



GitHub Codespaces & Advanced Security

Lakeside Code Talks





David Losert

Senior Solutions Engineer

 @davelosert  david_losert



Where the world builds software

83M+

Developers

4M+

Organizations

2.6B+

Contributions
per year

1,000+

Top open source
communities

200M+

Private + public
repositories





GitHub Codespaces



Private VM on Azure
VM & Storage creation



Volume get mounted into
container



Git clone repository

Based on devcontainer.json
Container creation



Browser or local VSCode
Connecting



SettingSync, dotConfig,
postCreateCommand
Post-creation setup

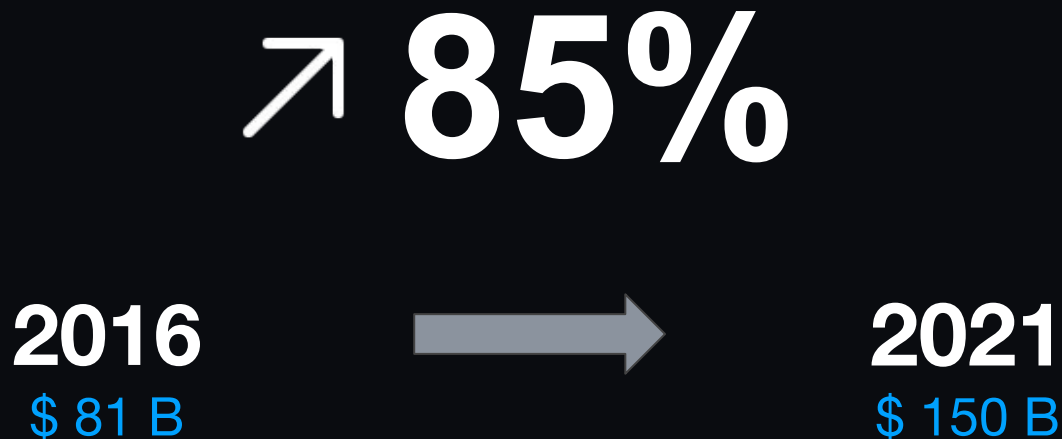




GitHub Advanced Security



Global IT Security Budget



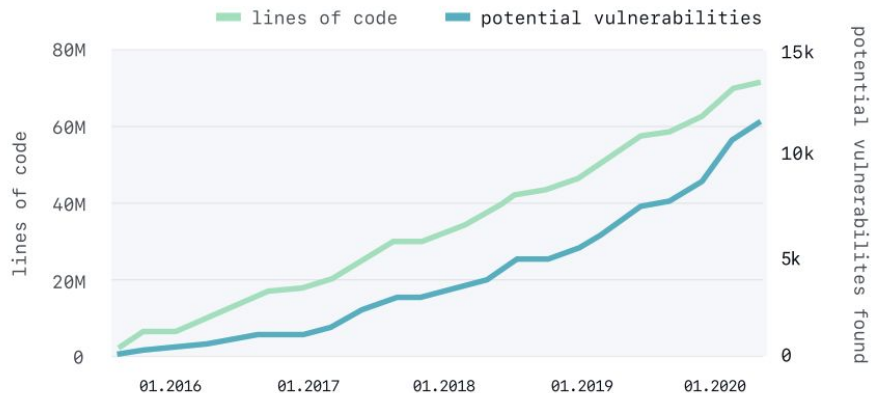
<https://www.gartner.com/en/newsroom/press-releases/2016-08-09-gartner-says-worldwide-information-security-spending-will-grow-8-percent-to-reach-81-billion-in-2016>

<https://www.gartner.com/en/newsroom/press-releases/2021-05-17-gartner-forecasts-worldwide-security-and-risk-managem>



The state of AppSec

Potential vulnerabilities found in source code scale with lines of code written



Despite billions of dollars of investment...

85% of applications still contain a security issue

Code written in 2020 is just as likely to introduce a security issue as code written in 2016





Developers



Modern Software Development



* <https://github.com/revolution-model/introduction>



Security ~~Distraction~~



Integrated



Focused
and actionable



Automated



FUN





GitHub Advanced Security



GitHub **secures** your complete software lifecycle



Dependabot



**Code Scanning
(CodeQL)**



Secret Scanning



GitHub Advanced Security Impact

Code vulnerability fix rate of

72%

compared to

15%

Industry norm after 7 days



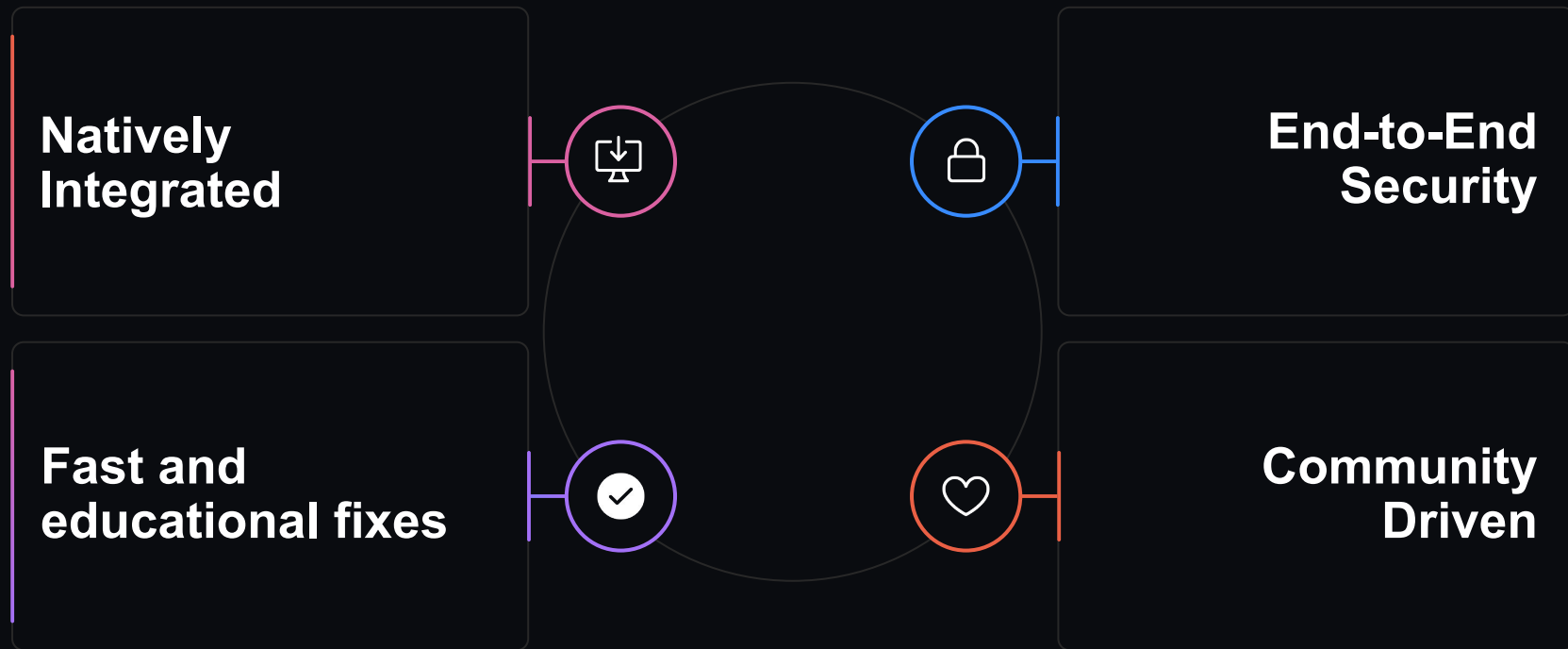
OSS vulnerabilities
MTTR decreased from
180 days to 40 days
with Dependabot

GHAS scan and alerts
for secrets and tokens
from 60+ providers
and growing



The GitHub Difference

Developer empowered security to fix in minutes not months



Danke

