

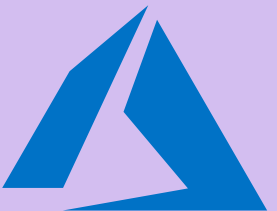


# What's new in Azure App Service for DevOps

Riccardo Cappello

Operative Manager @ ALTEN Italia

Microsoft Azure MVP | Intel Software Innovator





# #CodeGen

#dotnetconf

**@cloudgen\_verona**



24/co

# Community sponsors



Local Event

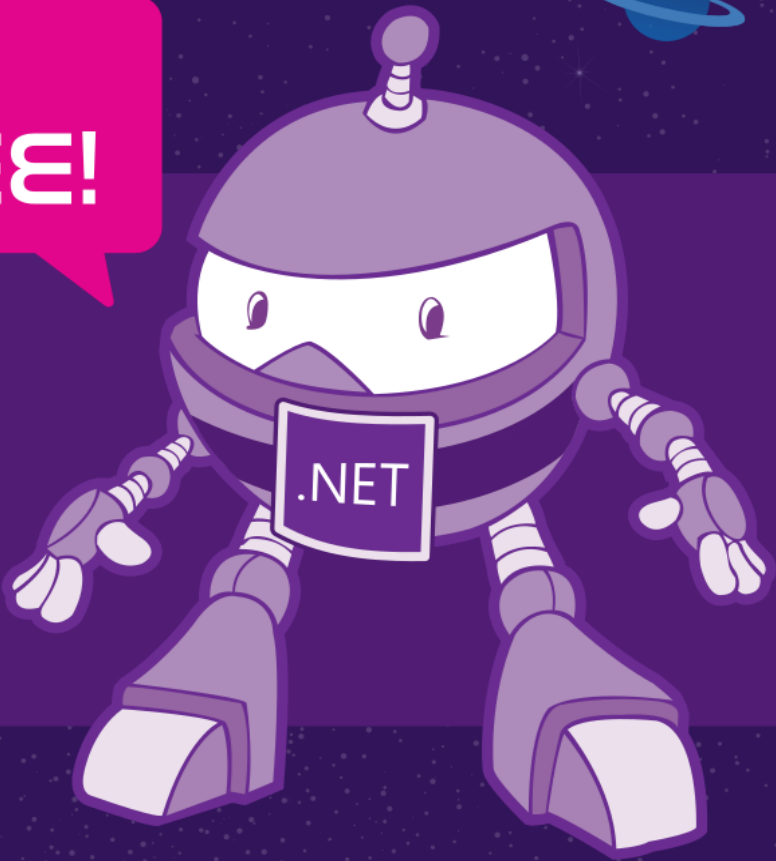


It's  
**FREE!**

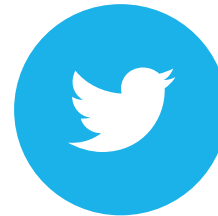
# .NET Conf

Discover the world of .NET

September 12-14, 2018



Tune in: [www.dotnetconf.net](http://www.dotnetconf.net)



@rcappello



rcappello



Riccardo Cappello



Riccardo CAPPELLO



# Welcome in Azure App Service for DevOps

Riccardo Cappello

Operative Manager @ ALTEN Italia

Microsoft Azure MVP | Intel Software Innovator

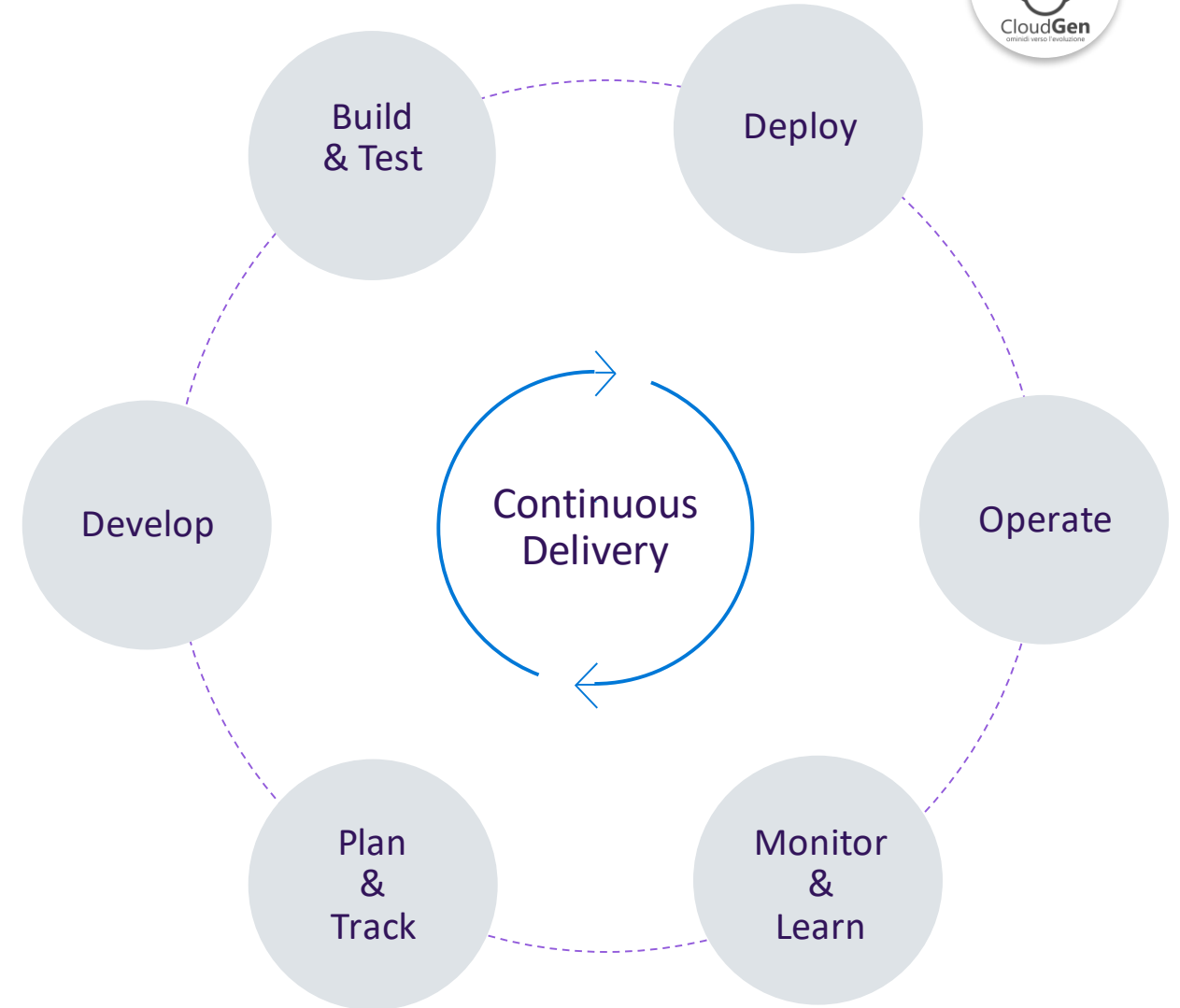


# What is DevOps?

People. Process. Products.

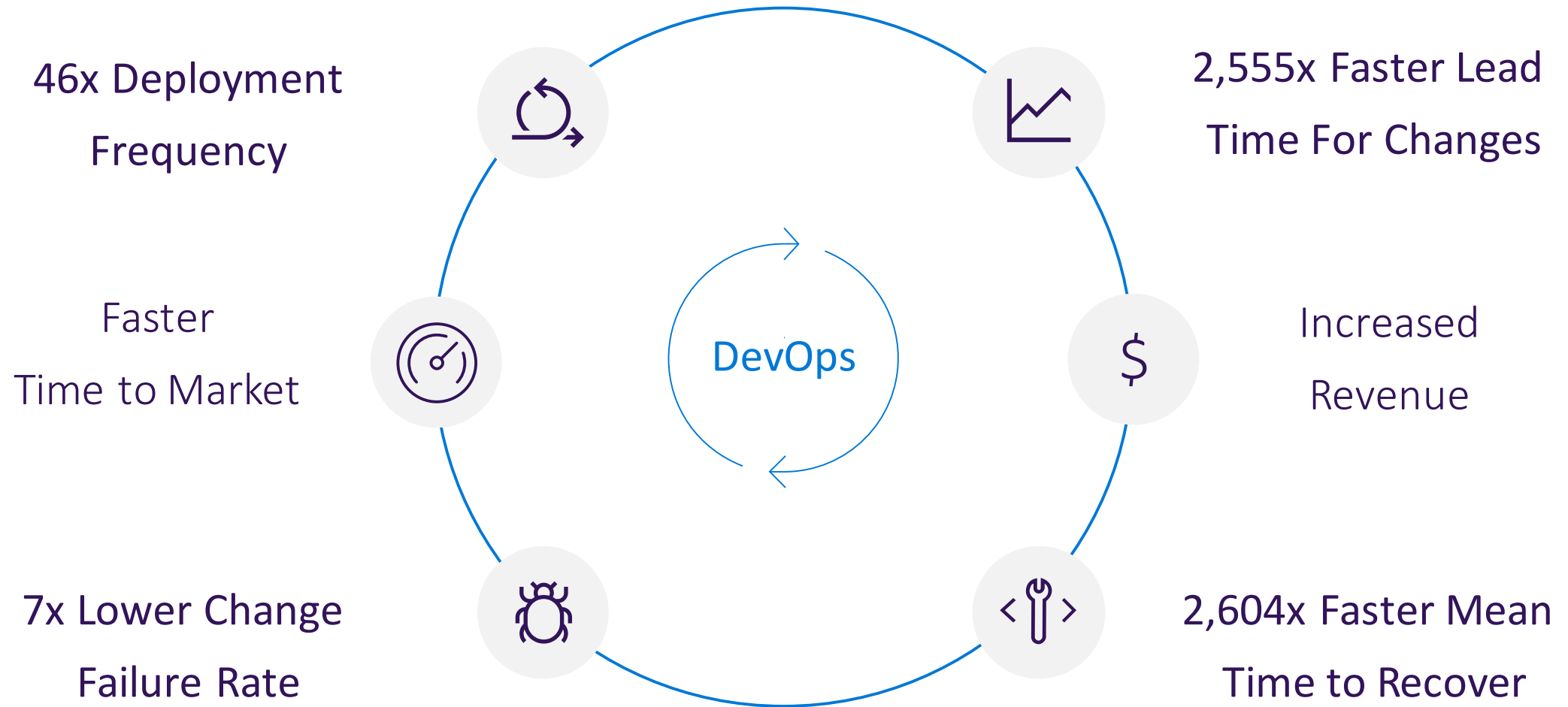


DevOps is the union of **people**, **process**, and **products** to enable continuous delivery of value to your end users.





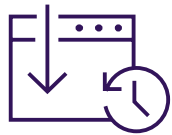
# High Performance DevOps Companies Achieve...



# What core technologies do I need to deploy & learn faster?



DevOps brings together people, processes, and technology, automating software delivery to provide continuous value to your users. Using Azure DevOps, you can deliver software faster and more reliably - no matter how big your IT department or what tools you're using.



Continuous Integration (CI)

---



Continuous Deployment (CD)

---



Continuous Learning & Monitoring

---

# Introducing Azure DevOps



## Azure Boards

Deliver value to your users faster using proven agile tools to plan, track, and discuss work across your teams.



## Azure Test Plans

Test and ship with confidence using manual and exploratory testing tools.



## Azure Pipelines

Build, test, and deploy with CI/CD that works with any language, platform, and cloud. Connect to GitHub or any other Git provider and deploy continuously.



## Azure Artifacts

Create, host, and share packages with your team, and add artifacts to your CI/CD pipelines with a single click.



## Azure Repos

Get unlimited, cloud-hosted private Git repos and collaborate to build better code with pull requests and advanced file management.



<https://azure.com/devops>

# DevOps Pipelines in Minutes



## Azure DevOps Projects

- ➔ Create a full ASP.NET DevOps pipeline with 4 easy steps from the Azure Portal
- ➔ Start with a Git repo, web app and pre-configured pipeline
- ➔ Customize, extend and scale when needed.

**DevOps Project**  
Create

Runtime Framework Service Create

**Choose an application framework**

ASP.NET	ASP.NET Core
Open source web framework for building modern web apps and services	Cross-platform, open-source framework for building modern web apps and services

**Add a database** ☒

SQL Database
A relational database-as-a service using Microsoft SQL Server



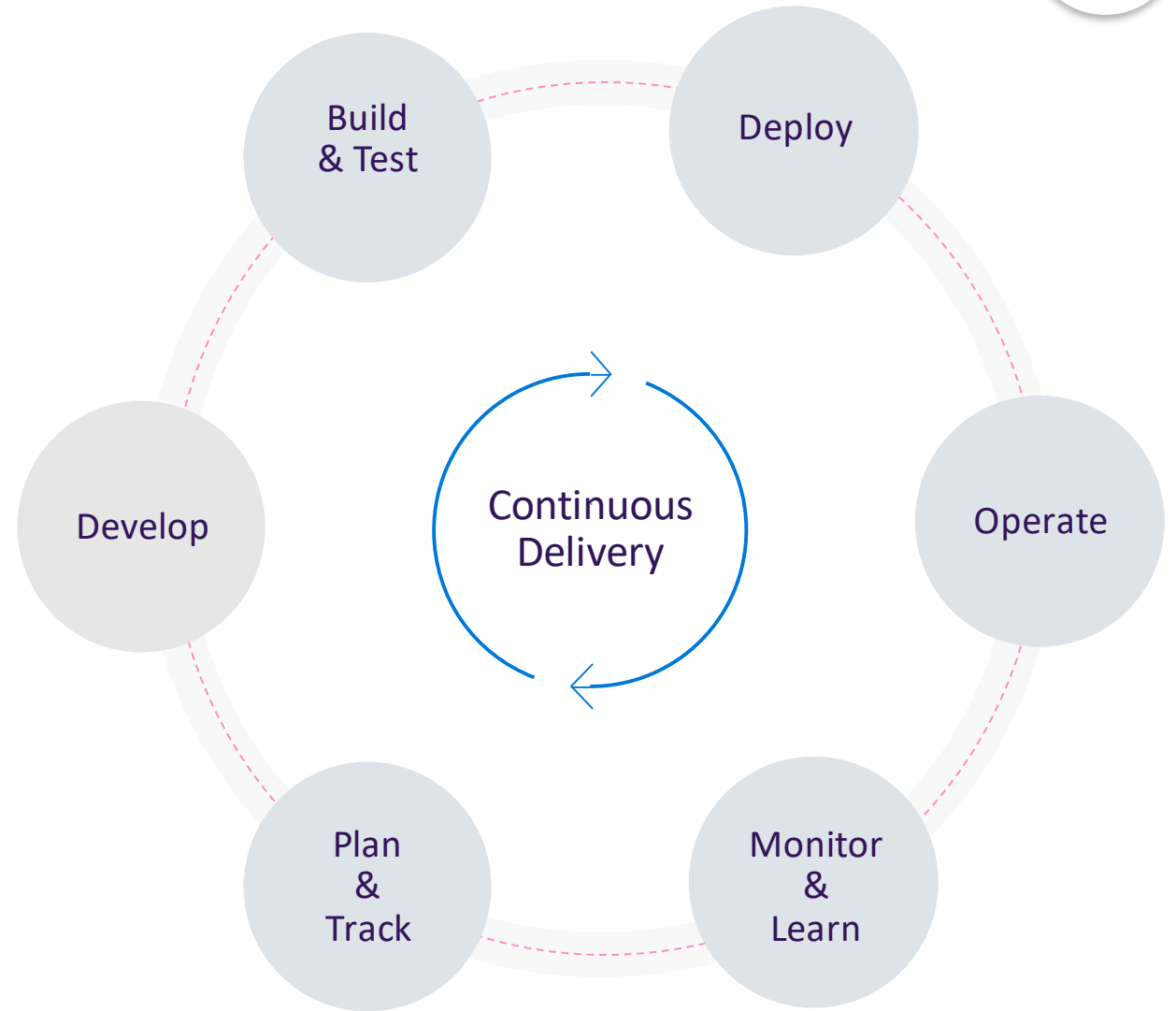
# Azure DevOps Projects

# Iteratively Removing Impediments



Find the pain points in your DevOps processes and improve a bit, reassess and improve again.

Lots of small incremental improvements add up.



# Azure Boards



Track work with Kanban boards, backlogs, team dashboards, and custom reporting



## Connected from idea to release

Track all your ideas at every development stage and keep your team aligned with all code changes linked directly to work items.



## Scrum ready

Use built-in scrum boards and planning tools to help your teams run sprints, stand-ups, and planning meetings.

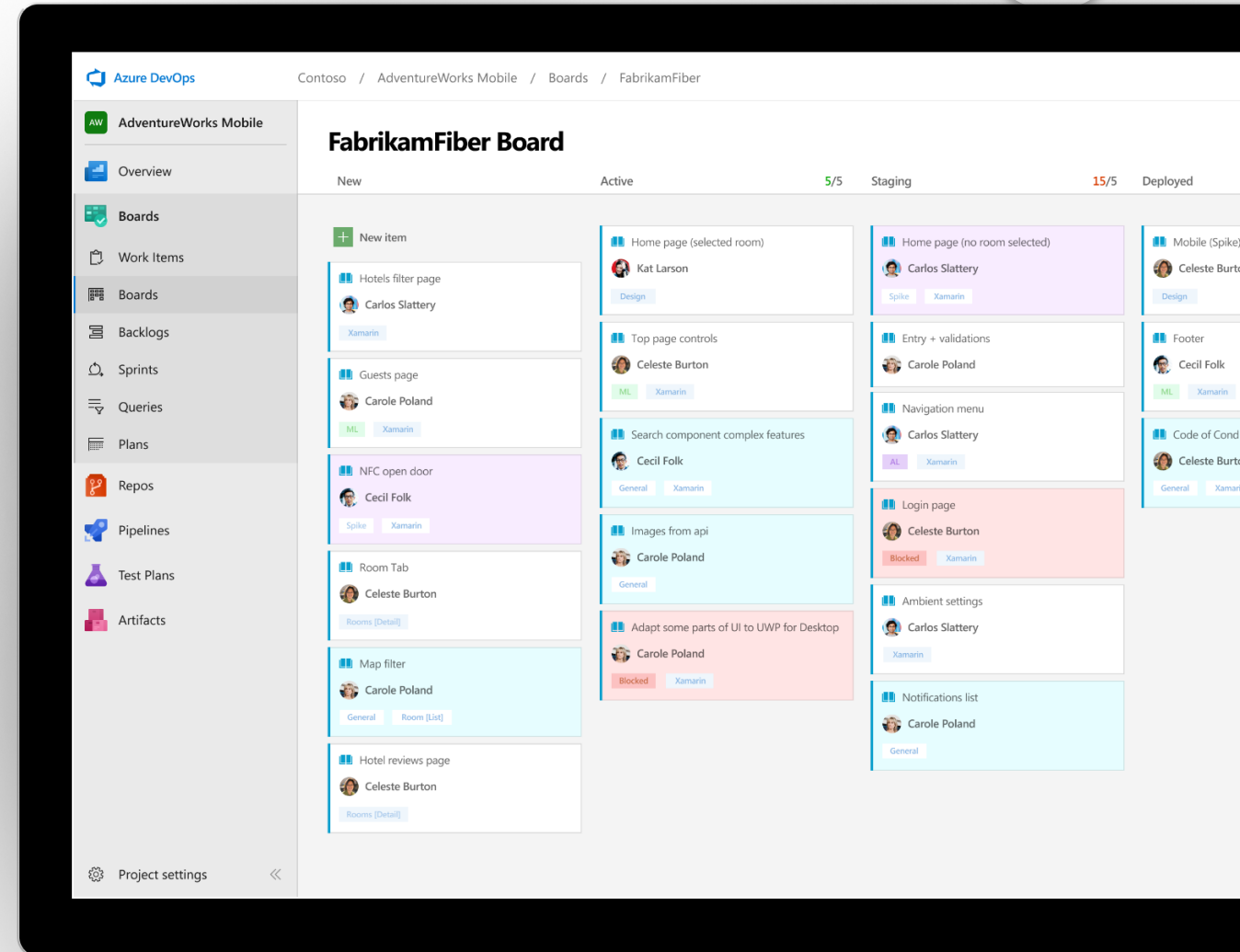


## Project insights

Gain new insights into the health and status of your project with powerful analytics tools and dashboard widgets.



<https://azure.com/devops>



# Azure Repos



Unlimited private Git repo hosting and support for TFVC that scales from a hobby project to the world's largest Git repositories



## Works with your Git client

Securely connect with and push code into your Git repos from any IDE, editor, or Git client.



## Web hooks and API integration

Add validations and extensions from the marketplace or build your own using web hooks and REST APIs.

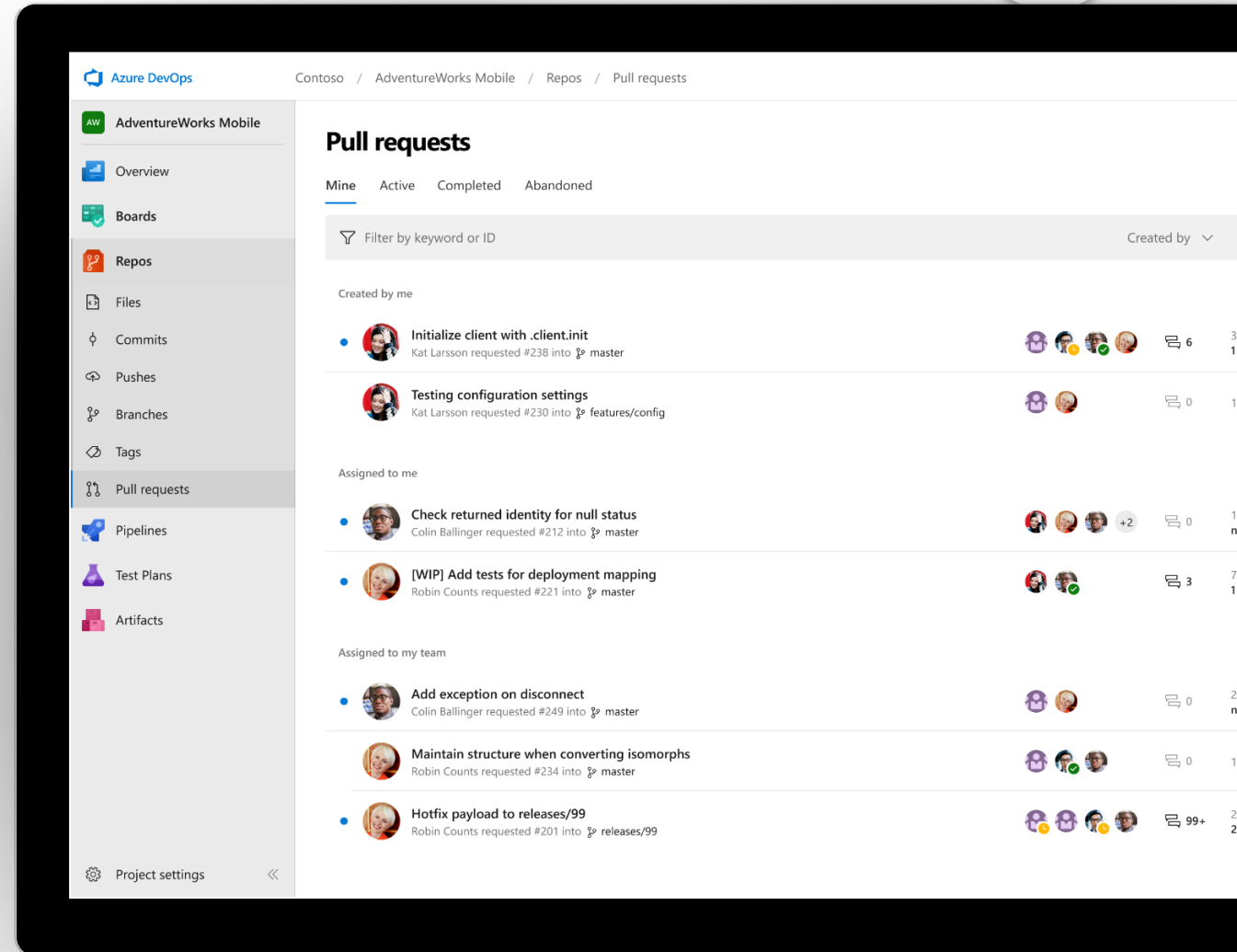


## Semantic code search

Quickly find what you're looking for with code-aware search that understands classes and variables.



<https://azure.com/devops>





# Azure Pipelines



Cloud-hosted pipelines for Linux, Windows and macOS,  
with unlimited minutes for open source



## Any language, any platform, any cloud

Build, test, and deploy Node.js, Python, Java, PHP, Ruby, C/C++, .NET, Android, and iOS apps. Run in parallel on Linux, macOS, and Windows. Deploy to Azure, AWS, GCP or on-premises



## Extensible

Explore and implement a wide range of community-built build, test, and deployment tasks, along with hundreds of extensions from Slack to SonarCloud. Support for YAML, reporting and more



## Containers and Kubernetes

Easily build and push images to container registries like Docker Hub and Azure Container Registry. Deploy containers to individual hosts or Kubernetes.

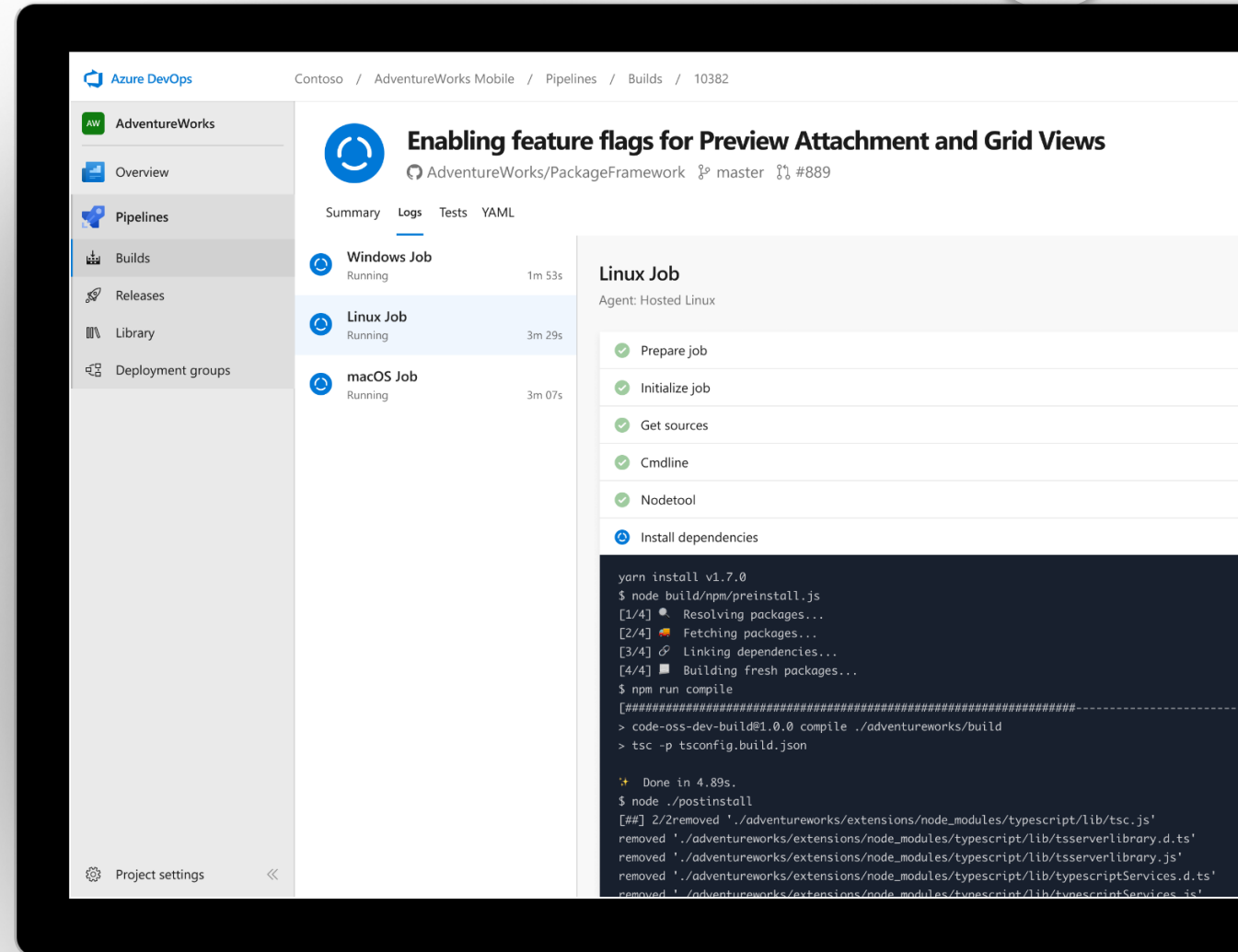


## Best-in-class for open source

Ensure fast continuous integration/continuous delivery (CI/CD) pipelines for every open source project. Get unlimited build minutes for all open source projects with up to 10 free parallel jobs across Linux, macOS and Windows



<https://azure.com/pipelines>





# Azure Pipelines

Free unlimited build minutes for public projects

Up to 10 free parallel jobs across Windows, Linux and macOS



<https://azure.com/pipelines>

Microsoft ❤️ Open Source



## Integrated with GitHub

Azure Pipelines available now to any developer from the GitHub Marketplace



The screenshot shows the Azure Pipelines page on the GitHub Marketplace. The page has a dark header with the GitHub logo, a search bar, and navigation links for Pull requests, Issues, Marketplace, and Explore. The main content area is white and features the Azure Pipelines logo, a "Set up a new plan" button, and an "Edit your plan" dropdown. Below this, there are sections for "Categories" (Continuous integration, Deployment), "Supported languages" (Dockerfile, Go, Java, and 7 other languages supported), and "Developer links" (Support, Status, Documentation, Privacy Policy). The right side of the page has a large blue section titled "Linux, macOS, and Windows agents" with a description and a diagram showing the pipeline steps: Test (27 succeeded), Build Linux (6 succeeded), Build Windows (2 succeeded), Build macOS (64% in progress), and Distribute.

Marketplace / Azure Pipelines

# Azure Pipelines

[Set up a new plan](#) [Edit your plan](#)

**Categories**

- Continuous integration
- Deployment

**Supported languages**

Dockerfile, Go, Java  
and 7 other languages supported

**Developer links**

- Support
- Status
- Documentation
- Privacy Policy

**Linux, macOS, and Windows agents**

Simplify managing hardware and VMs by using Microsoft cloud-hosted agents. Get full CI/CD pipeline support for every major platform and tool.

**Test** 27 succeeded

**Build Linux** 6 succeeded

**Build Windows** 2 succeeded

**Build macOS** 64% in progress...

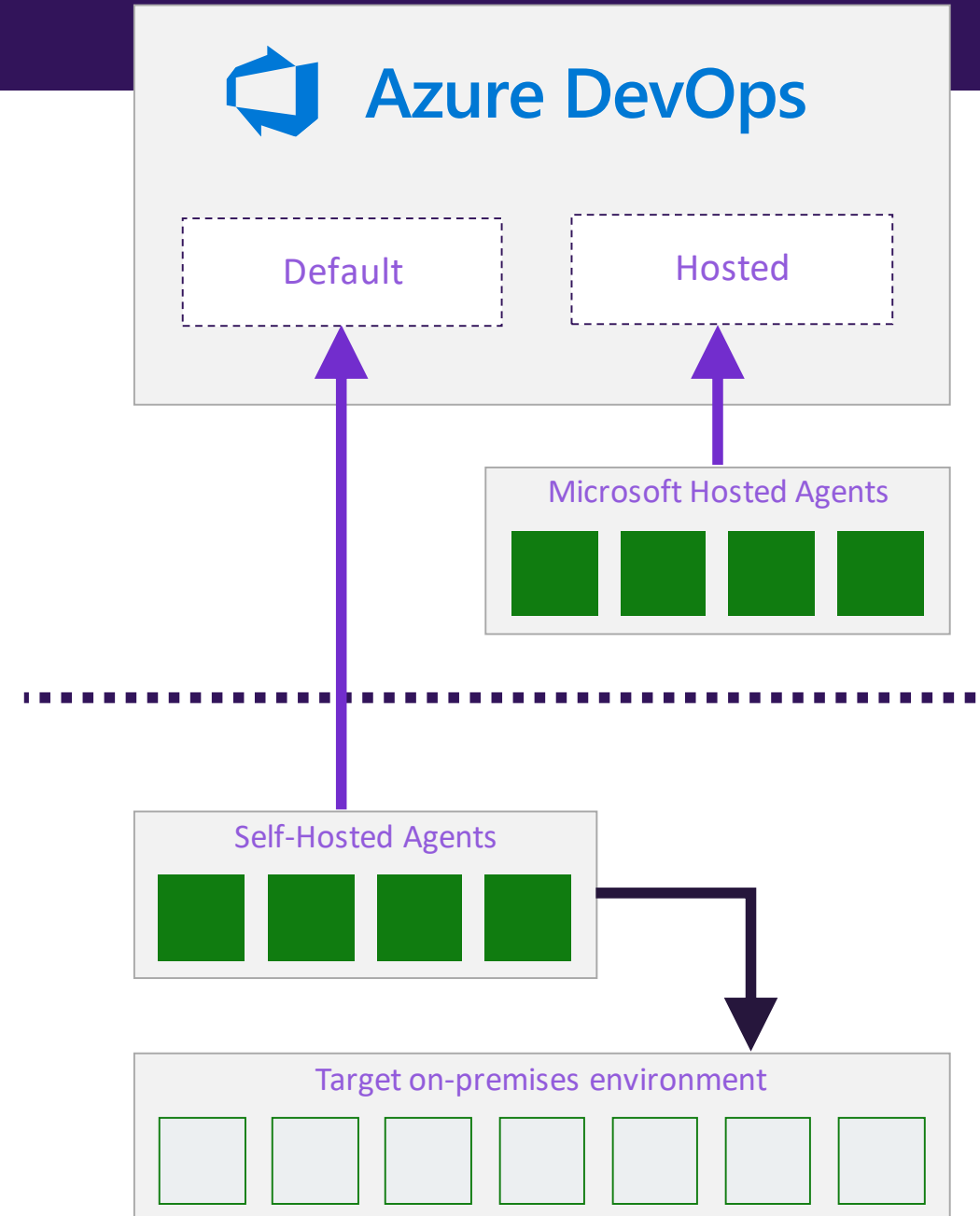
**Distribute**



Open Source  
Powered by  
Azure Pipelines

# Self-Hosted Agents

- Ideal if you require custom build pre-requisites, control vendor license keys etc
- Can create in cloud or on-prem
- Can also deploy to on-prem servers from Azure DevOps
- Can use deployment groups to dynamically provision to target deployment group types



# DevOps for Desktop

DevOps principles are not just for web apps, containers & micro-service architectures.

Common area of focus is on improving the flow of value to your customers with CI & CD to the desktop

## Evergreen Installation Technologies

- ClickOnce
- Squirrel
- Microsoft Store for Business and Education



# Self-Service Dev/Test Environments



## Azure Lab Services

- Simplify cloud environment management for developers and testers.
- Enforce policies and control costs with full visibility
- Use templates, custom images and formulas to reproduce environments.
- Orchestrate with Azure Pipelines or integrate using REST API

The screenshot displays the Azure portal interface for configuring marketplace images in a DevTest Lab. The left sidebar shows the navigation menu with options like 'Create a resource', 'All services', and 'DevTest Labs'. The main content area is titled 'Configuration and policies - Marketplace images' and includes a search bar, 'Save', 'Discard', and 'Feedback' buttons. Below this, there's a section for 'Allowed images' with a table listing various Red Hat Linux and SQL Server images. The table has columns for 'NAME' and 'OFFER STATUS'. The 'Red Hat Enterprise Linux 7.3' image is selected with a checkmark.

NAME	OFFER STATUS
<input type="checkbox"/> Free SQL Server License: SQL Server 2017 Developer on Red Hat Enterpris...	Standard terms
<input type="checkbox"/> Free SQL Server License: SQL Server 2017 Express on Red Hat Enterprise Li...	Standard terms
<input type="checkbox"/> Red Hat Enterprise Linux 6.7	Standard terms
<input type="checkbox"/> Red Hat Enterprise Linux 6.7 for SAP HANA	Standard terms
<input type="checkbox"/> Red Hat Enterprise Linux 6.8	Standard terms
<input type="checkbox"/> Red Hat Enterprise Linux 6.8 for SAP Business Apps	Standard terms
<input type="checkbox"/> Red Hat Enterprise Linux 6.9	Standard terms
<input checked="" type="checkbox"/> Red Hat Enterprise Linux 7.2	Standard terms
<input type="checkbox"/> Red Hat Enterprise Linux 7.2 for SAP HANA	Standard terms
<input checked="" type="checkbox"/> Red Hat Enterprise Linux 7.3	Standard terms
<input type="checkbox"/> Red Hat Enterprise Linux 7.3 for SAP Business Apps	Standard terms
<input type="checkbox"/> Red Hat Enterprise Linux 7.4	Standard terms
<input type="checkbox"/> SQL Server 2017 Enterprise on Red Hat Enterprise Linux 7.4 (RHEL)	Standard terms
<input type="checkbox"/> SQL Server 2017 Standard on Red Hat Enterprise Linux 7.4 (RHEL)	Standard terms



# Azure DevOps



Azure Boards



Azure Repos



Azure Pipelines



Azure Test Plans



Azure Artifacts



Plan smarter, collaborate better, and ship faster with a set of modern dev services



Any developer, any platform, any cloud. Full support for hybrid cloud, on-premises & containers.



Use all the Azure DevOps services or choose just what you need to complement your existing workflows



Best in class builds for open source. Free unlimited build minutes for public projects and up to 10 free concurrent jobs across Windows, Linux and macOS



Get started for free for small teams, scales to support the largest enterprises



Start free today



<https://azure.com/devops>



# Grazie

Domande?



rcappello



@rcappello



Riccardo Cappello

# Changes for existing VSTS / TFS customers



The same functionality you know and love today, with greater openness, flexibility and focus

## Existing Accounts

- Existing <https://contoso.visualstudio.com> URL continues to work. <https://dev.azure.com/contoso> available for opt-in.
- New UI opt-in per user as preview feature. Will start advertising new UI once feedback from new accounts and early adopters has been incorporated.
- Can disable services on a per project basis for new UI
- New Azure branding in communications and documentation (emails, alerts etc).
- Websites and documentation will move from Visual Studio to Azure based locations (with redirects in place).
- Redirects available for some time.
- TFS will remain the on-premises brand until the next major version in 2019. The new UI will be enabled in that release.
- Existing TFS branded information and downloads remain in Visual Studio locations until next release.

## Pricing

- Public project usage is now free.
- The free tier for Pipelines now includes 1,800 minutes per month, up from 240.
- Pipelines can be used independently from Repos — so if you are only using Pipelines and your repos are hosted on GitHub you don't need to pay for Repos or Boards (Basic) users.

## New Accounts

- <https://dev.azure.com/contoso> based URL.
- New navigation & branding by default.

# Migrating from TFS to Azure DevOps



Move from Team Foundation Server to Azure DevOps and bring your data along

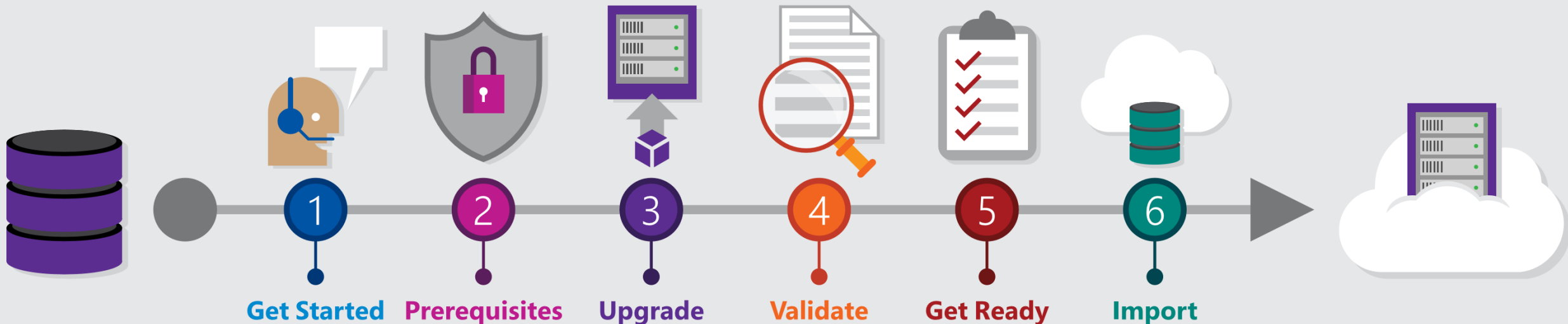
## Benefits of Cloud Hosted Azure DevOps Services

- Global availability
- Hosted and maintained by Microsoft with 99.9% uptime guarantee and 24x7 support
- Immediate access to latest features
- Simplified deployment to Azure

## TFS Import Service

- Fully supported high fidelity migration path
- Trusted by many large enterprises
- Now faster and easier to use

 <https://aka.ms/tfsimport>



# Azure DevOps Services Pricing



## Open Source Projects

### Free

Unlimited users and build time

- Azure Pipelines: 10 parallel jobs with unlimited minutes for CI/CD
- Azure Boards: Work item tracking and Kanban boards
- Azure Repos: Unlimited public Git repos

## Small Teams

### Free

Start free with up to 5 users

- Azure Pipelines: Run 1 Microsoft-hosted job for 1,800 minutes per month and 1 self-hosted job for any amount of time
- Azure Boards: Work item tracking and Kanban boards
- Azure Repos: Unlimited public Git repos
- Azure Artifacts: package management
- Unlimited stakeholders

## Teams of any size

### Starts at \$6

per user, per month for Boards & Repos\*

Easy pricing that grows with your team

- Azure Pipelines: Run 1 Microsoft-hosted job for 1,800 minutes per month and 1 self-hosted job for any amount of time
- Azure Boards: Work item tracking and Kanban boards
- Azure Repos: Unlimited public Git repos
- Azure Artifacts: package management
- Unlimited stakeholders
- Boards & Repos included for Visual Studio subscribers



<https://azure.com/pricing/details/devops/>

\* 5 Boards & Repos users and 5 Artifacts users free. Pipelines with unlimited minutes, Test Plans users and additional Artifacts users also available. Please see the Azure pricing calculator for details.

# Grazie

Domande?



rcappello



@rcappello



[Linkedin.com/in/rcappello](https://www.linkedin.com/in/rcappello)