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Future-Proofing Your Codebase With the Help of Auto-Refactoring

Introductions

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Let’s Discuss

The Technical Debt Problem Today

- Nearly 80% of libraries in a codebase are never updated
- 70% of software used by F5000 companies was developed more than 20 years ago
- 20-40%+ of developer time is spent on maintenance

Sources:
Venturebeat: 79% of devs don't update third-party code
TechRadar: Fix it, even if it 'ain't broke': the price of legacy technology
The New Stack: How Much Time Do Developers Spend Actually Writing Code
Dev.to: How much is technical debt costing you?

Causes of Technical Debt

- Inheriting or starting with unsecured codebases
- Prioritization
- Not enough people / resources
- Excel sheets are a bad plan!


THAT'S A PROBLEM FOR FUTURE HOMER.
VODKA
MAN, I DON'T ENVY THAT GUY.

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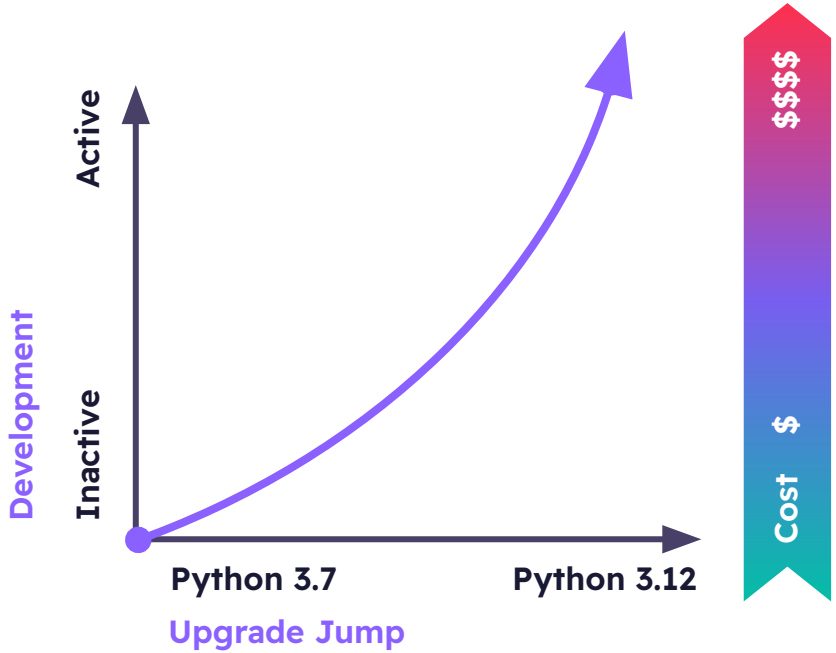
Poll

Let’s find out where we all are today

Why Does It Matter?



- Optimizations
- Proper staff to maintain code
- Security threats over time
- Productivity loss
- Breaking changes more likely
- EOL languages - chasing EOL dates

What's the cost of tech debt?

- Tech debt accounts for 15%-60% of every dollar spent on IT
- Study finds: A large bank with 1000 systems/apps generate over $2 billion in tech-debt costs
- Active management of tech debt leads to at least a 50% faster service delivery time on strategic goals

*Source: https://www.forbes.com/sites/forbestechcouncil/2022/08/10/measuring-and-managing-technical-debt

"That's a problem for future me"

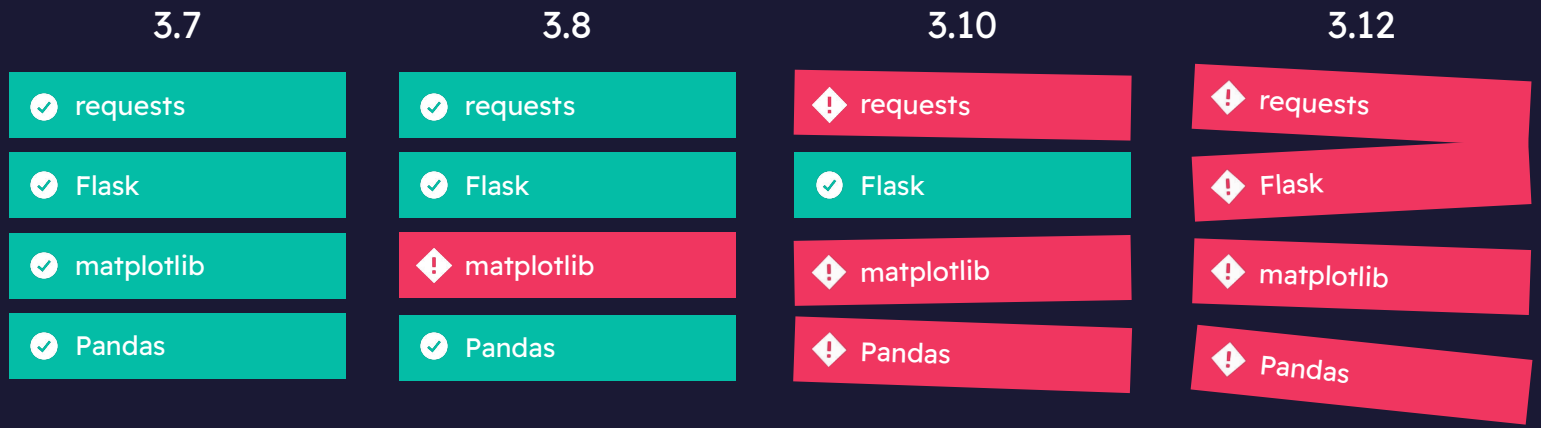
Impact on Application Delivery

- More limited in libraries / packages choice
- Mitigating security vulnerabilities

“Good” Reasons for Tech Debt

- Not able to update (dependencies)
- Supporting existing customers
- Prioritize stability and support

Remove Tech Debt Without Breaking Changes?



The older the versions you upgrade, the more breaking changes are introduced...requiring a greater portion of your application to be rewritten.

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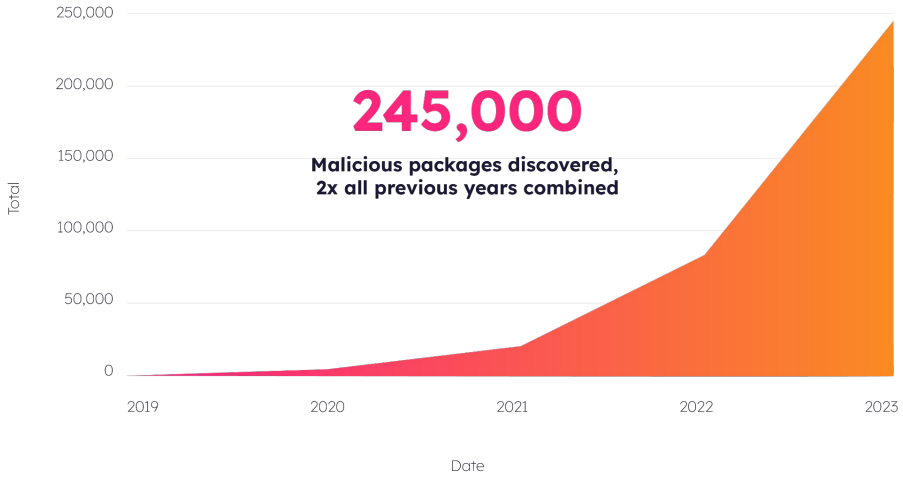
Addressing Supply Chain Security Risks

- 96% of codebases contain open source
- 1 compromise -> many breached
- SLSA - cross-industry framework



Role of AI?

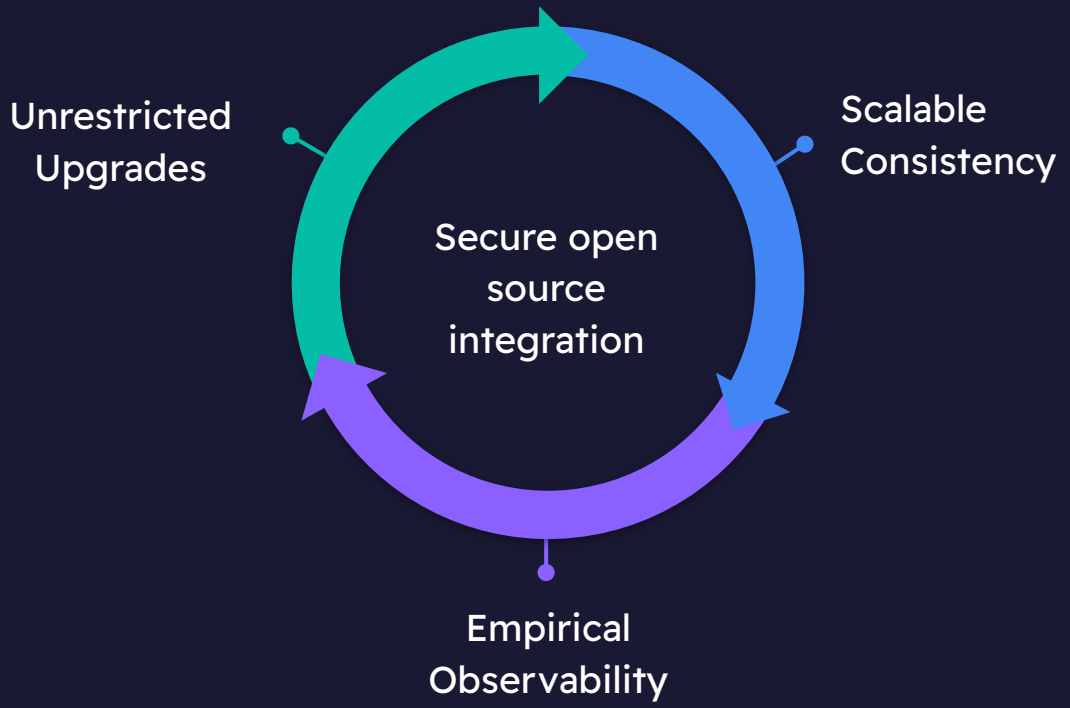
- Some existing solutions
- AI is flawed
- Need a human in the loop

Available Tools

- Dependabot
- Free tools (“free as in puppies”)

What is ActiveState?

Open source security your developers will love.



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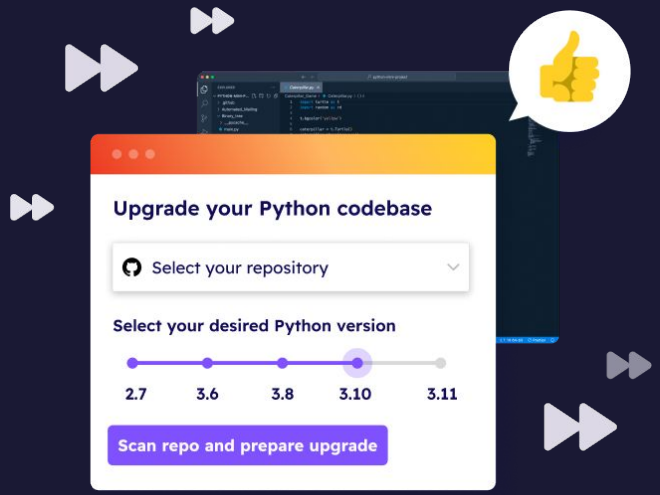
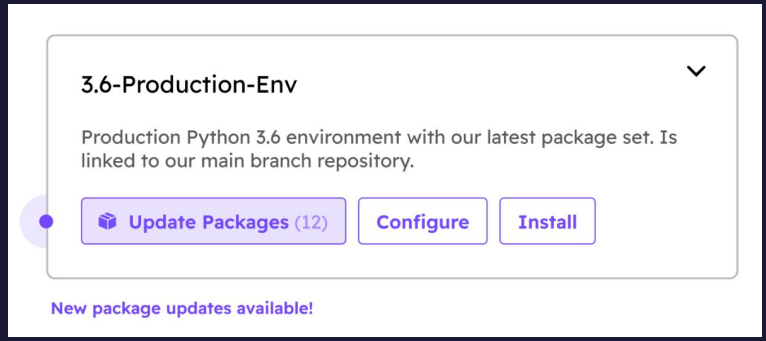
ActiveState makes secure, continuous open source updates simple





Get current → Stay current

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ActiveState Platform Demo

Q&A

Next Steps

Learn more about future-proofing your codebase:

https://www.activestate.com/get-current-stay-current/

Try the ActiveState Platform for free:

https://platform.activestate.com/

Still have questions? Email us!

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- Pablo - pablofb@activestate.com

References

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