CONF42 DEVSECOPS 2024

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DevSecOps as an approach to building and deploying secure apps by “shifting left”

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Microsoft Technical Trainer

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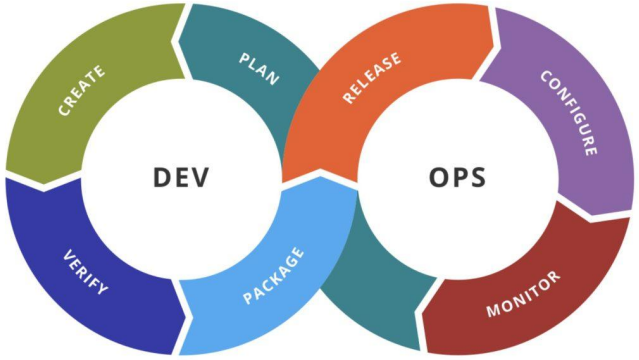


What will be covered

DEVOPS

SHIFT LEFT MENTALITY

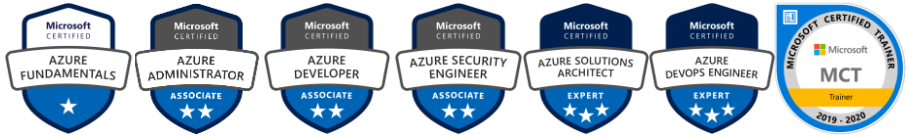
DEVSECOPS TOOLING

DEMOS

Q & A

About Me : Peter De Tender

- Azure Technical Trainer and Cloud Advocacy v-team @ Microsoft with focus on Azure Architecting and Microsoft DevOps Solutions
- Former Azure MVP (6y)
- Technical Writer & Book publisher



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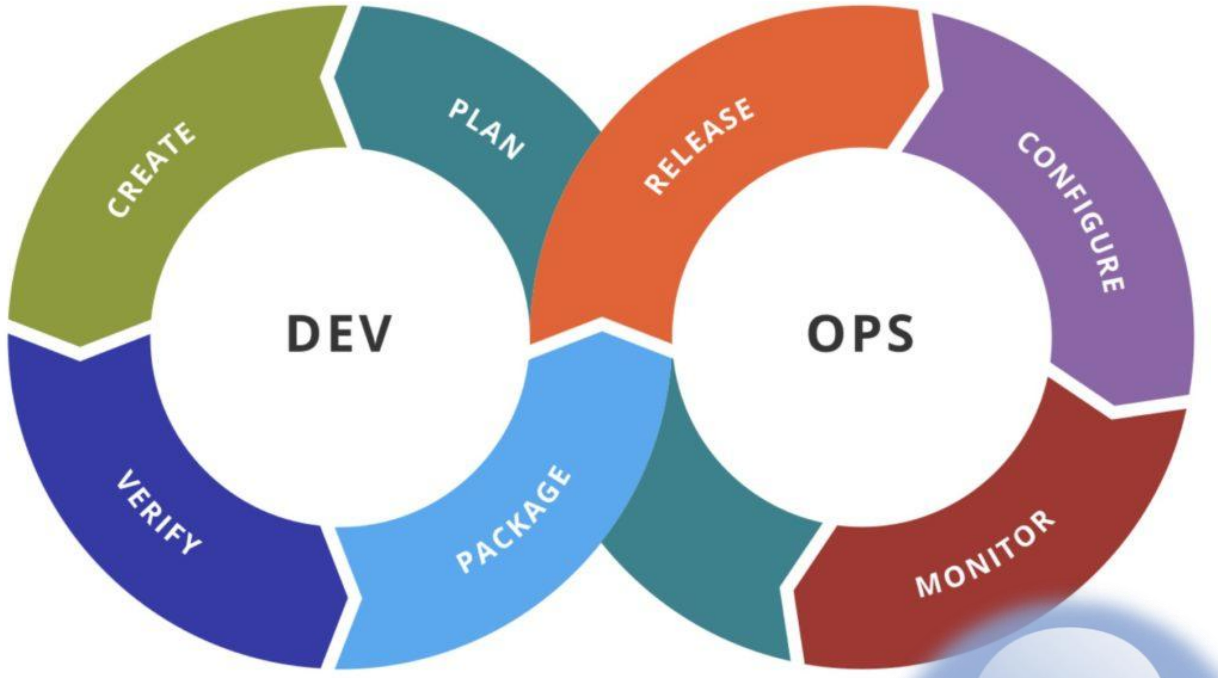
Concepts of DevOps

Microsoft’s Definition:

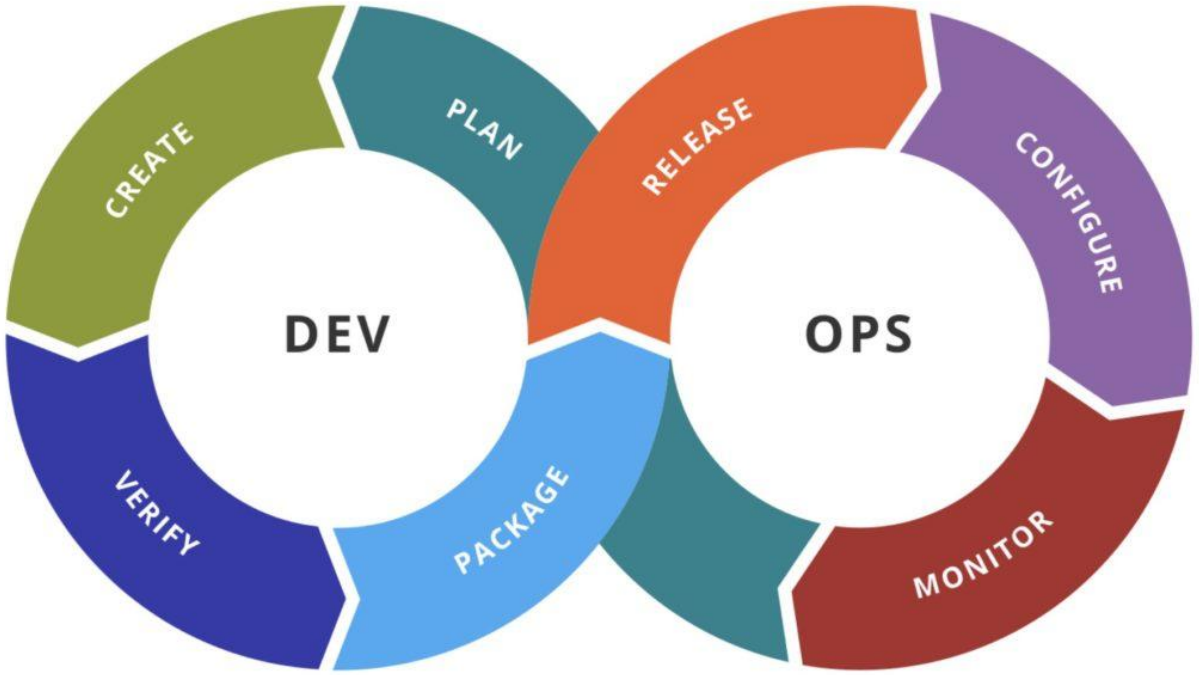
The Union of People, Processes and Products, to enable continuous delivery of value to our end users



Concepts of DevOps

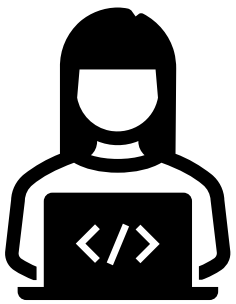
Peter’s Definition:

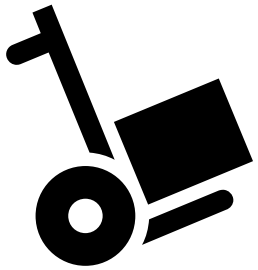
Integrating a culture of delivering value to your end users, relying on team collaboration and workload automation

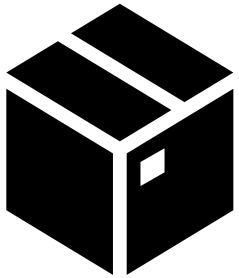


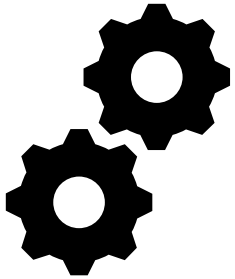
60% - Culture 40% - Tools

Automate Everything









DEV

VALIDATE

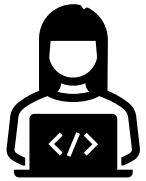
PACKAGE

RUN

OPERATE

Automate Everything!!

Secure Everything

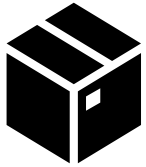


DEV

- Threat Modeling
- Secure Coding Standards
- Credentials & Secrets management
- Peer Review

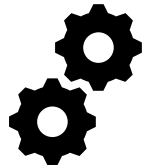
VALIDATE

- Code Analysis
- Credentials & Secrets management
- Approvals
- Unit Testing
- Container Vulnerability Scanning



PACKAGE

- Secured IaC
- Secured Containers
- Quality Gates
- Cloud Configuration
- Security & Pen-testing



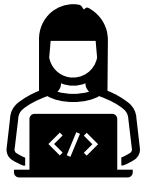
RUN

- Cloud Platform Security
- RBAC permissions model
- Credentials & Secrets management

OPERATE

- Security Monitoring
- Threat Detection
- Mitigation

Secure Everything – **by shifting left**



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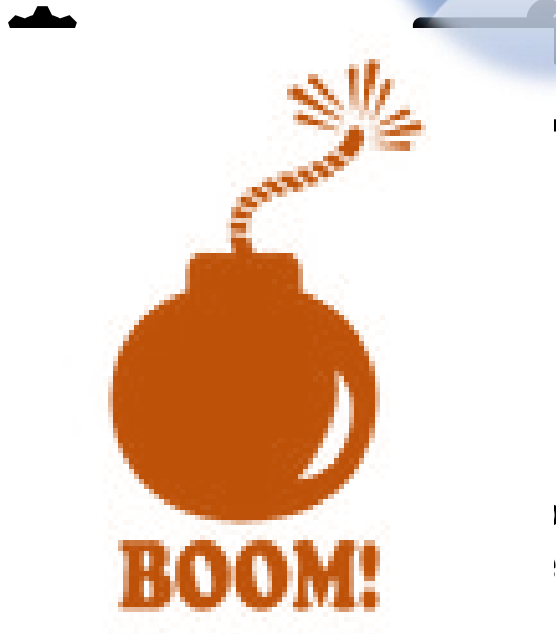


- Cloud
- RBAC
- Creden management

nitoring
ction

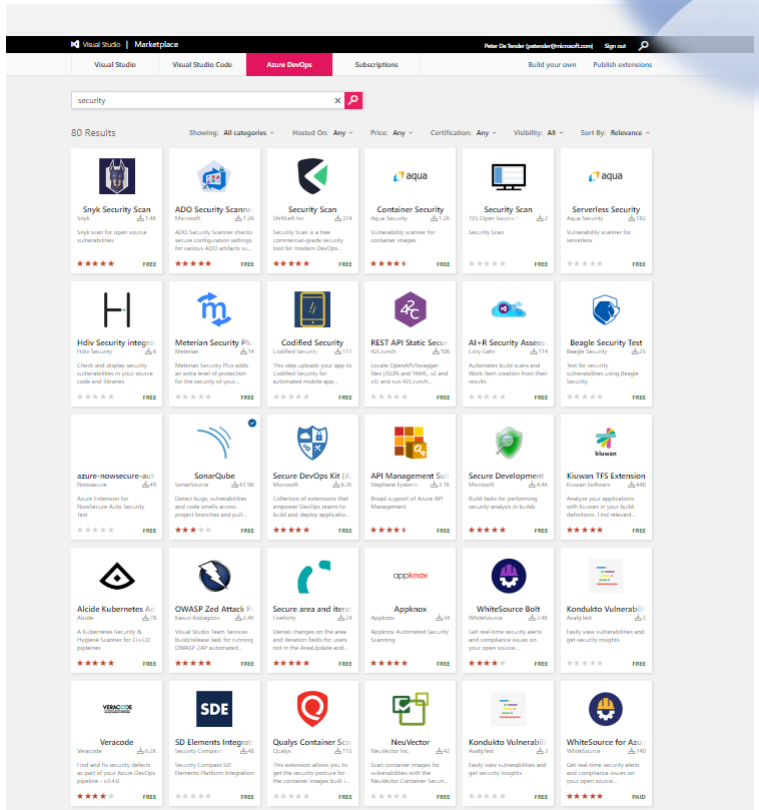
Demo

Approvals & Pull requests

Demo

Code Analysis

Credentials & Secrets Management



Azure DevOps Security: Your Personal Access Tokens (PAT) have been found in a public GitHub repository.

We are notifying you that Azure DevOps security team has identified that one of your Personal Access Tokens (PAT) named SonarCloud associated with user petender@microsoft.com have been found exposed in the following public GitHub repository.

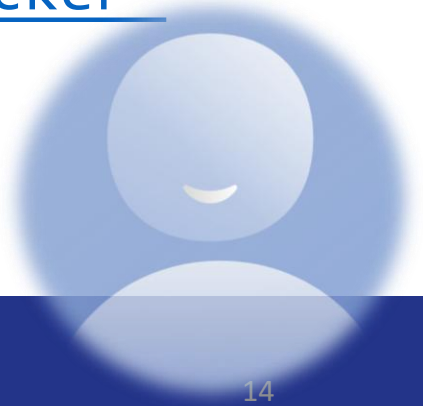
https://github.com/JLPacherie/sicm-workspace/blob/5635a9782e0d02c8b058271824ba43196f3d543c/libraries/Servers/SNR-002.json

We encourage you to take immediate action by revoking this leaked token and mitigate any risks associated with this leakage. Please see the public documentation on how to revoke a personal access token.
Authenticate with personal access tokens - Azure DevOps | Microsoft Docs
We will go ahead and revoke this personal access token by **Jan 28 2021** if the PAT is still found active.
You can create a new personal access token and use that for business continuity in place of the revoked token. Please see the public documentation on how to create a new personal access token.
Authenticate with personal access tokens - Azure DevOps | Microsoft Docs
As a good security practice, if you are using other tokens, please ensure that they are not checked into any public or private repositories.
Reach out to Azure DevOps Security SMEs (mailto:azdevsecsme@microsoft.com) if you have any questions or concerns.
Azure DevOps Security Team

Secure Everything – **by shifting left**

Some Container Vulnerability Scanning Solutions (No preference!!)

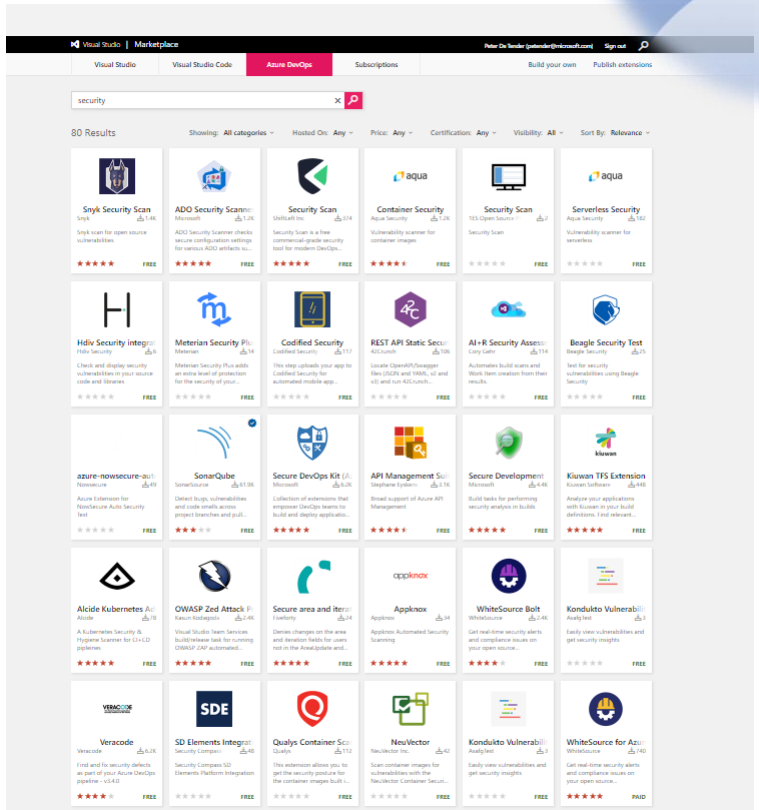
1. AquaSec (https://www.aquasec.com/products/container-vulnerability-scanning/)
2. Qualys (https://www.qualys.com/apps/container-security/)
3. Clair (https://github.com/quay/clair)
4. Anchore (https://anchore.com/opensource/)
5. Docker Bench Security (https://github.com/docker/docker-bench-security)
6. Snyk (https://snyk.io)
7. And so many other ones ☺



Demo

Container Vulnerability Scanning

Azure Key Vault Secret Store



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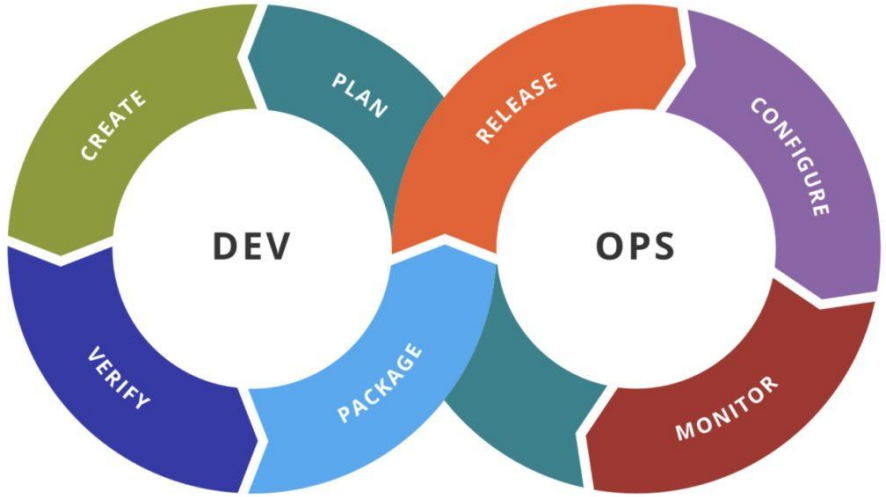

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Thank you

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