



IMPLEMENT

DEVSECOPS

IN

AZURE



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100:10:1



DEVOPS

DevOps is the union of **people**,
process, and **technology** to
enable continuous delivery of
value to your end users





Why not to automate **security** then?

EVERY BREATH YOU TAKE,
EVERY MOVE YOU MAKE, EVERY BOND
YOU BREAK, EVERY STEP YOU TAKE
I'LL BE WATCHING YOU

SOME SECURITY GUY NAMED "STING"



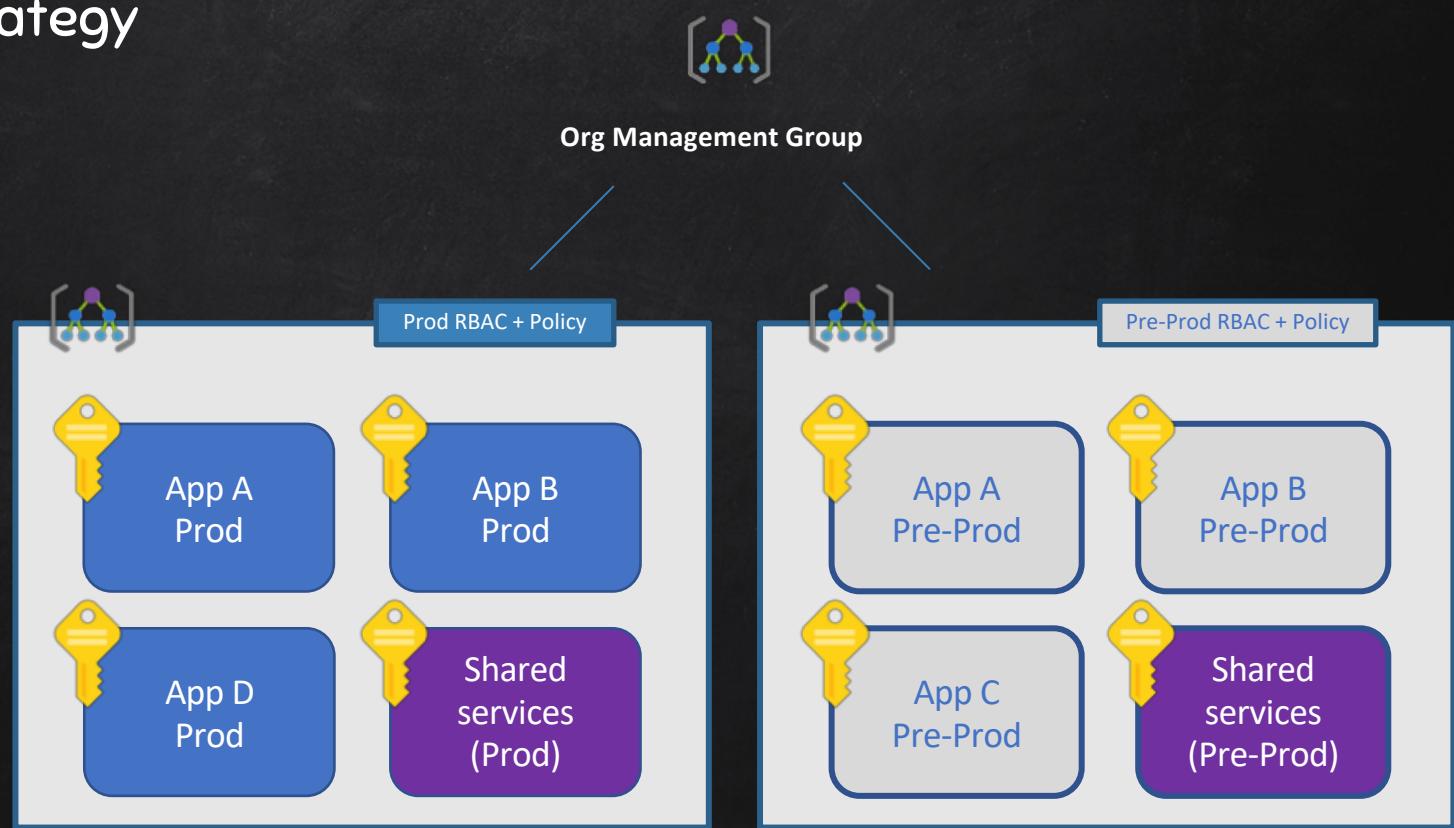
PATTERNS



PLAN YOUR INFRASTRUCTURE WISELY

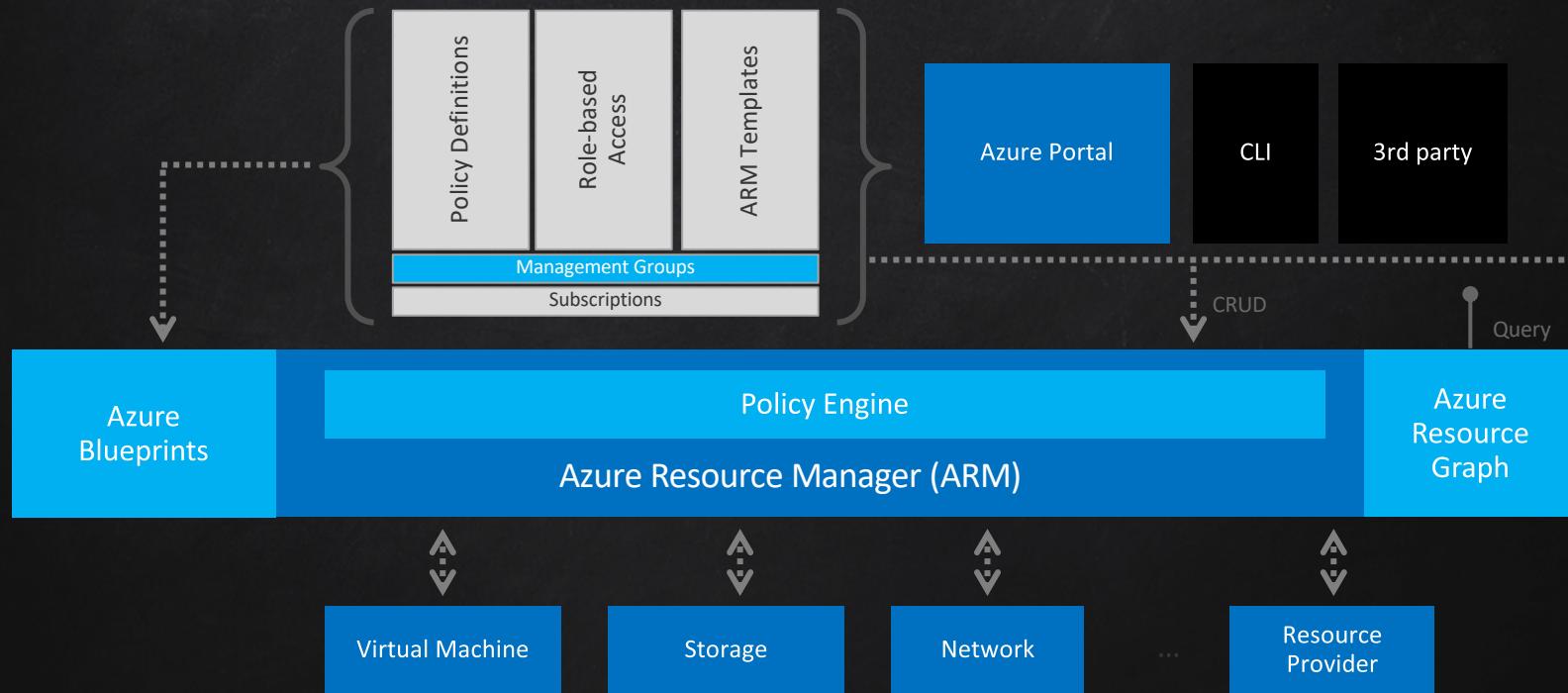
- x Subscription **per** environment
- x Apply policies to control transparently and proactively
- x Security Center **ON** from day 1
- x Infrastructure as code. **Period**
- x Production **ONLY** for CI/CD pipelines
- x CI/CD pipeline is a **heart** of security

Management Group & Subscription Modeling Strategy





AZURE GOVERNANCE





DELIVERING THE SOLUTION



Pre-commit

Commit (CI)

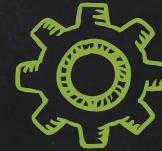
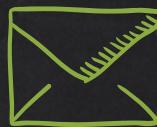
Acceptance (CD)

Production

Operations



...EVERY STEP YOU TAKE... I'LL BE WATCHING YOU



Pre-commit

- X Threat modeling
- X IDE Security plugins
- X Pre-commit hooks
- X Secure coding standards
- X Peer review

Commit (CI)

- X Static code analysis
- X Security unit tests
- X Dependency management

Acceptance (CD)

- X IaC
- X Security scanning
- X Cloud configuration
- X Security acceptance testing

Production

- X Security smoke tests
- X Configuration checks
- X Penetration testing

Operations

- X Continuous monitoring
- X Threat intelligence
- X Penetration testing
- X Blameless postmortems





DEMO TIME

WE DO DEVOPS ALREADY



JUST WITHOUT AGILE,
CI, SECURITY, STANDUPS
OR ANY OF THAT HIPSTER STUFF

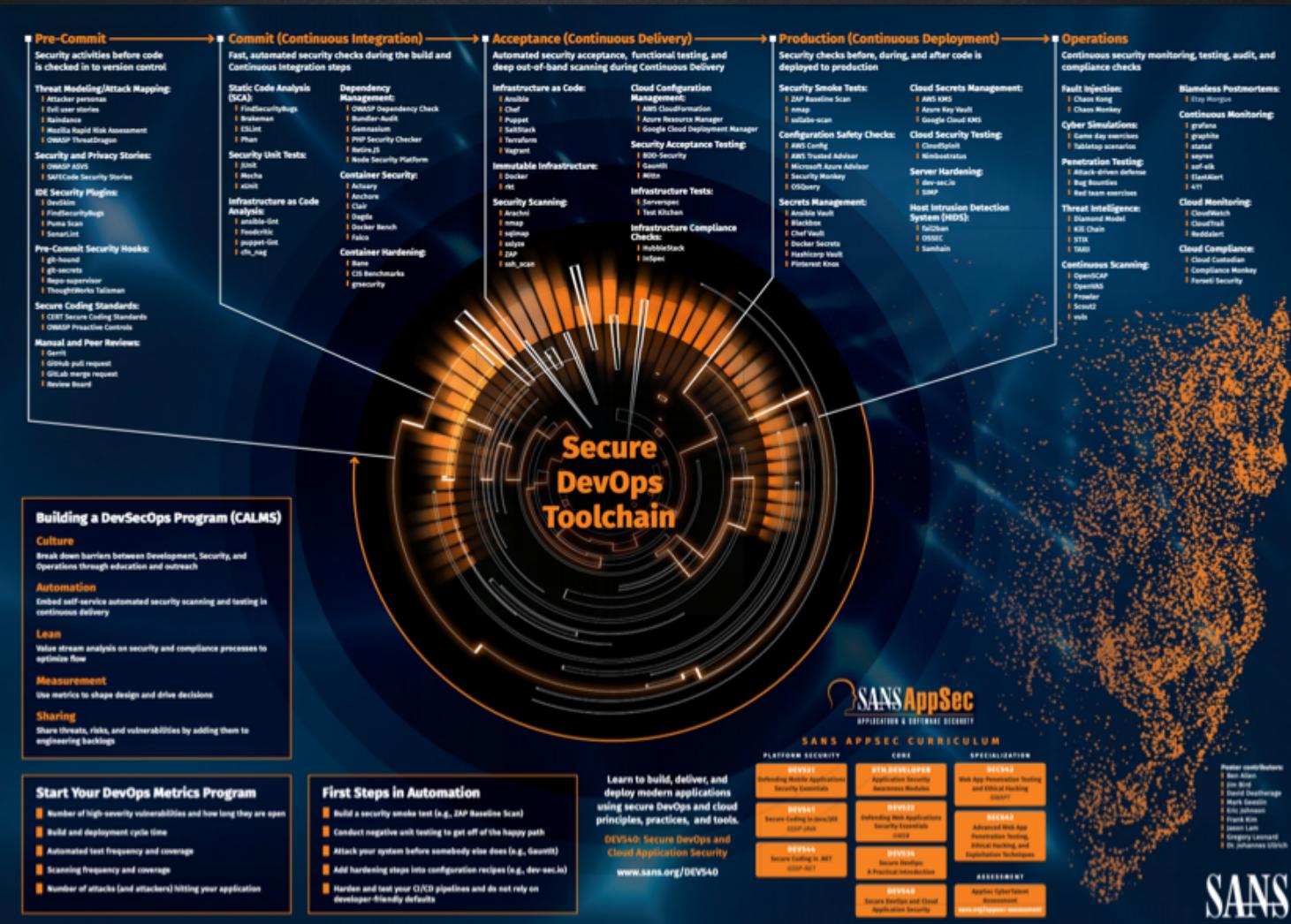


SO MANY HOT TAKES!



CALL TO ACTION

- x Subscription per environment
- x Apply policies
- x Enable Security Center
- x Implement CI/CD security tools:
 - o AzSK ARM Template Checker
 - o WhiteSource Bolt
 - o Sign up for Microsoft Security Code Analysis tools



RESOURCES

- X SANS poster: <https://www.sans.org/security-resources/posters/secure-devops-toolchain-swat-checklist/60/download>
- X Microsoft Security Code Analysis: <https://secdevtools.azurewebsites.net>
- X Secure DevOps Kit for Azure: <https://github.com/azsk/DevOpsKit-docs>
- X Azure security best practices: <https://docs.microsoft.com/en-us/azure/security/security-best-practices-and-patterns>
- X Azure DevOps Services: <https://azure.microsoft.com/en-us/services/devops/>
- X Azure applications design principles: <https://docs.microsoft.com/en-us/azure/architecture/guide/design-principles/>
- X WhiteSource Bolt extension for Azure DevOps Services:
<https://marketplace.visualstudio.com/items?itemName=whitesource.ws-bolt>
- X The OWASP Foundation: https://www.owasp.org/index.php/Main_Page
- X And me ☺ at github: <https://github.com/texnokot/>
- X And of course twitter: <https://twitter.com/texnokot>



THANKS!

Any questions?

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