Continuous Delivery and DevOps with Azure DevOps: The Big Picture

UNDERSTANDING CONTINUOUS DELIVERY AND DEVOPS WITH AZURE DEVOPS

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Outline

Why & what

- Traditional IT
- Continuous delivery
- DevOps

How

- Azure devops tools
  - Boards
  - Repos
  - Pipelines
  - Test plans
  - Artifacts

Better together

Summary

Why?

We need a toolset that can help us provide insides in a holistic way on all the steps involved building and running software.

Secure, traceable, reliable, easy to use and no maintenance on the tools yourself!

Traditional vs. Modern Software Delivery

Traditional	Modern
Waterfall approach	Agile, often scrum approach
Different teams or organizational units for requirements, development, test and operations	Multidisciplinary teams where all disciplines work together on small piece to deliver
Clear separation between business and IT (demand/supply)	Business, development and operations in one team
Release software 2 or 3 times a year	Release multiple times a day
Budget/cost driven	Value stream driven

Our highest priority is to satisfy the customer through early and **continuous delivery** of valuable software

-- 1st principle behind agile manifesto

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Continuous Delivery

Continuous delivery is all about creating a repeatable and reliable process for delivering software in order to **deliver high value software** to our customers **fast**!

DevOps is the union of people, process, and products **to enable continuous delivery** of value to our end users.

-- Donovan Brown

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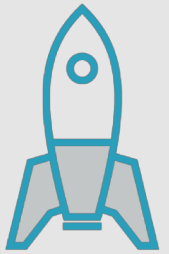
Awesome, but how do we do this?

In a secure and compliant way?

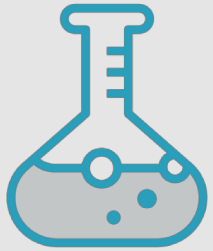
Meet the Azure DevOps Tools

Boards

Repos



Pipelines



Test Plans

Artifacts

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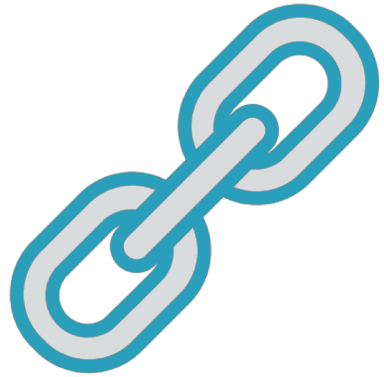
Boards

Work Items



Traceability

Planning

Kanban

Backlog

Sprint

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Demo

Boards

Repos

- TFVC
- Git
- Pull requests
- Branch policies
- Hooks for CI/CD

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Repos

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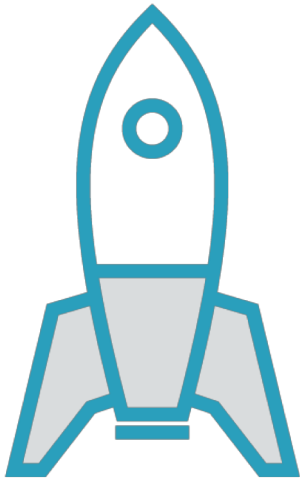
Pipelines



- Build automation
- Continuous integration
- Deployment automation
- Continuous delivery
- Traceability and compliance
- Hooks for other products

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Build & release pipelines

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Test Plans

Planned and exploratory testing solution

Capture rich data

Test across web and desktop

Get end-to-end traceability

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Test plans

Artifacts

- Package management
  - NuGet
  - NPM
- Artifact repo
- Track usage of external packages
- Traceability

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Artifacts

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Better Together

Full traceability out of the box

Hosted SaaS solution

Always up to date

No maintenance of own build machines

Hosted in various regions world wide

Azure DevOps

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End 2 end story

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