Pipeline your Ruby apps with Azure DevOps

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Software delivery paradox

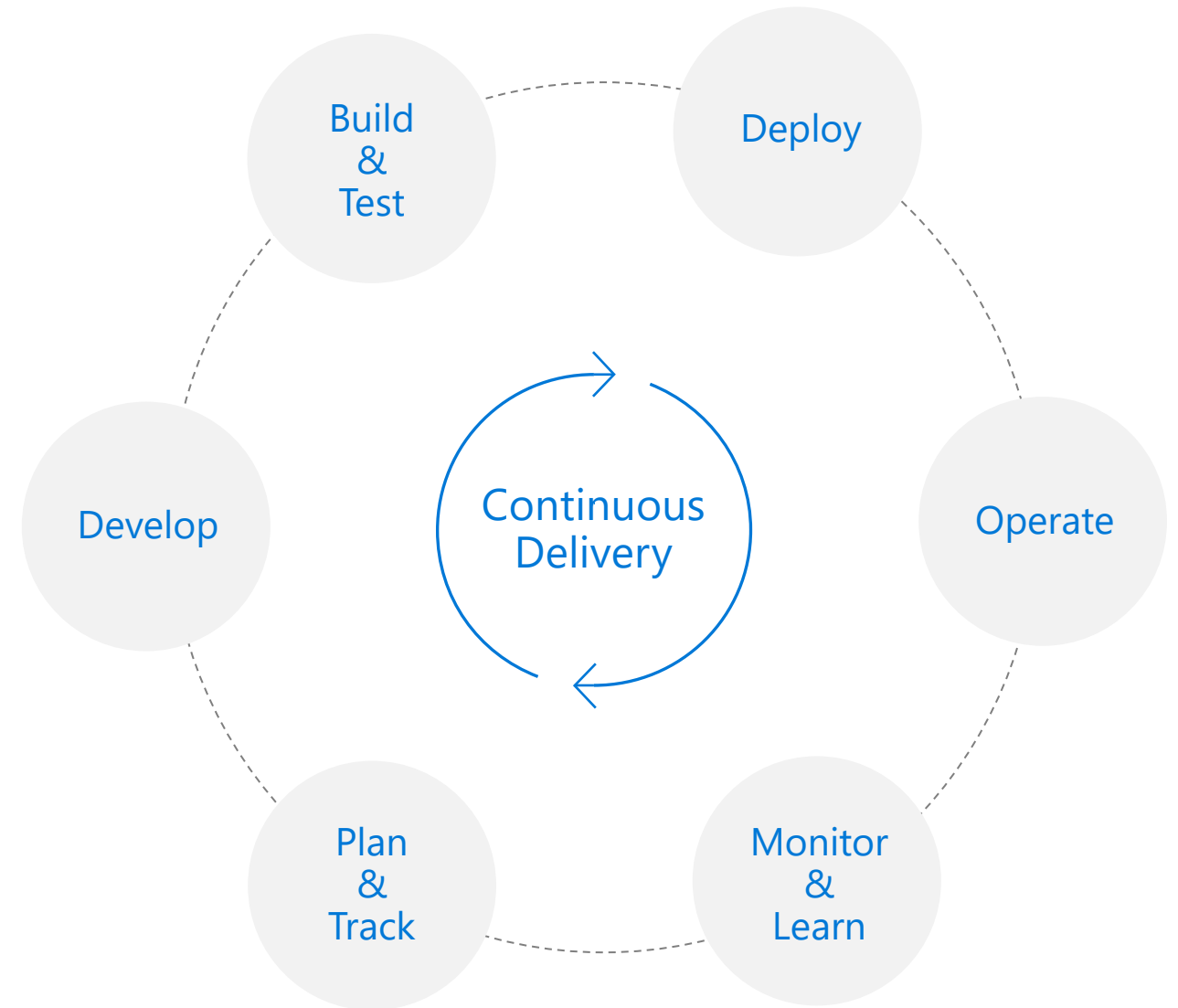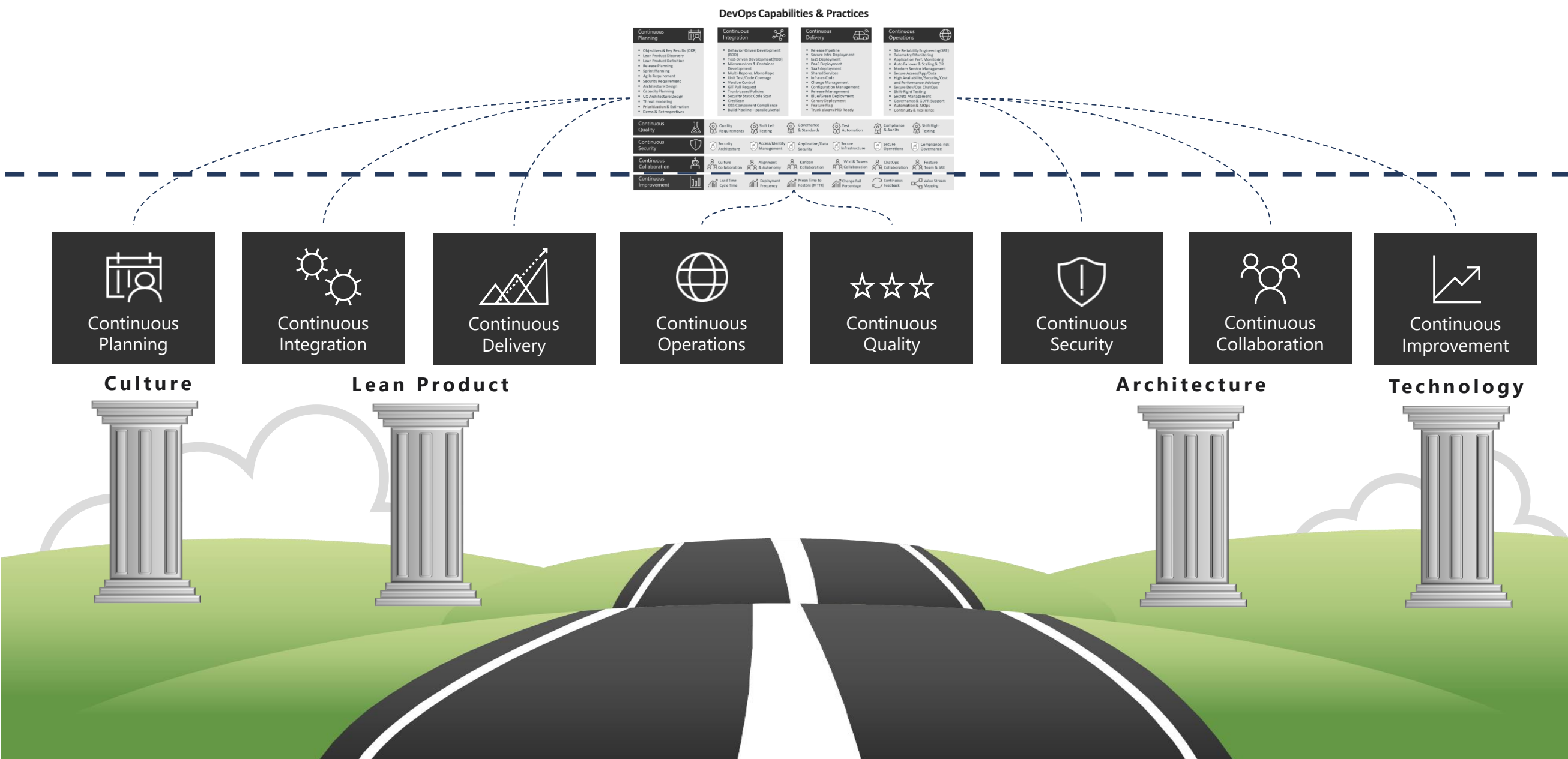Speed vs. control impedes innovation

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. **"**

DevOps Taxonomy

DevOps Capabilities & Practices

Culture · Lean Product · Architecture · Technology

Continuous Planning · Continuous Integration · Continuous Delivery · Continuous Operations · Continuous Quality · Continuous Security · Continuous Collaboration · Continuous Improvement

DevOps benefits based on research

Comparing elite DevOps performers against low performers, we find that elite performers have...

IOIOIO OIOIOI IOIOIO **46 times more** Frequent code deployments	(clock icon) **2,555 times faster** Lead time from commit to deploy
(warning icon) **7 times lower** Change failure rate (changes are 1/7 as likely to fail)	(gauge icon) **2,604 times faster** Time to recover from incidents

Source: 2019 State of DevOps Report DORA.

Plan & Track
Agile Planning
Dashboards
Kanban Boards
Taskboards

Build & Test
Git Source Control
Modern Code Workflow
Continuous Integration
Continuous Testing
Package Management
Open Source Compliance

Develop + Test

Plan + Track

Continuous Delivery

Monitoring & Operations
ORF
Telemetry
Diagnostics
Analysis
Compliance

Release

Monitor + Operate

Deployment
Deployment of app and infrastructure
PaaS, IaaS and Containers

"

DevOps is the union of people, process, and tools to enable continuous delivery of value to your end users.
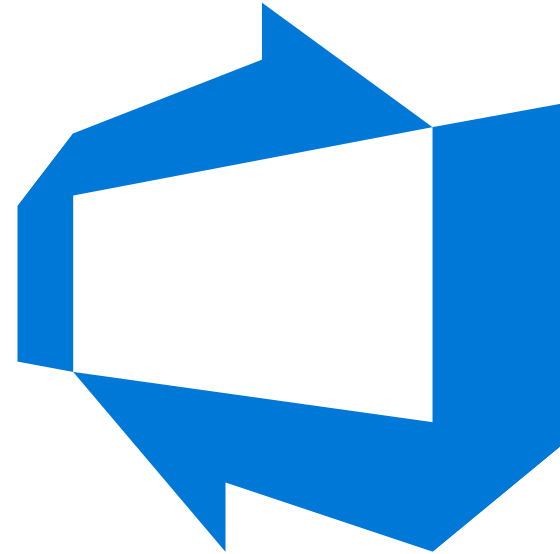
Azure #DevOps

Building the largest developer ecosystem on the planet

With over a decade of experience building developer services

GitHub

40 million developers

96 million repositories

Azure DevOps

1000's of enterprises

15+ years of developer innovation

Azure DevOps

Azure Boards

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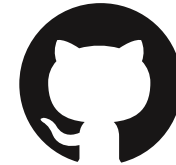
Azure Pipelines

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 Repos + GitHub repo

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

Azure Test Plans

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

Azure Artifacts

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

https://azure.com/devops
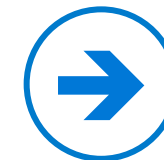
Azure Boards

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.
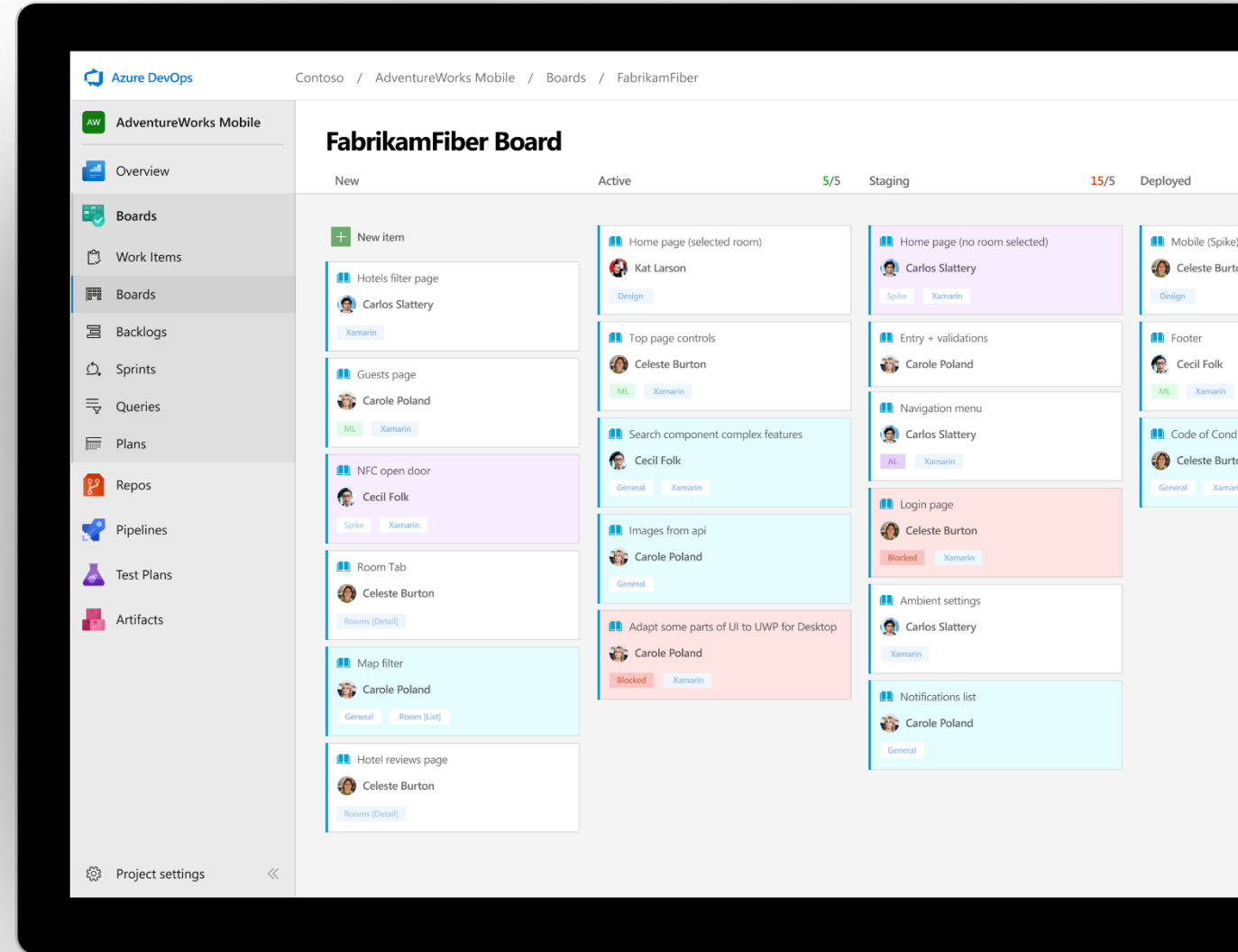
Project insights

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

https://azure.com/devops

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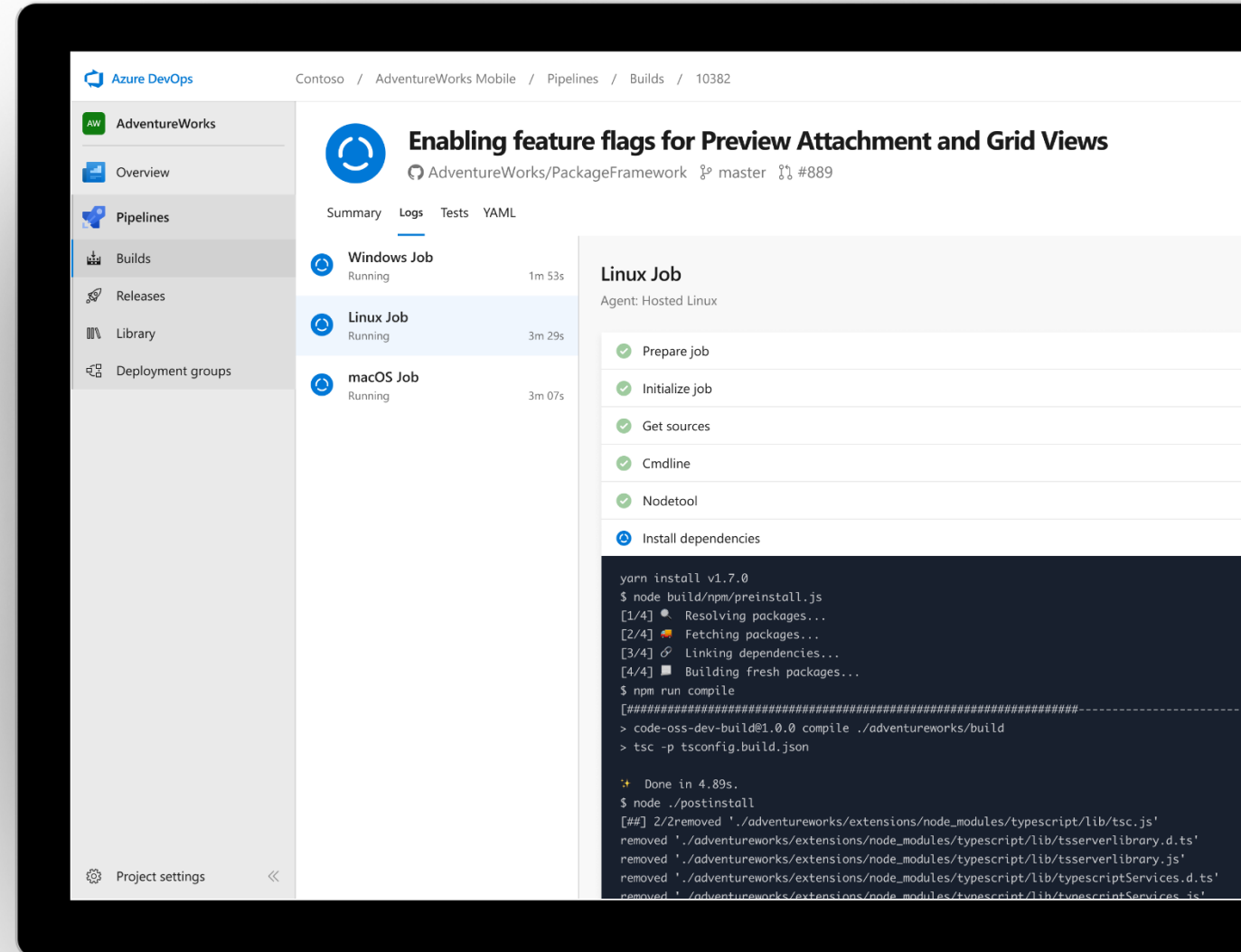
Best-in-class for open source
Ensure fast continuous integration/continuous delivery (CI/CD) pipelines for every open source project. Get unlimited build minutes for all open source projects with up to 10 free parallel jobs across Linux, macOS and Windows

https://azure.com/pipelines

Azure 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

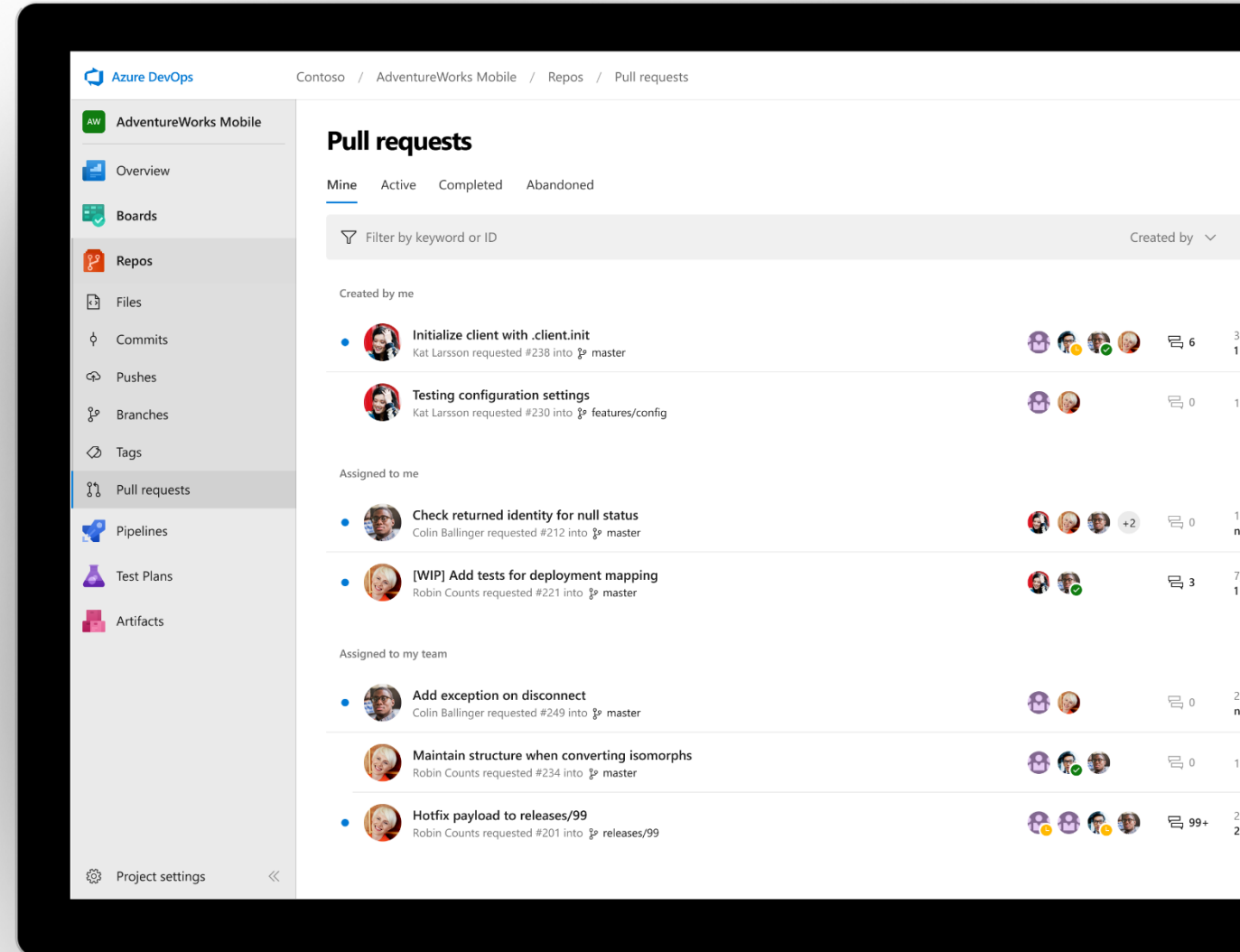Add validations and extensions from the marketplace or build your own using web hooks and REST APIs.

Semantic code search

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

https://azure.com/devops

Azure DevOps   Contoso / AdventureWorks Mobile / Repos / Pull requests

AW **AdventureWorks Mobile**

Overview
Boards
Repos
Files
Commits
Pushes
Branches
Tags
Pull requests
Pipelines
Test Plans
Artifacts

Project settings

Pull requests

Mine   Active   Completed   Abandoned

Filter by keyword or ID   Created by ∨

Created by me

Initialize client with .client.init
Kat Larsson requested #238 into master

Testing configuration settings
Kat Larsson requested #230 into features/config

Assigned to me

Check returned identity for null status
Colin Ballinger requested #212 into master

[WIP] Add tests for deployment mapping
Robin Counts requested #221 into master

Assigned to my team

Add exception on disconnect
Colin Ballinger requested #249 into master

Maintain structure when converting isomorphs
Robin Counts requested #234 into master

Hotfix payload to releases/99
Robin Counts requested #201 into releases/99

Azure Test Plans

Get end-to-end traceability. Run tests and log defects from your browser. Track and assess quality throughout your testing lifecycle.

Capture rich data

Capture rich scenario data as you execute tests to make discovered defects actionable. Explore user stories without test cases or test steps. You can create test cases directly from your exploratory test sessions.

Test across web and desktop

Test your application where it lives. Complete scripted tests across desktop or web scenarios. Test on-premises application from the cloud and vice-versa.

Get end-to-end traceability

Leverage the same test tools across your engineers and user acceptance testing stakeholders. Pay for the tools only when you need them.

https://azure.com/devops
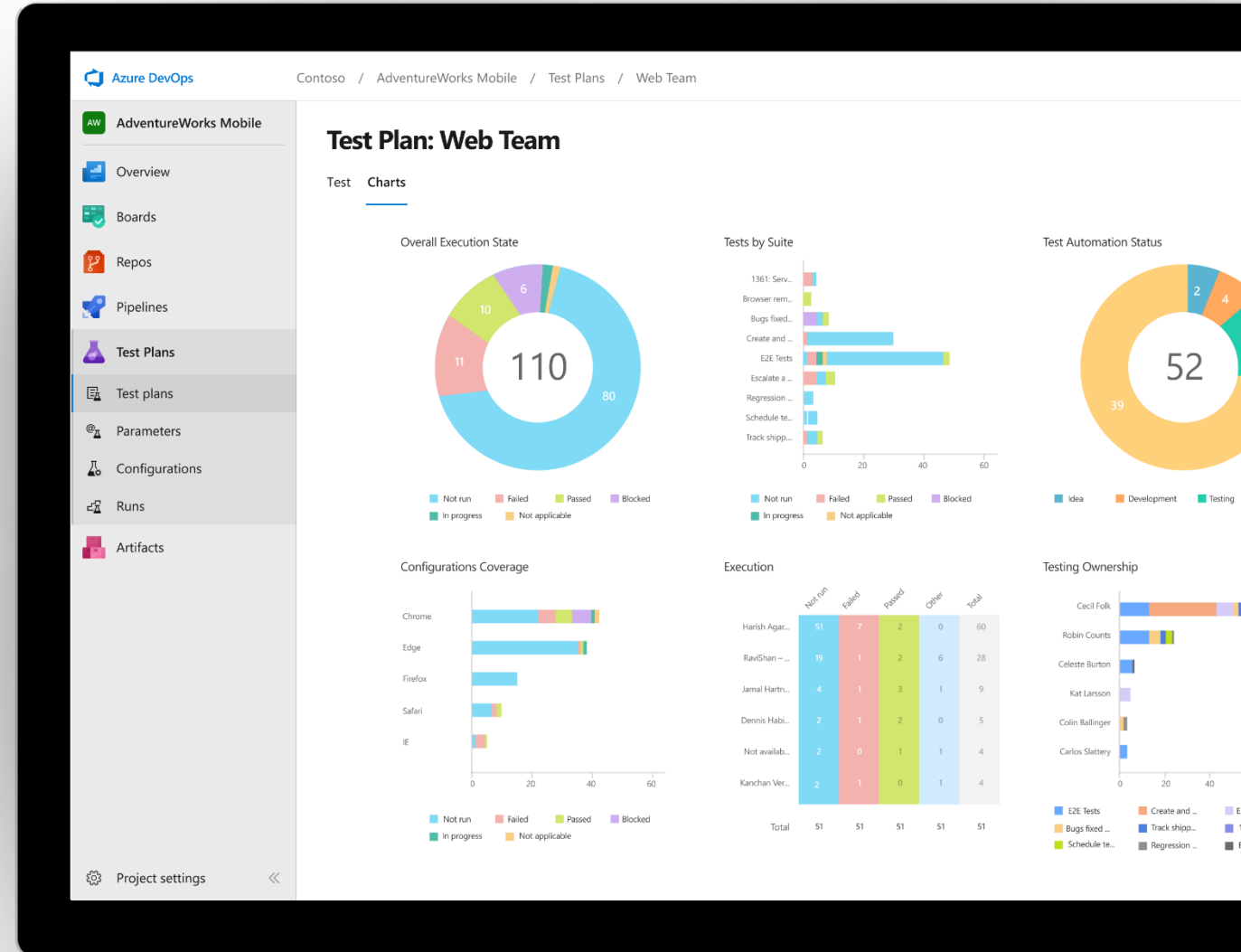
Azure Artifacts

Create and share Maven, npm, and NuGet package feeds from public and private sources – fully integrated into CI/CD pipelines

Manage all package types

Get universal artifact management for Maven, npm, and NuGet.

Add packages to any pipeline

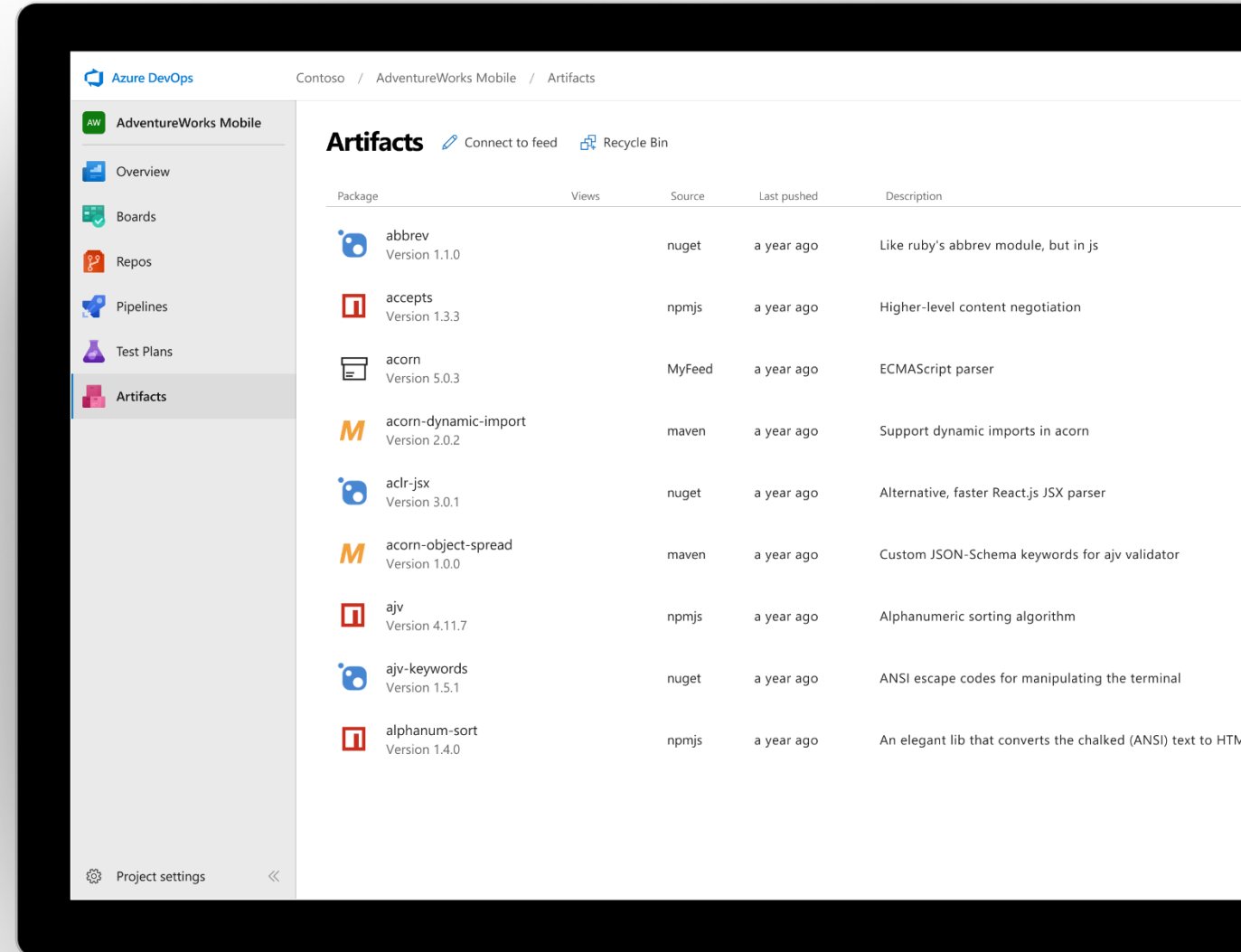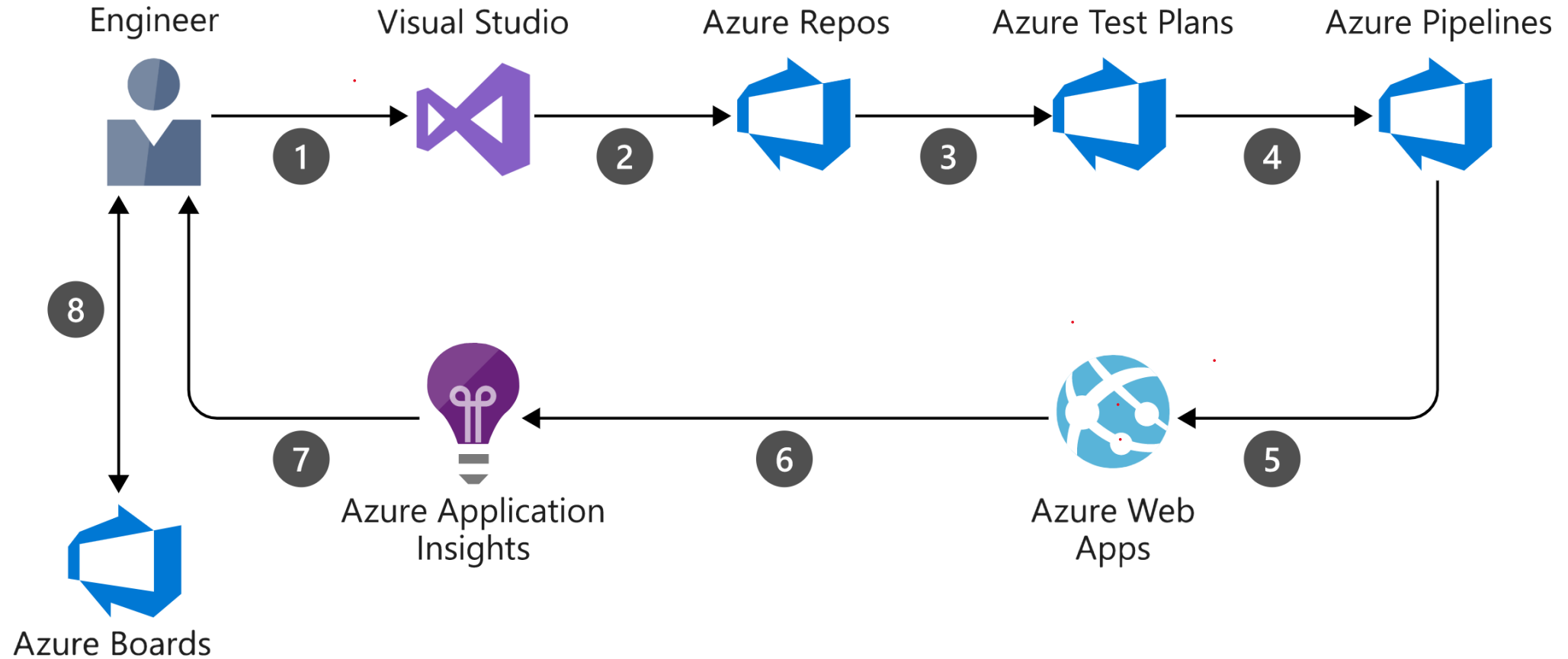Share packages, and use built-in CI/CD, versioning, and testing.

Share code efficiently

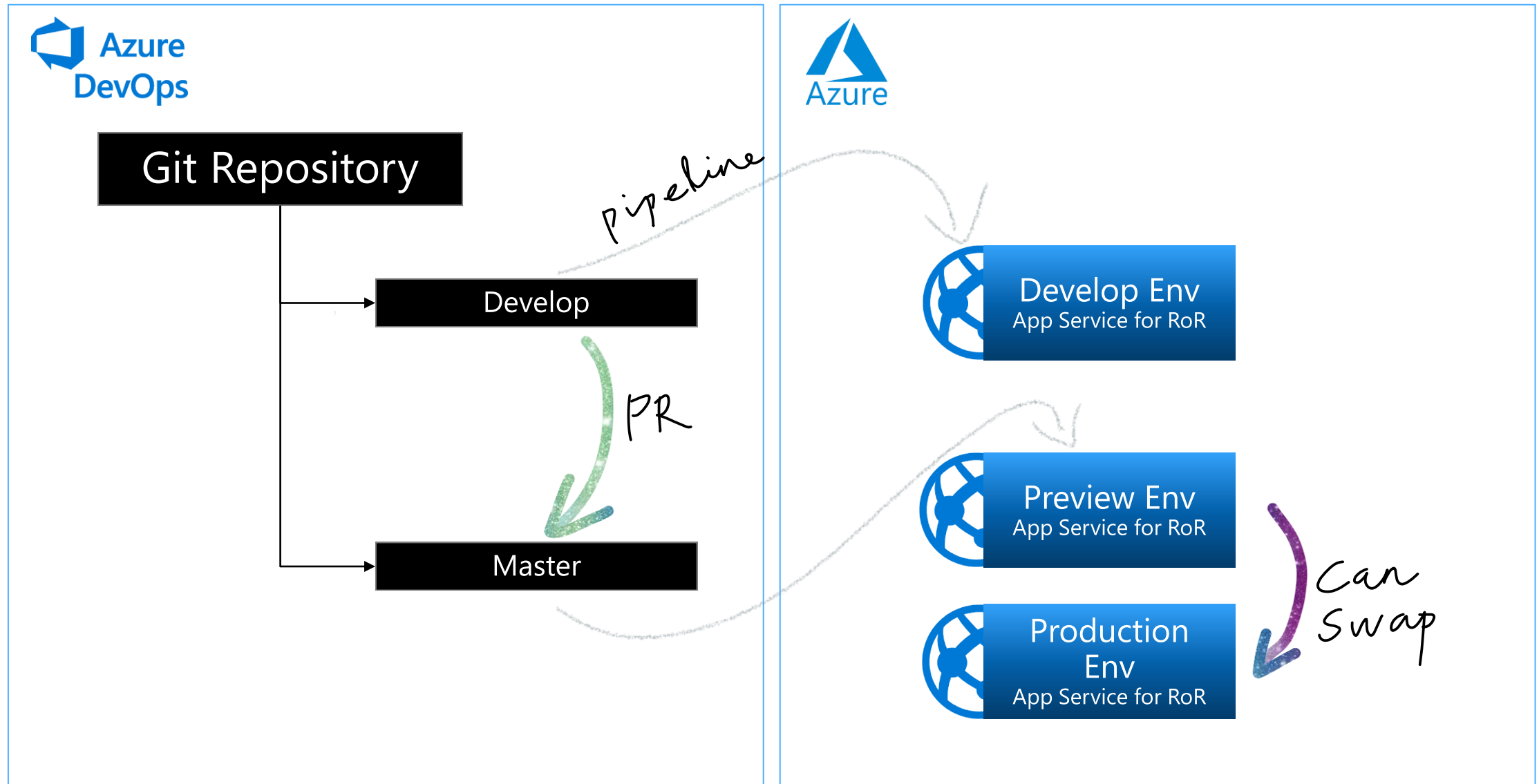Easily share code across small teams and large enterprises.

https://azure.com/devops

Demo: Pipeline Ruby App with Azure DevOps

Demo: Pipeline Ruby App with Azure DevOps

What's next?

Infrastructure as
Code

Appendix

DevOps
Pricing

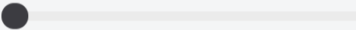## INDIVIDUAL SERVICES

Azure Pipelines

1 Free Microsoft-hosted CI/CD
1 Free Self-Hosted CI/CD

Start free >

- 1 Microsoft-hosted job with 1,800 minutes per month for CI/CD and 1 self-hosted job with unlimited minutes per month
- $40 per extra Microsoft-hosted CI/CD parallel job and $15 per extra self-hosted CI/CD parallel job with unlimited minutes
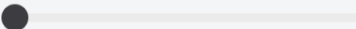
Microsoft-hosted

Free

1,800 minutes free with 1 free parallel job $0/mo

Self-hosted

1

1 free parallel job with unlimited minutes $0/mo
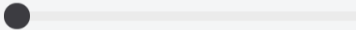
Azure Artifacts

2 GB free,
then starting at $2 per GB

Start free >

- Industry-leading NuGet Server
- Support for Maven, npm, and Python packages
- Upstream sources to help protect open-source dependancies
- Integrated with Azure Pipelines
- Sophisticated access controls

First 2 GB free

0

$0/extra gigabyte $0/mo

Rate card

- 0 - 2 GB = Free
- 2 - 10 GB = $2 per GB
- 10 - 100 GB = $1 per GB
- 100 - 1,000 GB = $0.50 per GB
- 1,000+ GB = $0.25 per GB

USER LICENSES

Basic Plan

First 5 users free,
then $6 per user per month

Start free >

- **Azure Pipelines:** Includes the free offer from INDIVIDUAL SERVICES
- **Azure Boards:** Work item tracking and Kanban boards
- **Azure Repos:** Unlimited private Git repos
- **Azure Artifacts:** 2 GB free per organization

First 5 users free

1

$6/user/month $0/mo

Basic + Test Plans

$52 per user
per month

30 day free trial >

- Includes all Basic plan features
- Test planning, tracking & execution
- Browser-based tests with annotation
- Rich-client test execution
- User acceptance testing
- Centralized reporting

1

$52/user/month $52/mo

https://azure.microsoft.com/en-us/pricing/details/devops/azure-devops-services/

Thank You

ευχαριστώ   Salamat Po   متشكرم   شكراً   Grazie

благодаря   ありがとうございます   Kiitos   Teşekkürler   谢谢

ขอบคุณครับ   Obrigado   شكريه   Terima Kasih   Dziękuję

Hvala   Köszönöm   Tak   Dank u wel   дякую   Tack

Mulţumesc   спасибо   Danke   Cám ơn   Gracias

多謝晒   Ďakujem   תודה   நன்றி   Děkuji   감사합니다