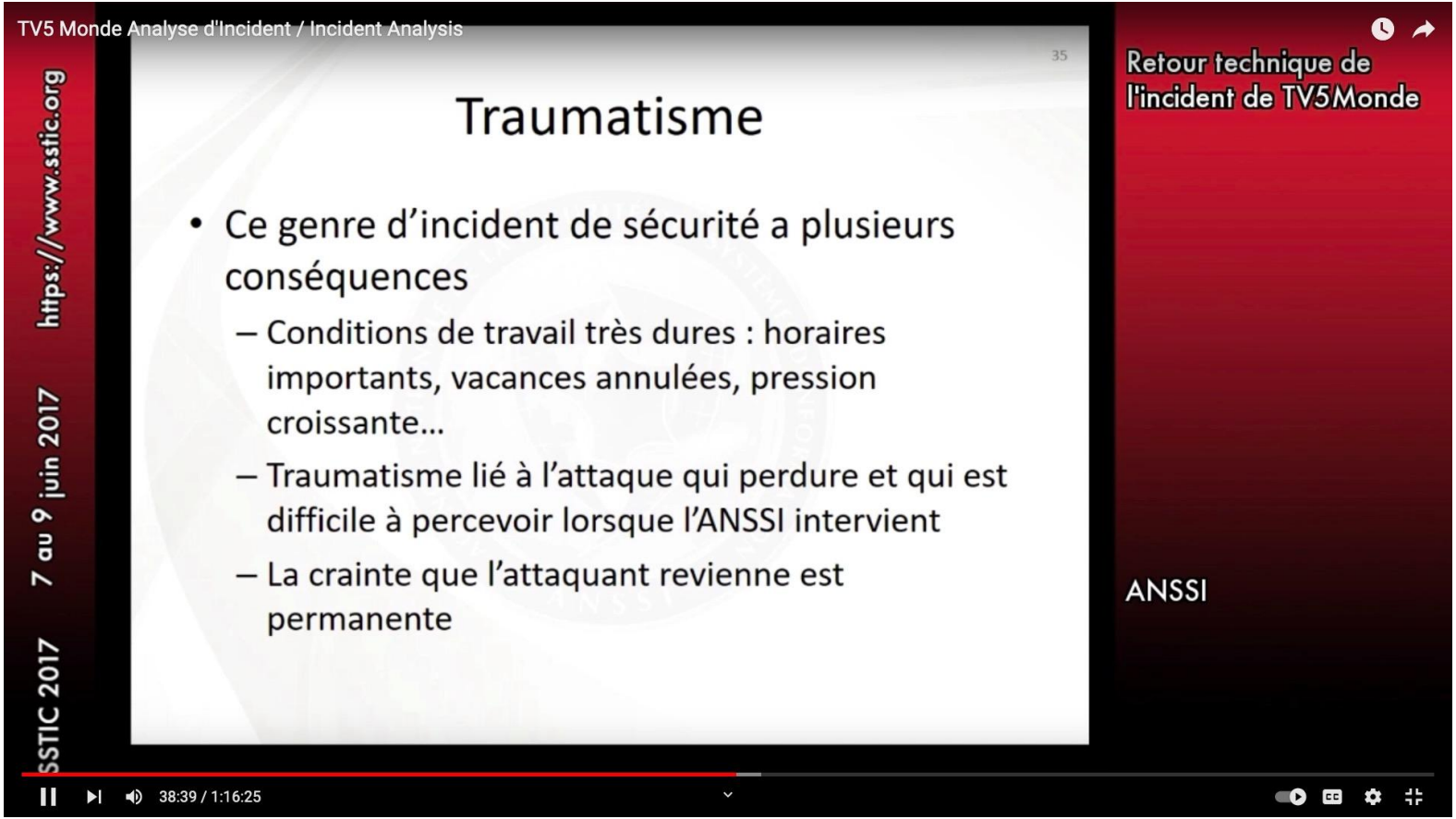
Ma devise

« Nul développeur n'est censé ignorer la sécurité »

🎯 Pour aller plus loin

- ANSSI (Sécurité Agile, Applications sécurisés en Rust, Déploiement de conteneurs Docker)
- 10 leçons sur les 10 plus grosses fuites de données, de Adrien Pessu (JSC 2020)
- La Cryptographie en 55' chrono de m4dz (SnowCamp2020)
- Sécurité du Cloud, de Eric Briand (RemoteClazz 2020)
- La nuit tous les hackers sont gris (Fiction écrite par Vincent Hazard, 2019)

Pour aller plus loin



TV5 Monde Analyse d'Incident, ANSSI (SSTIC 2017)

Pour aller plus loin

🎯 La Sécurité dès la conception (Secure by design), Programmez! (Hors-série 8 Septembre/Octobre 2022)

Rappelez-vous: Les hackers n'en ont rien à "faire"

- ❏ À propos du scope de votre projet
- ❏ Il est géré par une tierce partie / sous-traitant
- ❏ C'est un système ancien (Legacy)
- ❏ TPCM / " Touche pas ! C'est magique "
- ❏ C'est "trop critique pour être réparé"
- ❏ A propos de vos périodes de maintenance
- ❏ A propos de votre budget
- ❏ Vous l'avez toujours fait de cette façon
- ❏ À propos de votre date de mise en service
- ❏ Il s'agit seulement d'un pilote/PoC
- ❏ À propos des accords de non-divulgation
- ❏ Ce n'était pas une exigence dans le contrat
- ❏ C'est un système interne
- ❏ Il est vraiment difficile de modifier / changer
- ❏ Vous n'êtes pas sûr de savoir comment y remédier
- ❏ Il doit être remplacé
- ❏ C'est géré dans le Cloud
- ❏ À propos de votre inscription au registre des risques
- ❏ L'éditeur ne prend pas en charge cette configuration
- ❏ C'est une solution provisoire
- ❏ Il est conforme à [insérer la norme ici]
- ❏ Il est crypté sur disque
- ❏ Le rapport coût-bénéfice ne scale pas
- ❏ "Personne d'autre ne pouvait le comprendre"
- ❏ Vous ne pouvez pas expliquer le risque au "Business"
- ❏ Vous avez d'autres priorités
- ❏ Sur votre foi dans la compétence de vos utilisateurs internes
- ❏ Vous n'avez pas de justification commerciale
- ❏ Vous ne pouvez pas montrer le retour sur investissement
- ❏ Vous avez sous-traité ce risque
- ❏ C'était à la mode [insérer la technologie hype ici].
- ❏ De vos certifications

🎯 @dadideo + Kiwicon 2009 / Hackers don't give a shit

Merci pour votre attention !

👩‍🏫📢 N'oubliez pas de me donner votre avis sur cette session: https://feedback.touraine.tech

📃 Lien des slides dans les commentaires ⬆️

👍 Rejoignez-nous sur https://careers.ovhcloud.com

Faites-vous confiance aux QRCodes ?

Problèmes

- Cluster sans Kerberos (MapR ticket)
- Pas de 50/50 (épuisement)
- Temps de livraison (junior)
- Sécurité ? (auto-formation)
- Chiffrement des sauvegardes
- Accompagnement du Management