

- 1 Hello,
- ² I'm Roeland from Aikido,
- 3 talking about



4

- 5 SecOps, AppSec, Software Security, ...
- 6 Shift Left & OWASP top 10

7

⁸ → aikido.dev



Hacking is a growing problem

64%

Of companies have experienced a cyberattack in 2022

\$4.350.000

Average cost of a data breach in 2022

Pushing software security to go mainstream

The Old World

Enterprise only



We'll take care about AppSec when we're bigger and have time.

The New World

Tech companies

SW agencies

Enterprise



We need to care about AppSec from day 1.

Shift-left

Frameworks

Cloud

Incidents

Open-source

Dev Tooling

SOC2 & ISO27001



As a ... CTO, CISO, Security Engineer, ...

ISO 27001:2022

SOC 2 Type 2

GRC systems (Vanta, Drata, ...)

Pentest

OWASP top 10

Security Questionnaires

Bug Bounty Program

EU CRA - NIS2



As a ... CTO, VP Engineering, DevOps Engineer, ...

Leaked Secrets

Cloud Misconfigurations

Open-Source Dependencies

Malware

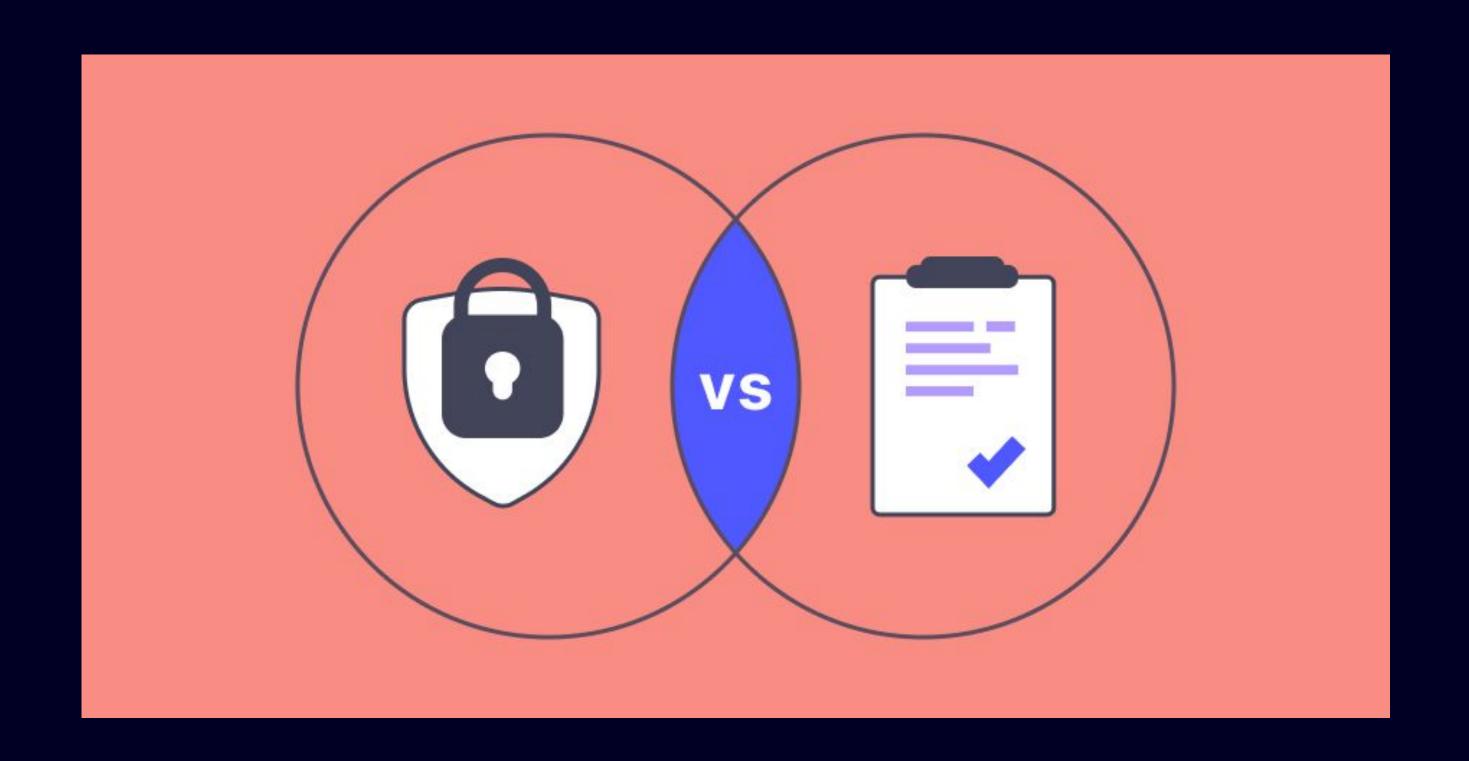
License Risks

Outdated Packages

Dynamic Testing - DAST

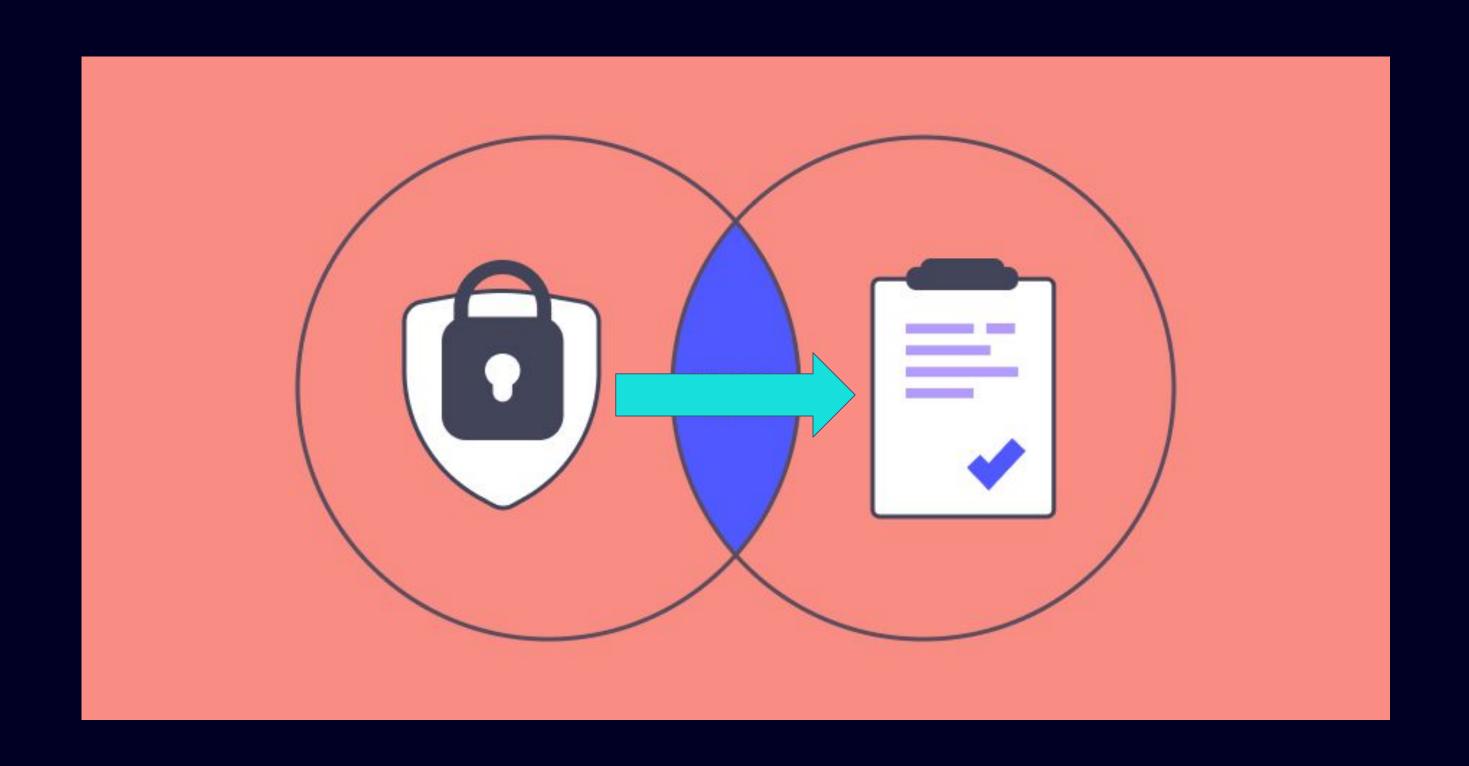


Security vs. Compliance



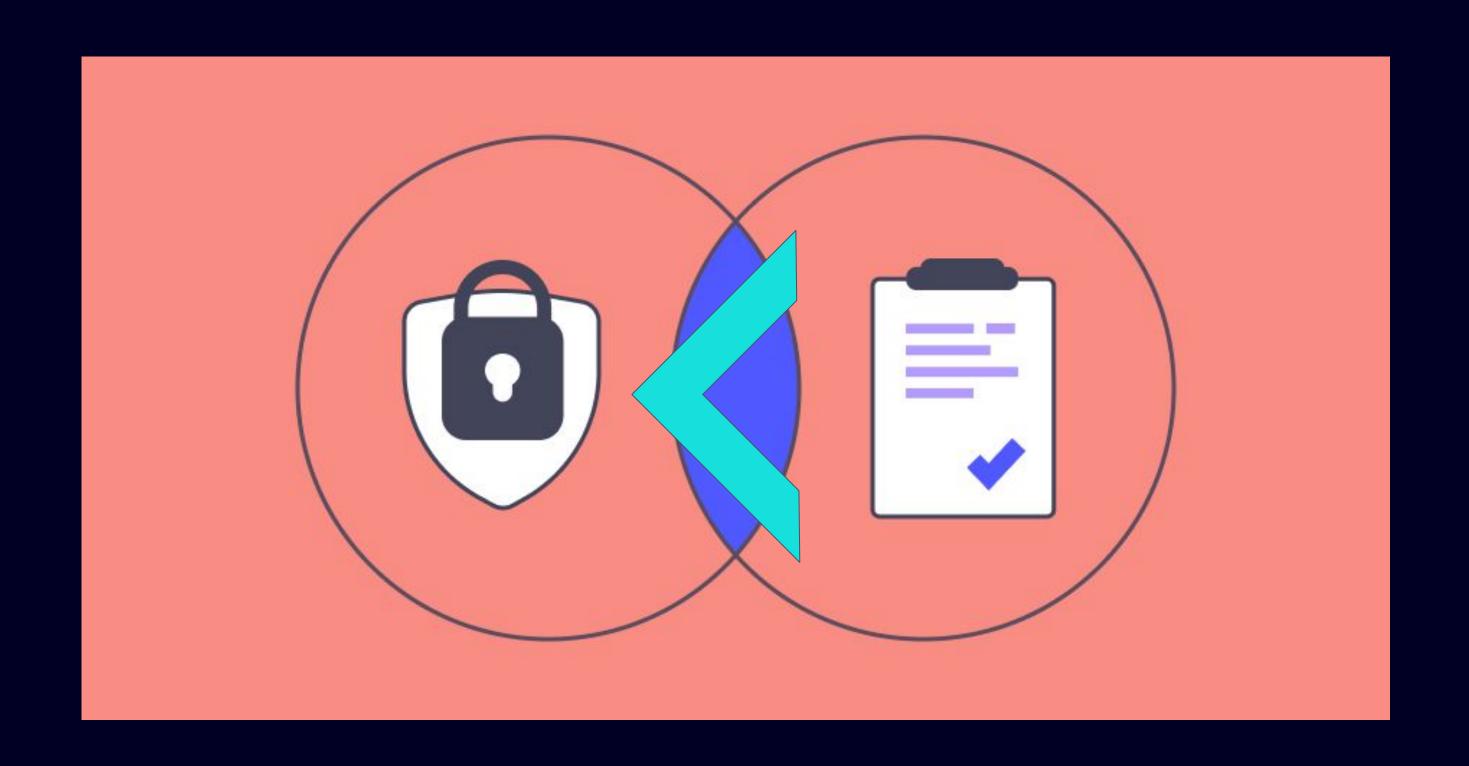


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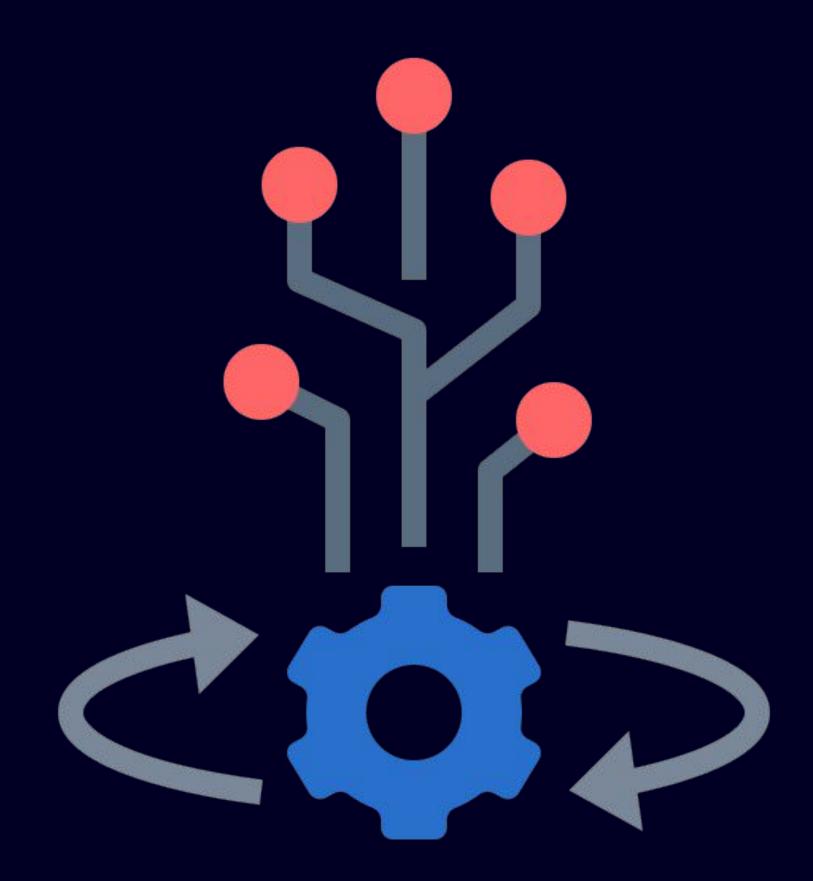


Security vs. Compliance





Integrate & Automate





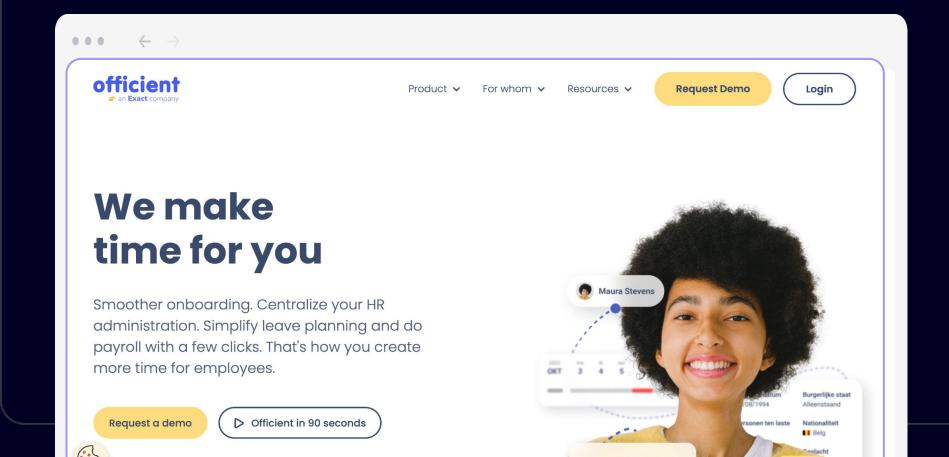
Where to start?

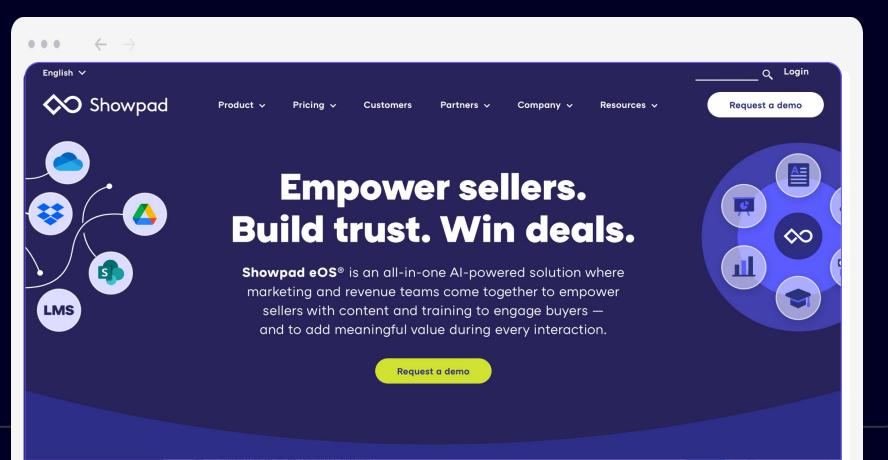
What to focus on?

Past Experiences

Officient HR Tech

Showpad
Sales Tech







OWASP TOP 10

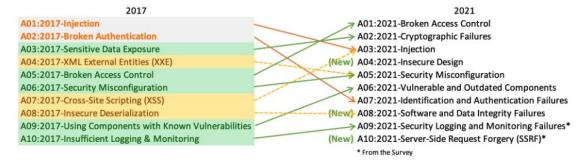


Open Web Application Security Project

https://owasp.org/www-project-top-ten/

Top 10 Web Application Security Risks

There are three new categories, four categories with naming and scoping changes, and some consolidation in the Top 10 for 2021.



- A01:2021-Broken Access Control moves up from the fifth position; 94% of applications were tested for some form of broken access control. The 34 Common Weakness Enumerations (CWEs) mapped to Broken Access Control had more occurrences in applications than any other category.
- A02:2021-Cryptographic Failures shifts up one position to #2, previously known as Sensitive Data Exposure, which was
 broad symptom rather than a root cause. The renewed focus here is on failures related to cryptography which often leads
 to sensitive data exposure or system compromise.
- A03:2021-Injection slides down to the third position. 94% of the applications were tested for some form of injection, and
 the 33 CWEs mapped into this category have the second most occurrences in applications. Cross-site Scripting is now part
 of this category in this edition.
- A04:2021-Insecure Design is a new category for 2021, with a focus on risks related to design flaws. If we genuinely want
 to "move left" as an industry, it calls for more use of threat modeling, secure design patterns and principles, and reference
 architectures.
- A05:2021-Security Misconfiguration moves up from #6 in the previous edition; 90% of applications were tested for some form of misconfiguration. With more shifts into highly configurable software, it's not surprising to see this category move up.
 The former category for XML External Entities (XXE) is now part of this category.
- A06:2021-Vulnerable and Outdated Components was previously titled Using Components with Known Vulnerabilities
 and is #2 in the Top 10 community survey, but also had enough data to make the Top 10 via data analysis. This category
 moves up from #9 in 2017 and is a known issue that we struggle to test and assess risk. It is the only category not to have
 any Common Vulnerability and Exposures (CVEs) mapped to the included CWEs, so a default exploit and impact weights
 of 5.0 are factored into their scores.
- A07:2021-Identification and Authentication Failures was previously Broken Authentication and is sliding down from the second position, and now includes CWEs that are more related to identification failures. This category is still an integral part of the Top 10, but the increased availability of standardized frameworks seems to be helping.
- A08:2021-Software and Data Integrity Failures is a new category for 2021, focusing on making assumptions related to
 software updates, critical data, and CI/CD pipelines without verifying integrity. One of the highest weighted impacts from
 Common Vulnerability and Exposures/Common Vulnerability Scoring System (CVE/CVSS) data mapped to the 10 CWEs
 in this category. Insecure Deserialization from 2017 is now a part of this larger category.
- A09:2021-Security Logging and Monitoring Failures was previously Insufficient Logging & Monitoring and is added from
 the industry survey (#3), moving up from #10 previously. This category is expanded to include more types of failures, is
 challenging to test for, and isn't well represented in the CVE/CVSS data. However, failures in this category can directly
 impact visibility, incident alerting, and forensics.
- A10:2021-Server-Side Request Forgery is added from the Top 10 community survey (#1). The data shows a relatively
 low incidence rate with above average testing coverage, along with above-average ratings for Exploit and Impact potential.
 This category represents the scenario where the security community members are telling us this is important, even though
 it's not illustrated in the data at this time.

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Crown Jewels (Cloud, Code, ...) → CSPM, ASPM, ...

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CI, Git, Databases → SAST

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Leaked Secrets

Cloud Misconfigurations

Open-Source Dependencies

Malware

License Risks

Runtime protection

Dynamic Testing - DAST







Cloud Misconfigurations

Open-Source Dependencies

Malware

License Risks

Runtime protection

Dynamic Testing - DAST











Open-Source Dependencies

Malware

License Risks

Runtime protection

Dynamic Testing - DAST















Malware

License Risks

Runtime protection

Dynamic Testing - DAST



















License Risks

Runtime protection

Dynamic Testing - DAST























Runtime protection

Dynamic Testing - DAST



























Dynamic Testing - DAST

































































But... current security software s*cks

Scattered tooling

Mix of closed & open-source. Alerts across solutions. Lacks overview.









Loads of false positives. Notification overload & alert fatigue.









UX Nightmare like a fighter-jet cockpit. Makes you feel dumb. No Self-serve.







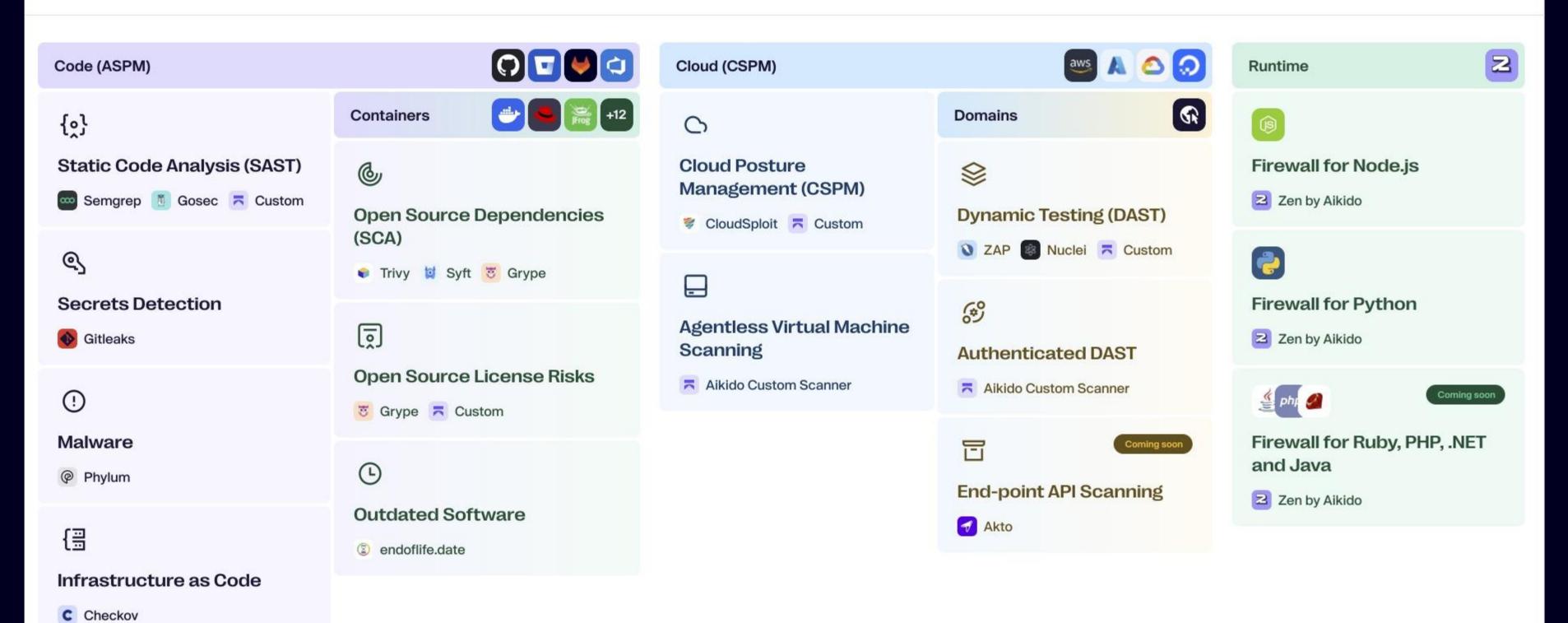
Ridiculous prices. Can't try before you buy. Intransparent & pushy sales.







All-in-One Software Security



How it works























Scans for issues & removes false positives

Open-source Dependency scanning (SCA)

Open-source License checks

Secrets detection

Surface monitoring (DAST & EASM)

Static code analysis (SAST)

Cloud misconfig checks (CSPM)

Infrastructure as Code Scanning

End-of-Life runtime scanning

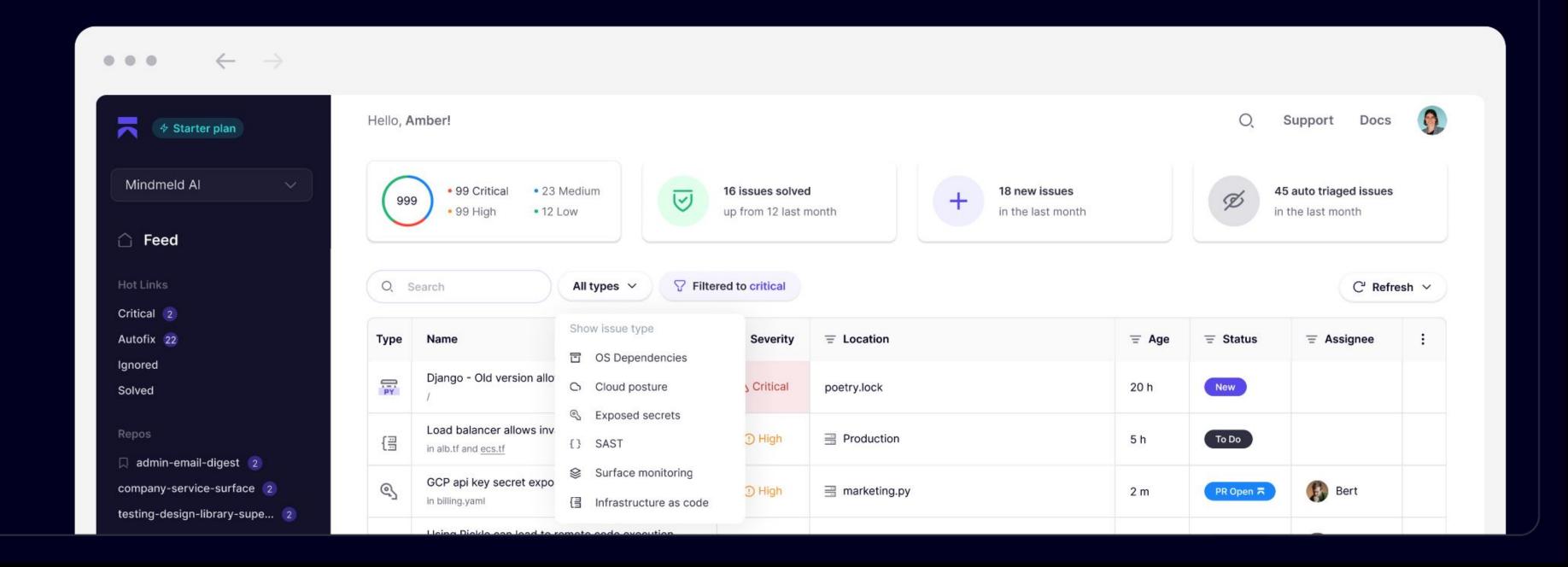
Malware scanning



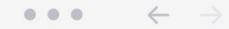
11-tools-in-1

Noise massively reduced UI & UX stellar Tech & Vendor agnostic

Price not ridiculous



Killer for compliance automation



Compliance

ISO 27001:2022 Compliance



See how far along ISO 27001:2022 compliance you are based on your connected clouds and code repositories

SOC2 Compliance



See how far along SOC2 compliance you are based on your connected clouds and code repositories

OWASP Top 10 compliance

96

Get insights into your performance for the OWASP top 10. See which vulnerabilities you protect against and where you can improve.

CIS Compliance



Check compliance against CIS Controls v8 based on your connected clouds and code repositories

NIS2 Compliance



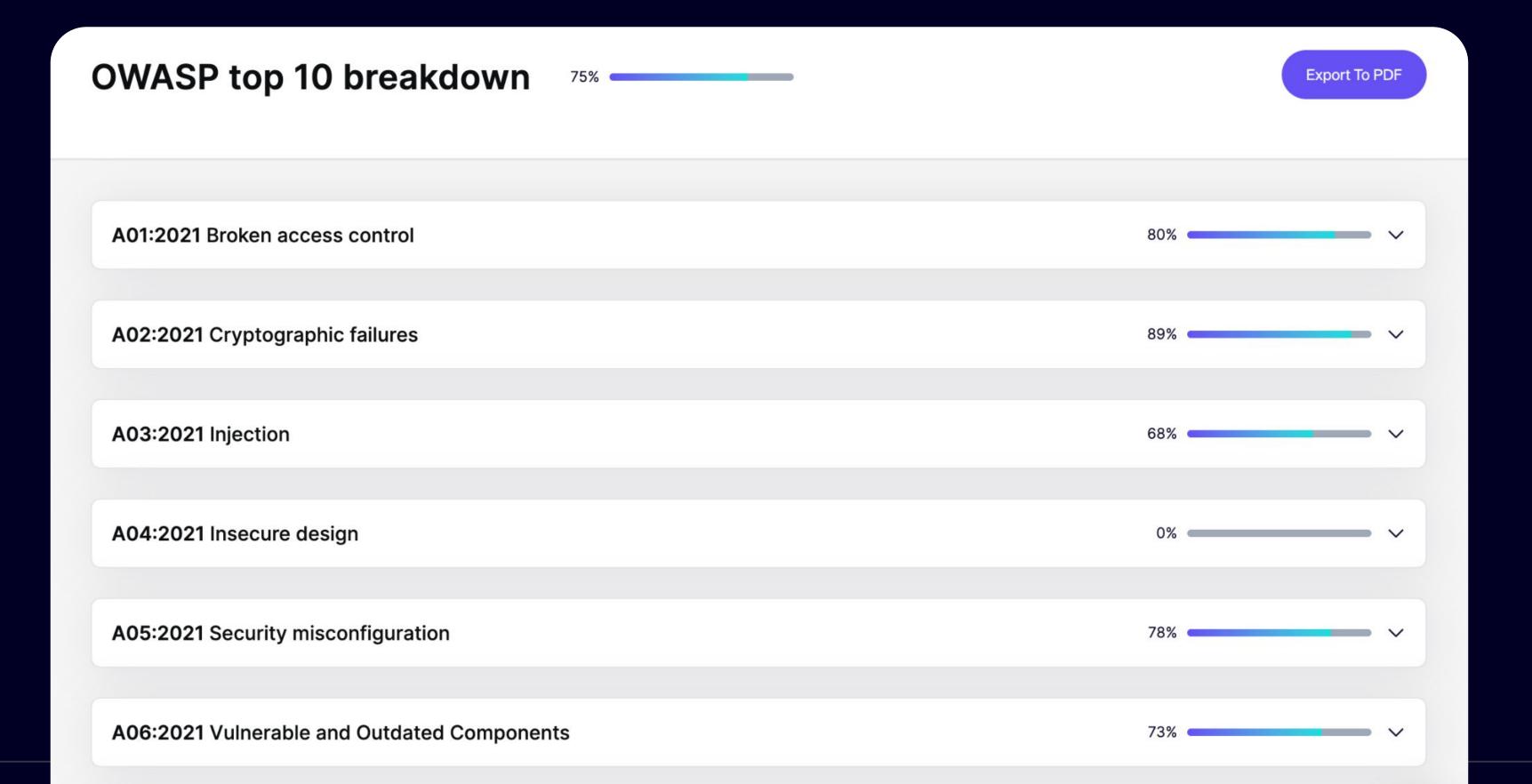
Check compliance against the NIS2 directive for SAAS companies based on your connected clouds and code repositories

Issues outside of SLA



See which issues are currently outside of their configured SLA settings

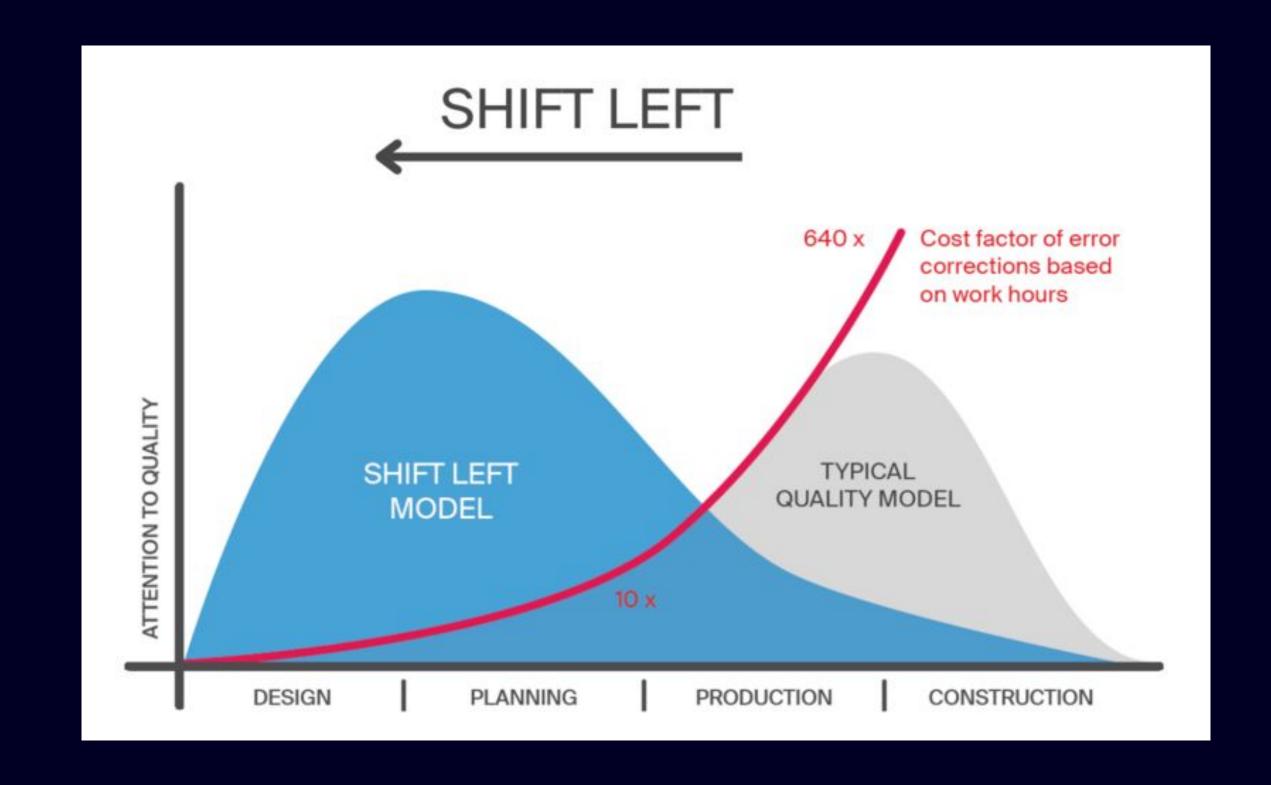
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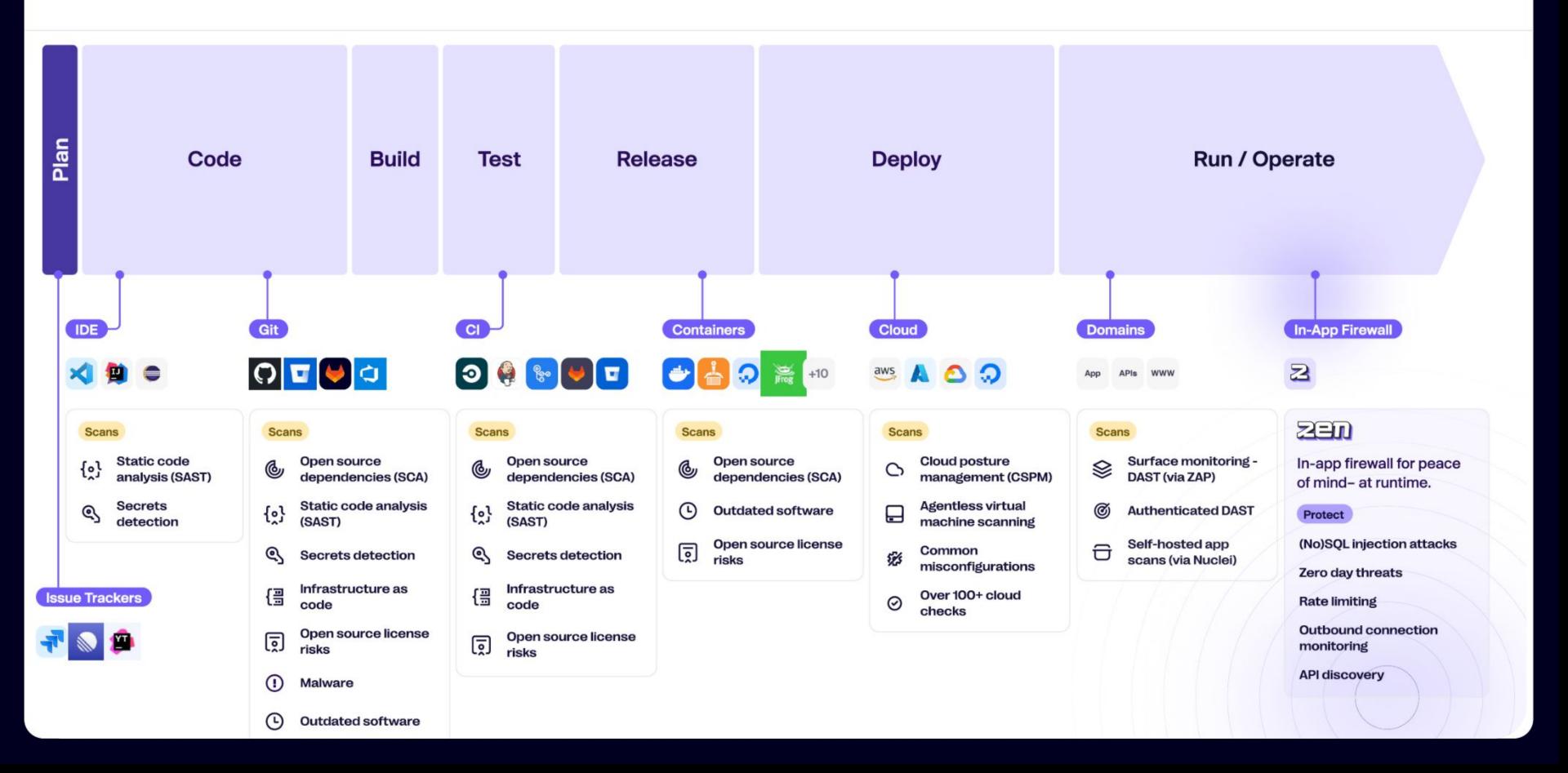


Shift Left

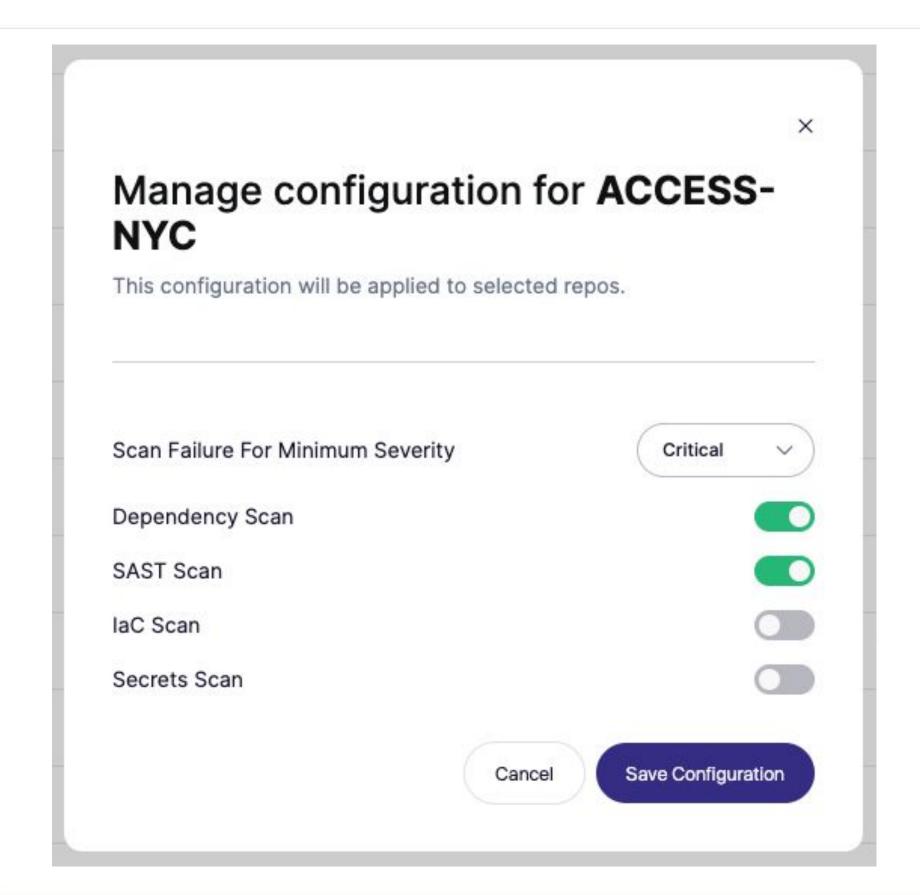
Shift Left



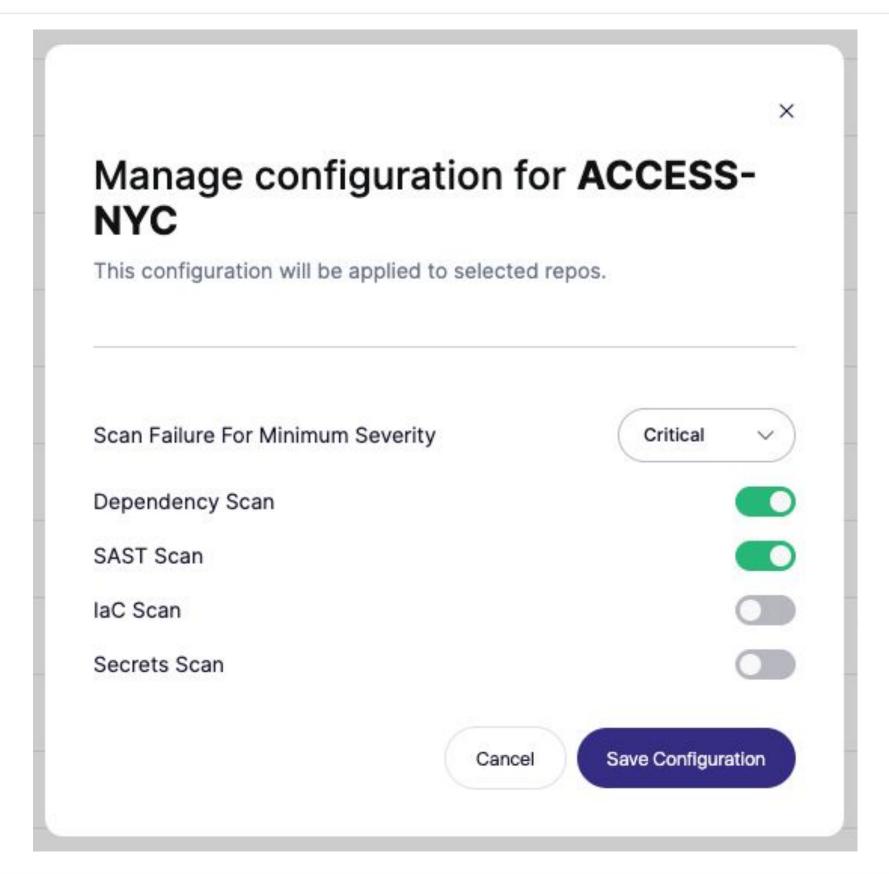
Aikido Shift-Left



Aikido Shift-Left



Aikido Shift-Left



```
status(500).send('Error Loading contig');
      });
      app.list Found a Stripe Access Token, posing a risk to payment processing services and sensitive financial
          cons data. (No matching Aikido repository found - noise suppression not possible) Aikido Secrets(stripe-
               access-token)
      });
     const ar Aikido: Report false positive
      app.get( View Problem (℃F8) No quick fixes available
       const PW = "sk_live_fakestripeapikeyleaked12"
        res.status(200).send(STRIPE_API_KEY)
      app.registerMethod(
        'fetch',
        Acl.ensure(function* (encryptedToken) {
            const decrypted = decryptJSON(encryptedToken, ENCRYPTION_ALGORITHM, ENCRYPTION_KEY, OLD_ENCRY
            yield management.users.findOne({ _id: decrypted._user });
            console.error(e);
148 }))
```



Democratize Software Security

Strong traction within regulated industries, ICP

Healthtech Securitytech Legaltech Fintech HRtech

Devtech Climatetech Enterprise SaaS

Agencies Non-software core Group-companies

Driven by:

SOC2 & ISO27001 7 Bundling 7 Cost Effectiveness 7

Ease of use 7 Automated 7 Integrated 7

Winning 100% inbound, our Product Led Growth engine

Self-Service

Sales-Assisted

Sales-Led

Free

€0

Up to 2 users

- √ 10 repos & 1 cloud
- ✓ Nightly rescans
- ✓ Slack alerts

Standard

€299/month

Up to 10 users

- √ 100 repos & 3 clouds
- Cl gating
- Task-tracker integrations
- ✓ Reporting

Pro

€599_{/month}

Up to 10 users

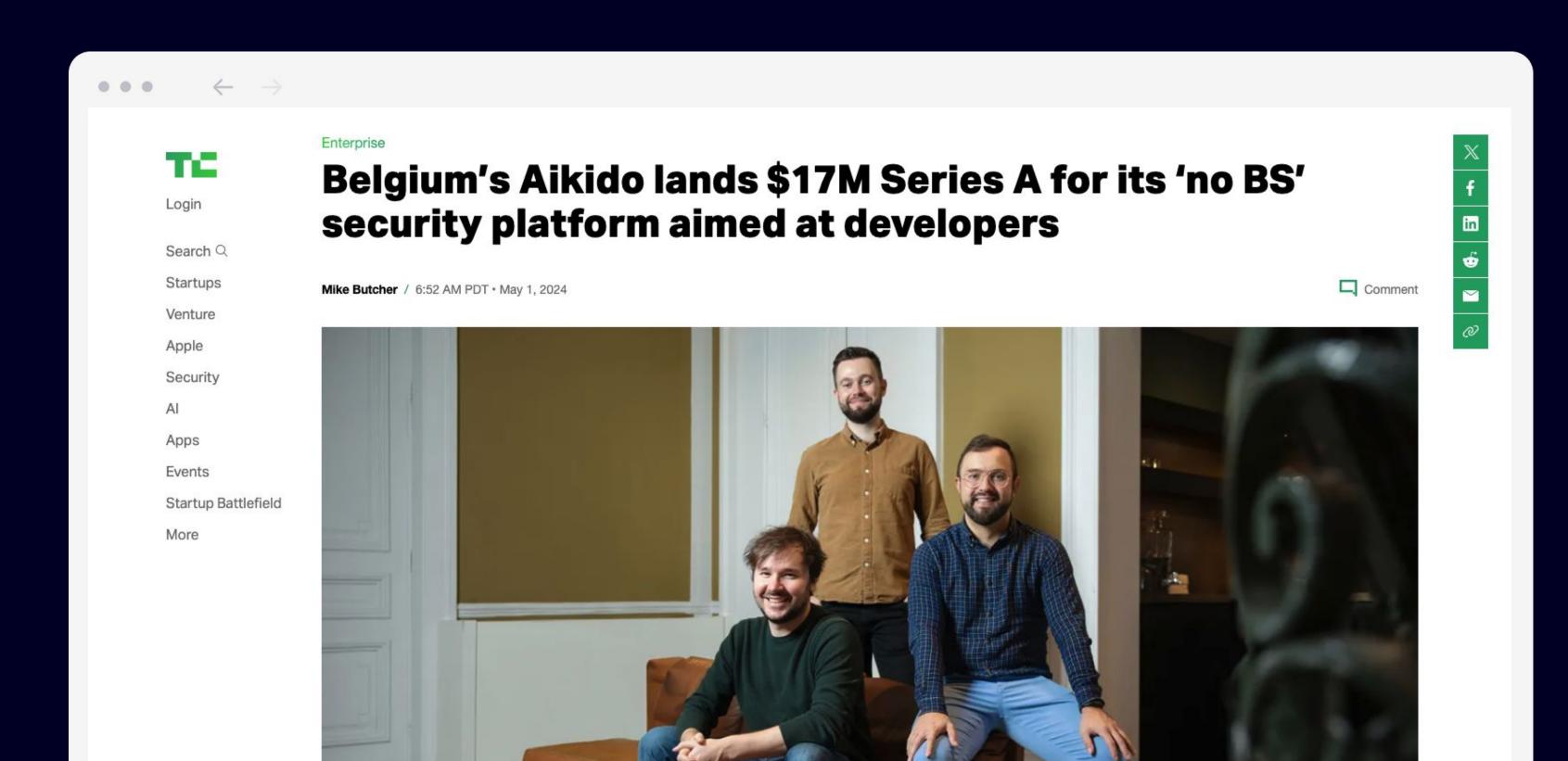
- √ 250 repos & 10 clouds
- ✓ On-prem scanning
- ✓ IDE plugins
- ✓ Malware detection

Enterprise

Custom

- ✓ ∞ repos & clouds
- ✓ Admin Portal
- ✓ Training & onboarding
- **✓** Enterprise support

We're gaining steam because we refuse to compromise





- ¹ Thank
- 2 you!
- 3
- 4
- 5
- 6
- **'**7



1

2

³ → aikido.dev

Annex

& back-up slides

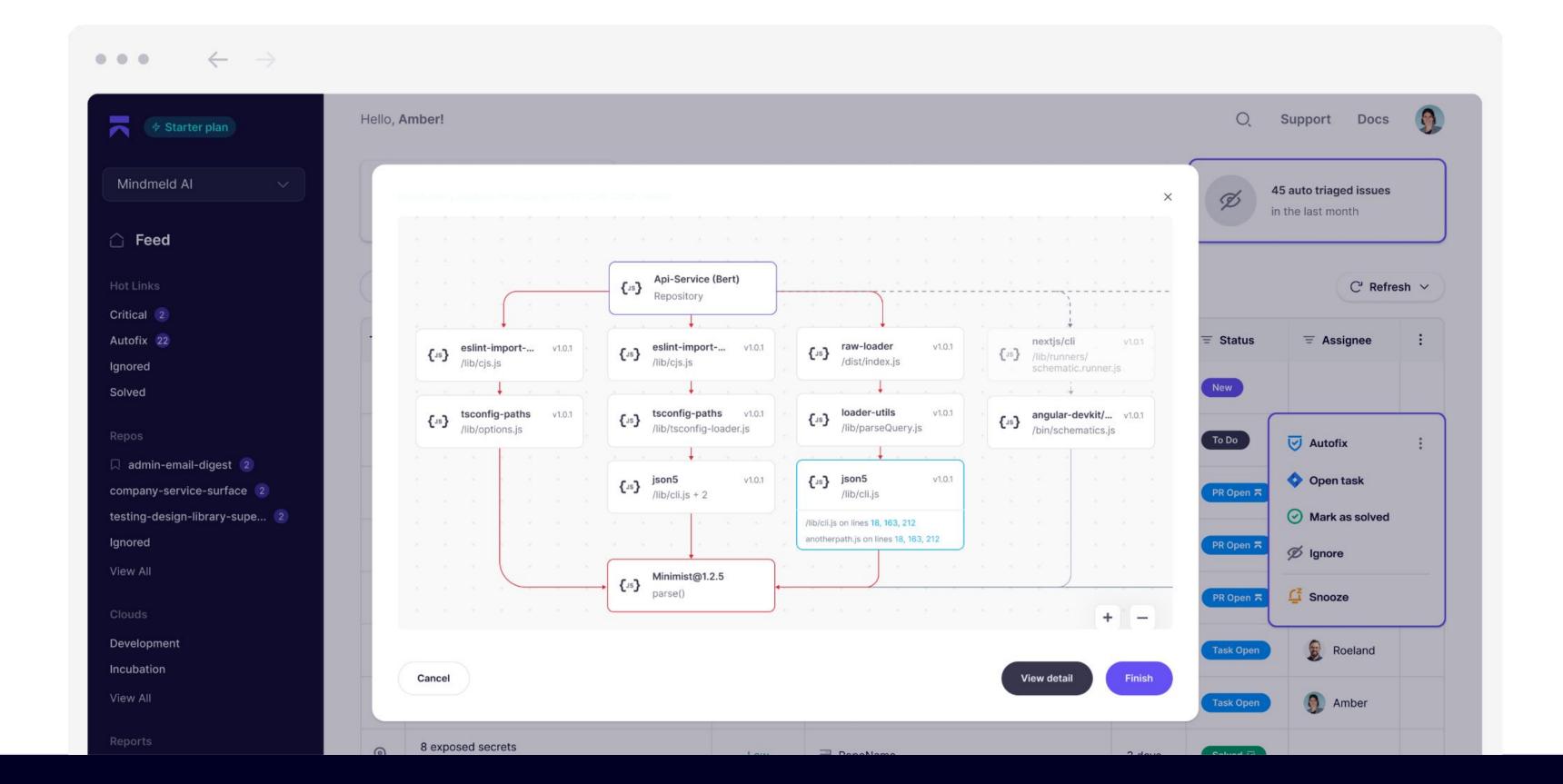
The competition is

- covering only few areas,
- hard to use, expensive,
- creating tons of false positives,
- built on legacy tech, sales-heavy

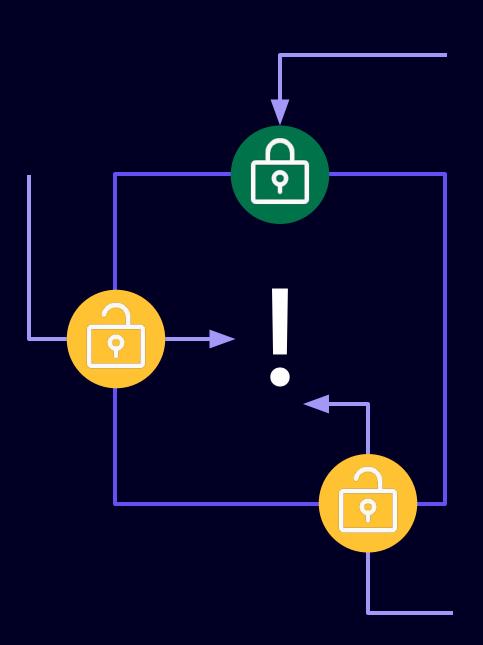
Automatic triaging and fixing false positives

#	Reason for ignoring	# issues	Description
1	Affected function not in use	† 84	Reachability analysis has determined that this vulnerability can not affect your environment.
2	Dependency not used in production	† 67	This package is a part of the toolchain you are using to build & test your application. Since it's not being shipped into the production, solving the issue is not urgent.
3	Exploits effects only end-user browser speed	† 44	This exploit can only cause the application to become slower in the end-user's browser. Since there is no security risk and can only affect uptime for 1 user at a time, Aikido has downgraded its severity.
4	Frontend path traversal attacks	† 34	This exploit can cause path traversal attacks, but Aikido assumed there is no direct filesystem access from the browser, so those attacks are of no importance.
5	Library not typically used in packaged frontend	† 21	This library is usually not used in any packaged front-end application because it mimics browser behavior in nodejs. Thus, Aikido assumes it is unused, and thus not important to fix.
6	CVE not valid	18	This CVE number has either been reserved for a future publication or has been retracted.

Reachability Analysis



White-box level pentesting, without giving access to your code



- + Built for SaaS [we collaborate with top-notch bounty hunters]
- + White-box level insights [bespoke testing based on your setup]
- + Fair price for actual, manual work [no automated tests]
- + Continuously keeping you secure [we monitor your environment every 24h]

→ For more information, click <u>here</u>