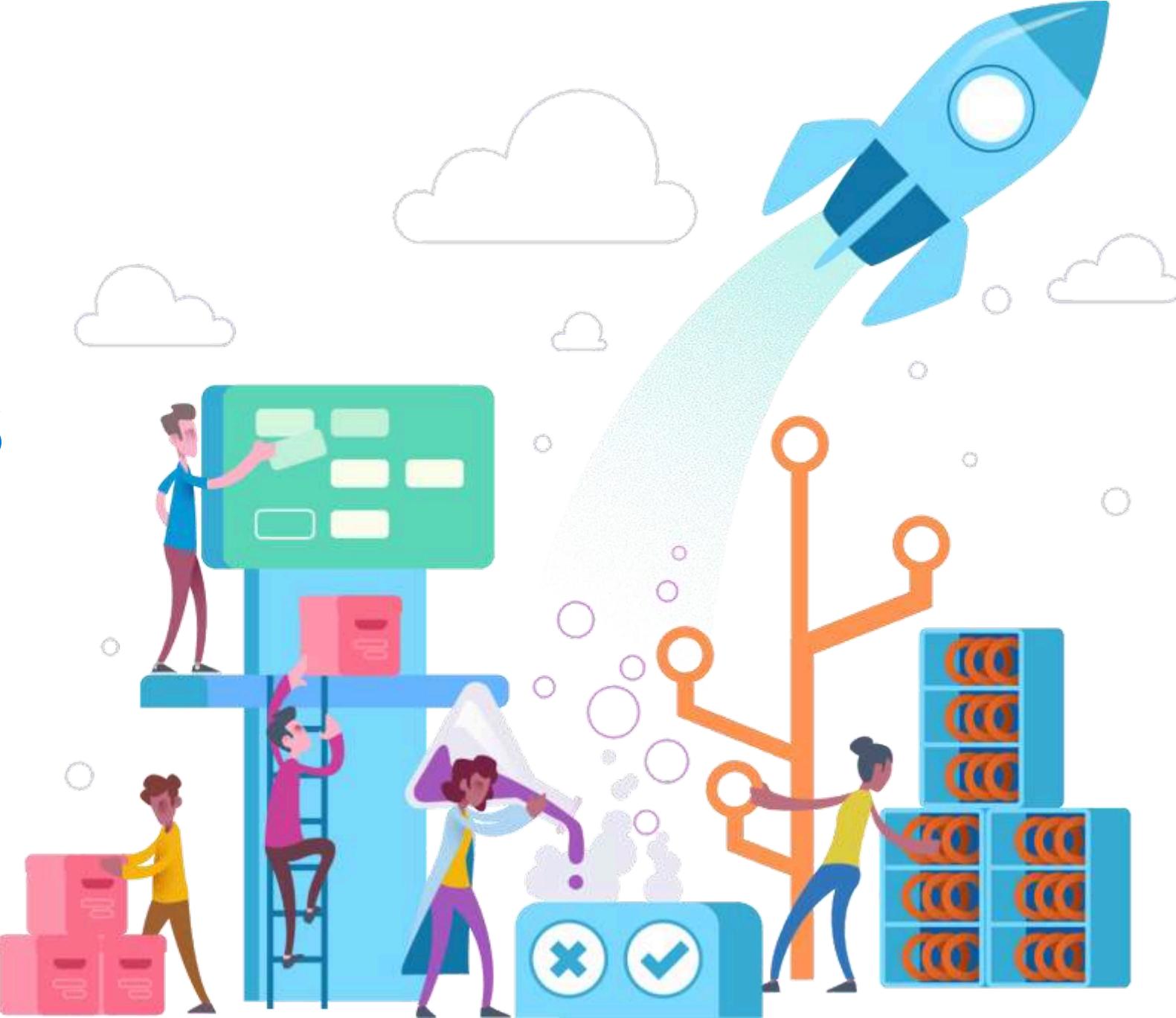


Azure DevOps

Mehul Patel



Azure DevOps

#AzureDevOps



<https://azure.com/devops>



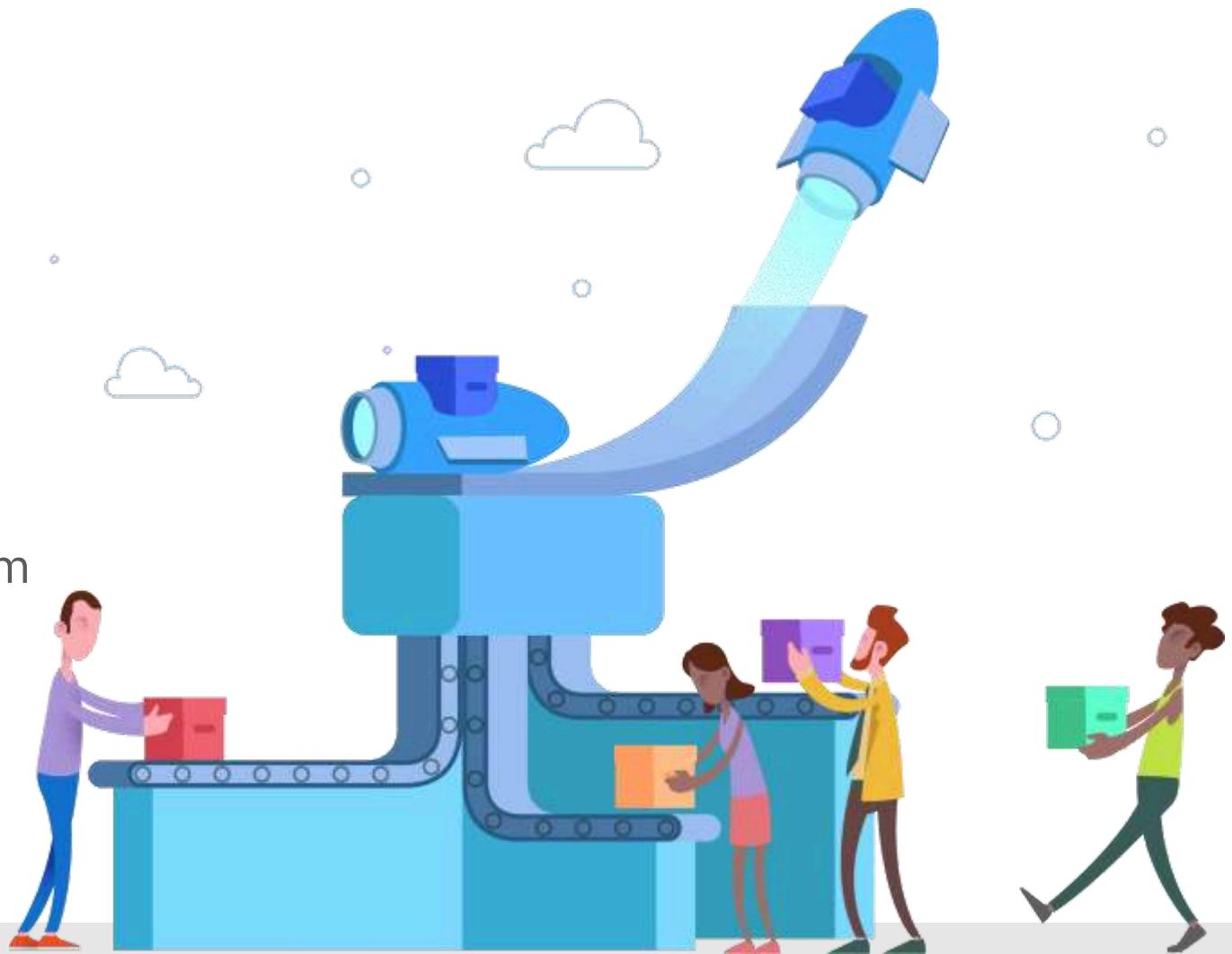
@AzureDevOps



<https://aka.ms/AzureDevOpsForum>



<https://aka.ms/DevOpsBlog/>

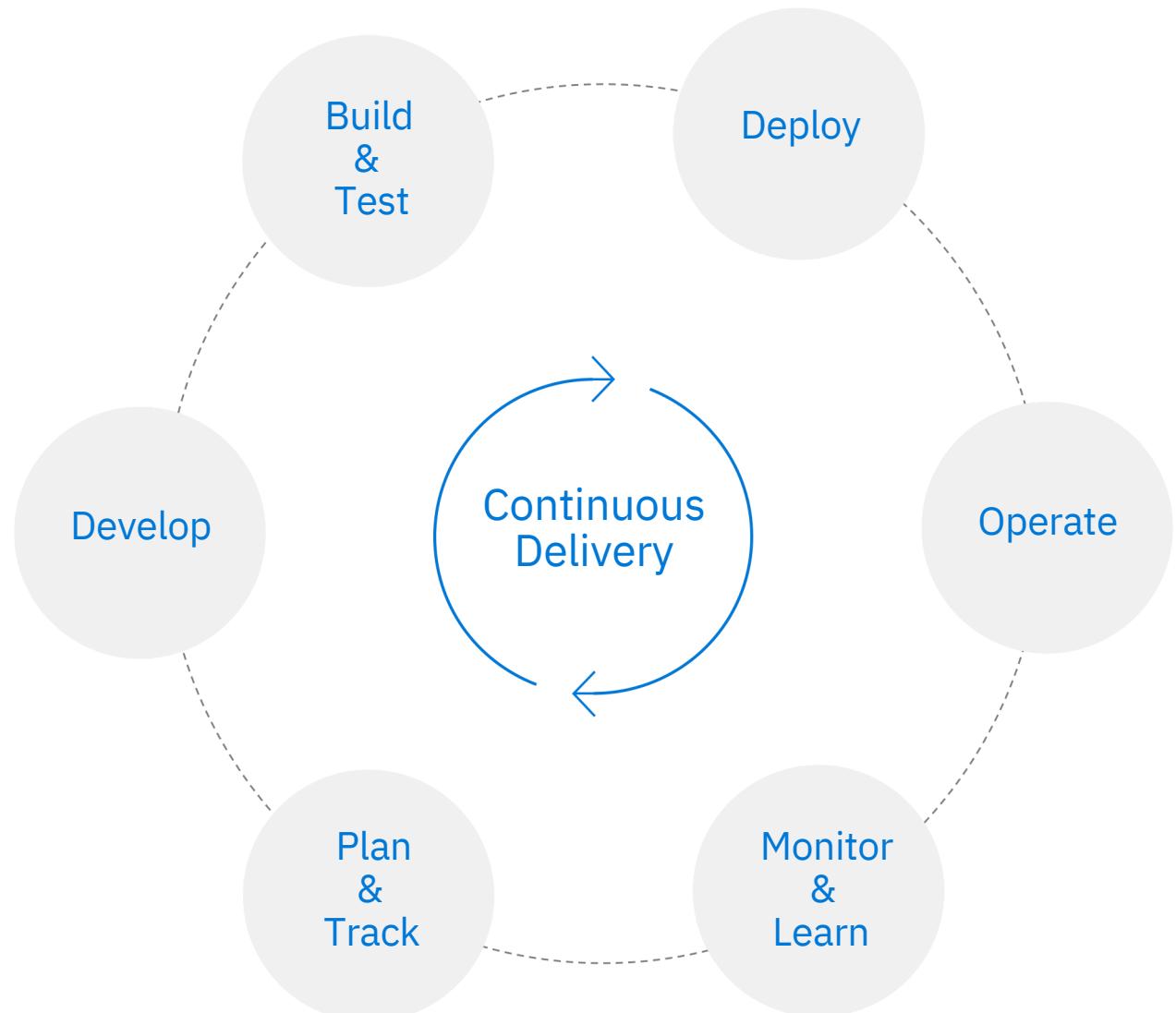


What is DevOps?

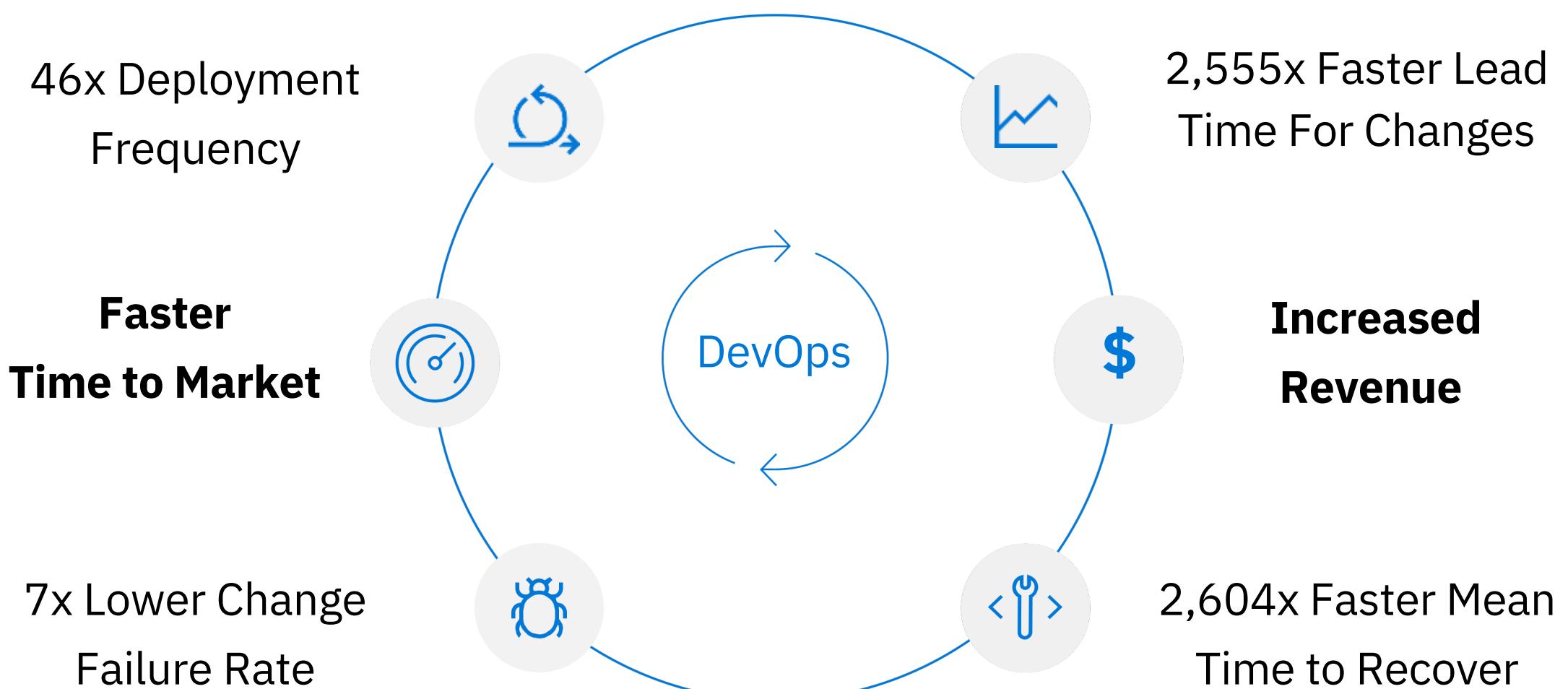
People. Process. Products.

“

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

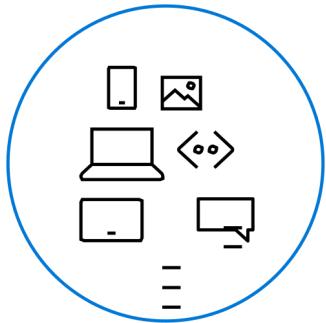


High Performance DevOps Companies Achieve...



How Microsoft can help

Microsoft Azure is a powerful and flexible foundation for past, present, and future apps –easily build, manage, and deploy any application and any stack on a massive, global network using your favorite tools and frameworks.

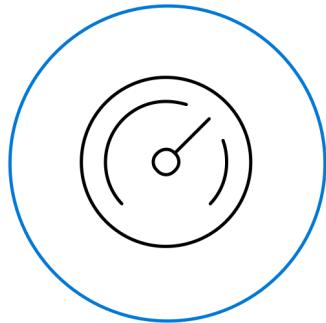


Flexible

Choice of IaaS, PaaS, public cloud or hybrid.

Mirror or modernize app infrastructure with VMs, containers, microservices or serverless.

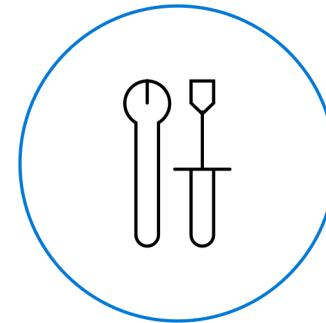
Supports all stages of the app modernization journey –from lift-and-shift to Cloud-Native.



Powerful

Instantly improve the performance, scalability and resiliency of your apps by moving them to the cloud.

Increase business agility with Cloud-Native capabilities and built-in DevOps for continuous innovation.



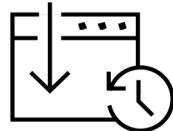
Open

Bring your stack, we bring a cloud that runs any app, on any platform, and any language.

Build applications using the language and tools of your choice - Azure supports what you already use and love so you can get up and running fast – just bring code.

What technologies do I need to support DevOps?

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)

- Improve software development quality and speed.
- When you use Azure Pipelines or Jenkins to build apps in the cloud and deploy to Azure, each time you commit code, it's automatically built and tested and bugs are detected faster.

101010
010101
101010

Continuous Deployment (CD)

- By combining continuous integration and infrastructure as code (IaC), you'll achieve identical deployments and the confidence to deploy to production at any time.
- With continuous deployment, you can automate the entire process from code commit to production if your CI/CD tests are successful.



Continuous Learning & Monitoring

- With Azure Application Insights you can identify how your applications are performing and test if the recent deployment made things better or worse.
- Using CI/CD practices, paired with monitoring tools, you'll be able to safely deliver features to your customers as soon as they're ready.

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 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

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



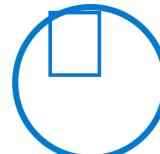
Azure TestPlans

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 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

The screenshot shows the Azure DevOps Pipelines interface for the AdventureWorks Mobile project. It displays three parallel jobs: a Windows Job, a Linux Job, and a macOS Job, all currently running. The Linux Job is expanded to show its detailed steps:

- Prepare job
- Initialize jobs
- Get sources
- Cmdline
- Nodetool
- Install dependencies

The log output for the Linux job shows the following command sequence:

```
yarn install v1.7.0
$ node build/npm/preinstall.js
[1/4] Resolving packages...
[2/4] Fetching packages...
[3/4] Linking dependencies...
[4/4] Building fresh packages...
$ npm run compile
[oooooooooooooo]
> code-osa-dev-build@1.0.0 compile ./adventureworks/build
> tsc -p tsconfig.build.json

* Done in 4.89s.
$ node ./postinstall
[#] 2/2 removed './adventureworks/extensions/node_modules/typescript/lib/tsc.js'
removed './adventureworks/extensions/node_modules/typescript/lib/EsServerLibrary.js'
removed './adventureworks/extensions/node_modules/typescript/lib/cassandraLibrary.js'
removed './adventureworks/extensions/node_modules/typescript/lib/typescriptServices.d.ts'
removed './adventureworks/extensions/node_modules/typescript/lib/TypeScriptClientServices.js'
```



<https://azure.com/pipelines>

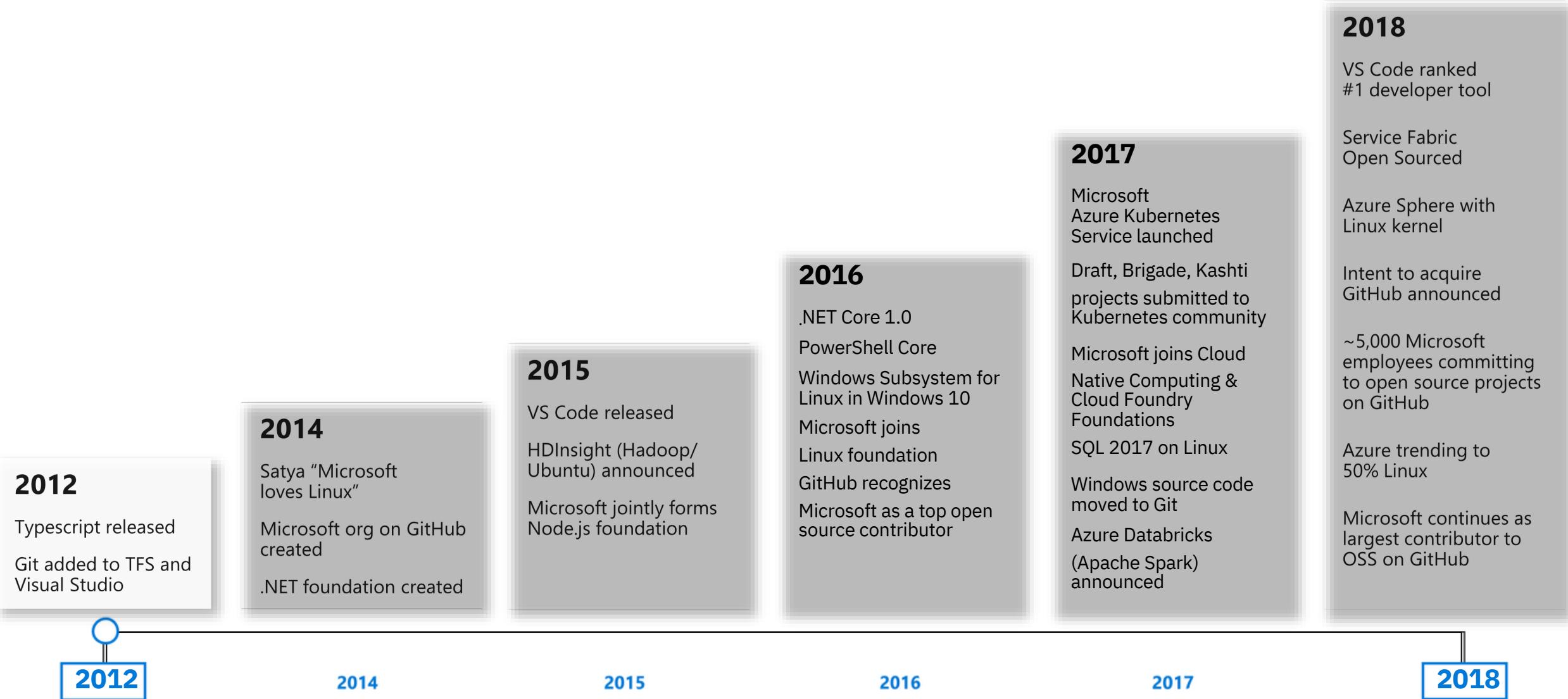
A photograph of Satya Nadella, CEO of Microsoft, speaking at a podium. He is wearing a dark polo shirt and glasses, and is gesturing with his right hand. A black rectangular box is overlaid on the upper right portion of the image, containing his quote.

"Judge us by the actions we have
taken in the recent past, our
actions today and in the future"

—Satya Nadella, CEO
Microsoft

2018

Microsoft ❤️ Open Source





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 GitHub Marketplace page for Azure Pipelines. At the top, there's a search bar and navigation links for 'Pull requests', 'Issues', 'Marketplace', and 'Explore'. Below that, the 'Marketplace' and 'Azure Pipelines' categories are selected. A large central image features the GitHub cat logo with the text 'Azure Pipelines'. Below the image are two buttons: 'Set up a new plan' (green) and 'Edit your plan' (grey). To the right of these buttons is a brief description: 'Continuously build, test, and deploy to any platform and cloud'. It also mentions that 'Azure Pipelines offers cloud-hosted pipelines for Linux, macOS, and Windows with 10 free parallel jobs and unlimited minutes for open source projects.' There's a 'Read more...' link. On the left side of the main content area, there's a sidebar with sections for 'Categories' (Continuous integration, Deployment), 'Supported languages' (Dockerfile, Go, Java, and 7 other languages supported), and 'Developer links' (Support, Status, Documentation, Privacy Policy). At the bottom, a large blue box highlights 'Linux, macOS, and Windows agents' with the subtext 'Simplify managing hardware and VMs by using Microsoft cloud-hosted agents. Get full CI/CD pipeline support for every major platform and tool'. It shows three status cards: 'Test 27 succeeded' (green checkmark), 'Build Linux 5 succeeded' (green checkmark), 'Build Windows 2 succeeded' (green checkmark), 'Build macOS 0 failed in progress' (blue circle), and a 'Distribute' button.

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

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



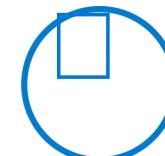
Azure TestPlans

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>

The screenshot displays the Azure Boards interface within the Azure DevOps environment. At the top, the navigation bar shows 'Contoso / AdventureWorks Mobile / Boards / FabrikamFiber'. The main area is titled 'FabrikamFiber Board'. The board is organized into four columns: 'New' (1 item), 'Active' (5 items), 'Staging' (5 items), and 'Deployed' (5 items). Each column contains cards representing work items, each with a title, a small icon, and a user profile picture. The 'Active' column includes cards for 'Home page (selected room)' (assigned to Kat Larson), 'Top page controls' (Celeste Burton), 'Search component complex features' (Cecil Folk), 'Images from api' (Carole Poland), and 'Adapt some parts of UI to UWP for Desktop' (Carole Poland). The 'Staging' column includes cards for 'Entry + validations' (Carole Poland), 'Navigation menu' (Carlos Slattery), 'Login page' (Celeste Burton), 'Ambient settings' (Carlos Slattery), and 'Notifications UI' (Carole Poland). The 'Deployed' column includes cards for 'Mobile Spike' (Celeste Burton), 'Focus' (Cecil Folk), and 'Code of Conduct' (Celeste Burton). On the left side, there is a vertical sidebar with navigation links: Overview, Boards (which is selected and highlighted in blue), Backlogs, Sprints, Queries, Plans, Repos, Pipelines, Test Plans, and Artifacts. The 'Boards' link is underlined with a blue bar. Below the sidebar, there is a 'Project settings' button.

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>

The screenshot shows the Azure DevOps interface for the 'AdventureWorks Mobile' project. The left sidebar includes links for Overview, Boards, Repos (which is selected), Files, Commits, Pushes, Branches, Tags, and Pull requests. The main content area is titled 'Pull requests' and shows a list of pull requests categorized by creator: 'Created by me', 'Assigned to me', and 'Assigned to my team'. Each pull request entry includes the author's name, the title of the PR, and a link to view it. The interface uses a clean, modern design with a light gray background and blue header elements.

Category	Pull Request	Author	Description	Actions
Created by me	Initialize client with .client.init	Kat Larson	Requested #238 into <master>	6
	Testing configuration settings	Kat Larson	Requested #230 into <master>/features/config	1
Assigned to me	Check returned identity for null status	Colin Ballinger	Requested #212 into <master>	0
	[WIP] Add tests for deployment mapping	Robin Counts	Requested #221 into <master>	3
Assigned to my team	Add exception on disconnect	Colin Ballinger	Requested #249 into <master>	0
	Maintain structure when converting isomorphs	Robin Counts	Requested #234 into <master>	0
	Hotfix payload to releases/99	Robin Counts	Requested #201 into <master>/releases/99	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.

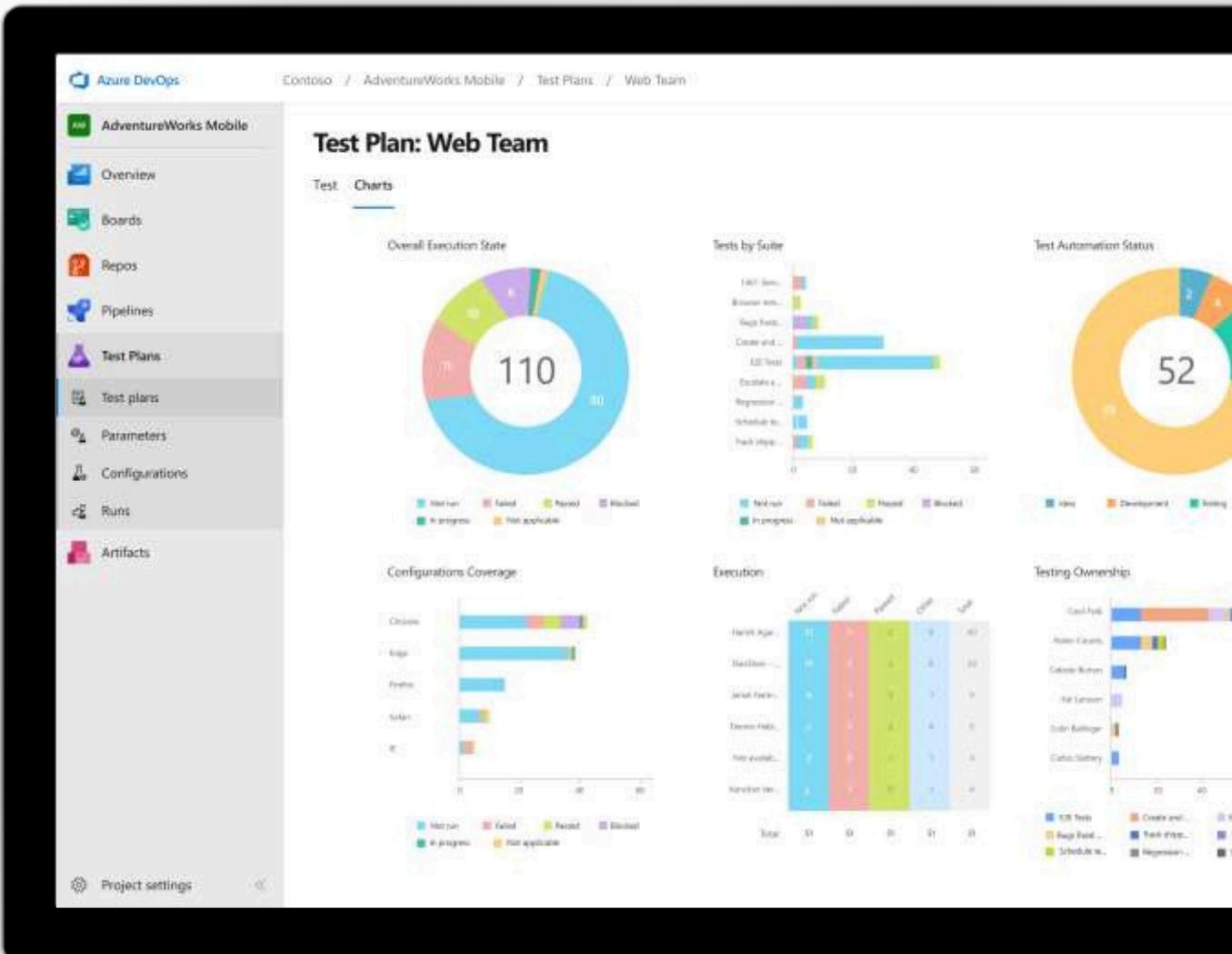


Get end-to-end traceability

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>

The screenshot shows the Azure DevOps interface for managing artifacts. On the left, there's a sidebar with links for Overview, Boards, Repos, Pipelines, Test Plans, and Artifacts. The main area is titled "Artifacts" and shows a list of packages. Each package entry includes the name, version, source (nuget, npmjs, maven), last pushed time, and a brief description. The packages listed are abbrev (Version 1.1.0), accepts (Version 1.3.3), acorn (Version 5.0.3), acorn-dynamic-import (Version 2.0.2), acr-jssx (Version 3.0.1), acorn-object-spread (Version 1.0.0), ajv (Version 4.11.7), ajv-keywords (Version 1.5.1), and alphanum-sort (Version 1.4.0).

Package	Version	Source	Last pushed	Description
abbrev	Version 1.1.0	nuget	a year ago	Like ruby's abbrev module, but in js
accepts	Version 1.3.3	npmjs	a year ago	Higher-level content negotiation
acorn	Version 5.0.3	MyFeed	a year ago	ECMAScript parser
acorn-dynamic-import	Version 2.0.2	maven	a year ago	Support dynamic imports in acorn
acr-jssx	Version 3.0.1	nuget	a year ago	Alternative, faster React.js JSX parser
acorn-object-spread	Version 1.0.0	maven	a year ago	Custom JSON-Schema keywords for ajv validator
ajv	Version 4.11.7	npmjs	a year ago	Alphanumeric sorting algorithm
ajv-keywords	Version 1.5.1	nuget	a year ago	ANSI escape codes for manipulating the terminal
alphanum-sort	Version 1.4.0	npmjs	a year ago	An elegant lib that converts the chalked (ANSI) text to HTML

Demo

Azure DevOps

Azure DevOps

Better together



Azure Boards



Azure Repos



Azure Pipelines



Azure TestPlans



Azure Artifacts

An end-to-end solution for organizations looking for an enterprise-grade toolchain

Fully Integrated
with end
to end
traceability

Scalable to
anyteam
and project
size

Highly
available,
multi region,
hybrid
cloud &
on-prem

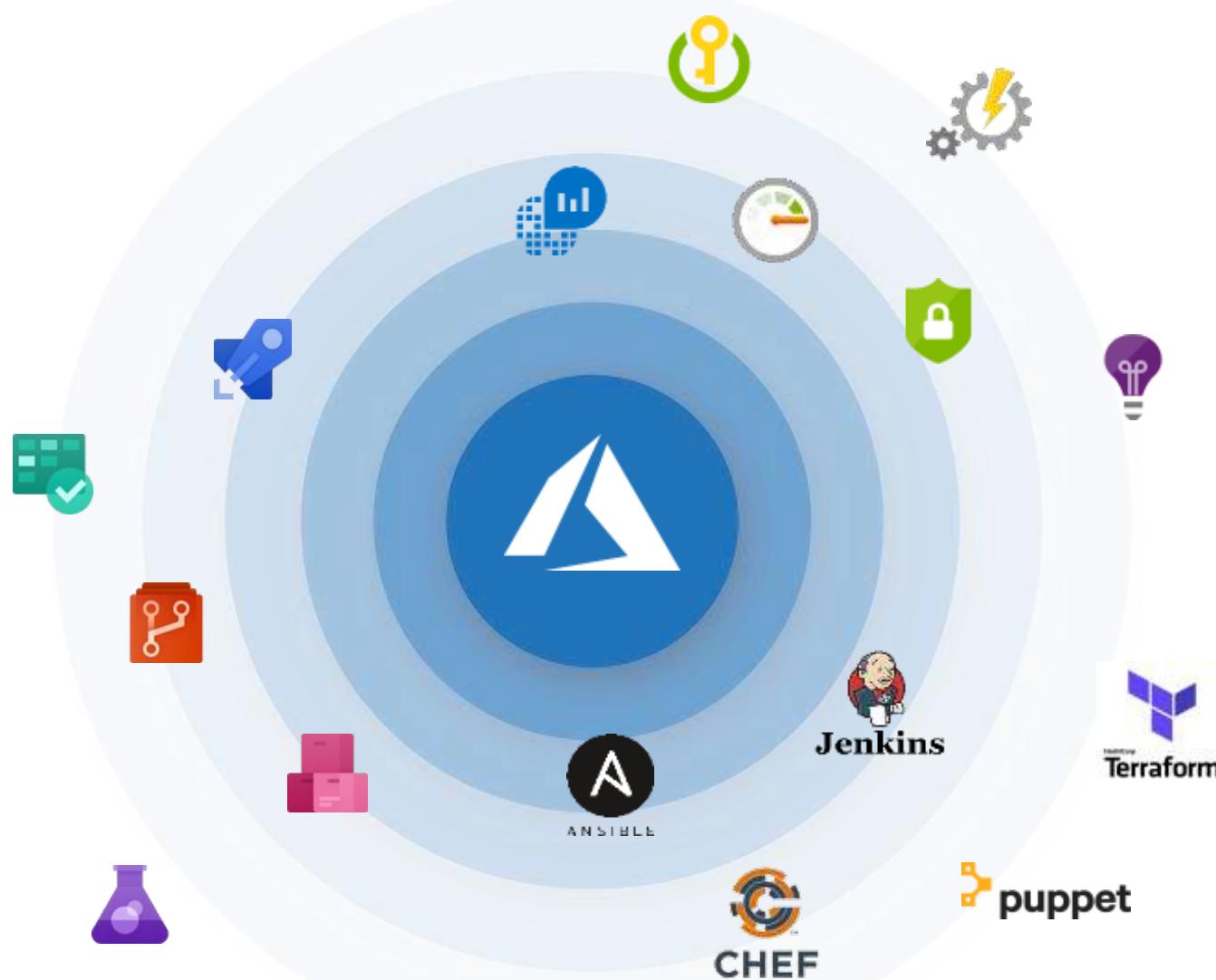
Customer
Support

Consistent
admin
and access
control



<https://azure.com/devops>

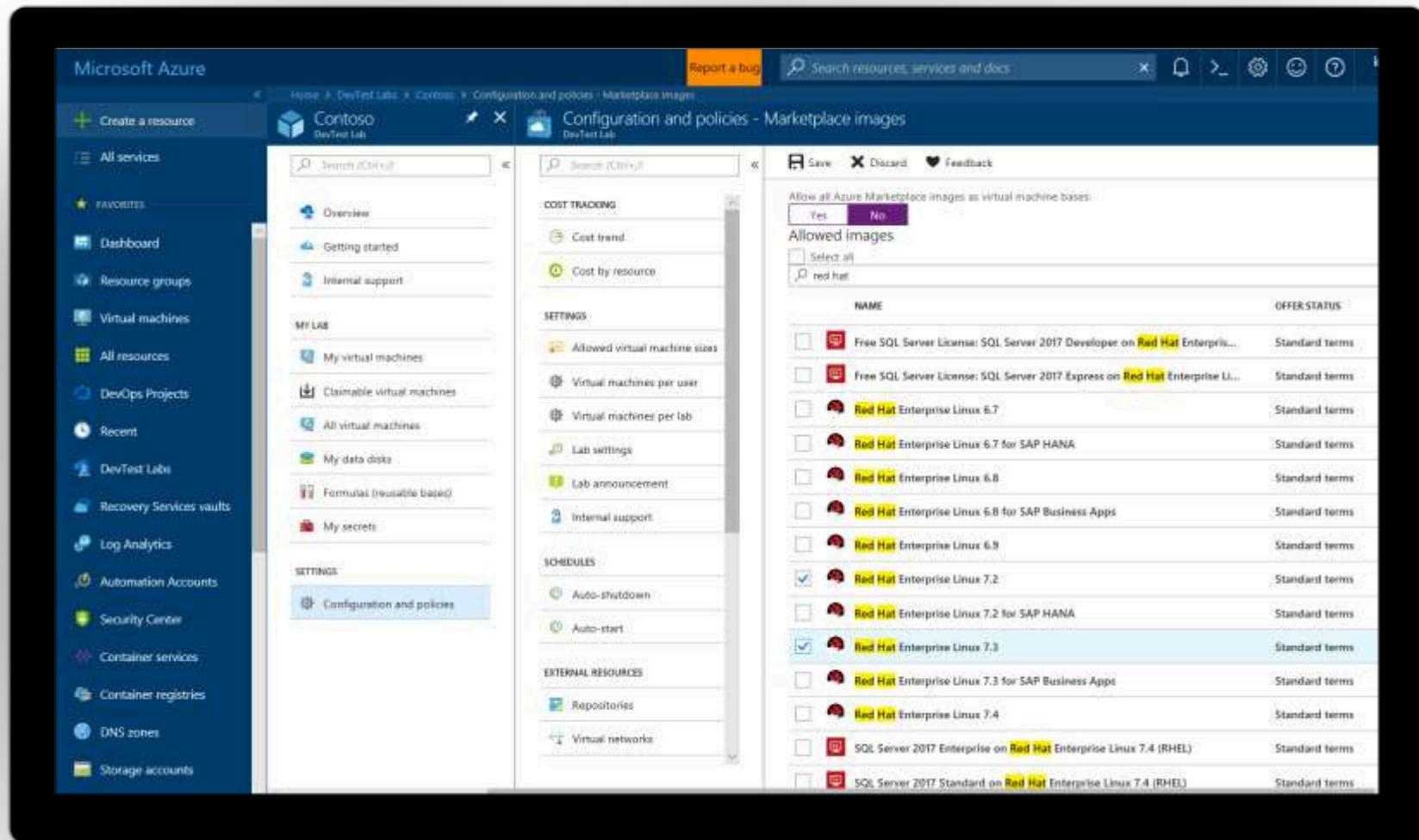
Broadening the Azure Ecosystem



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



Infrastructure and Configuration as Code

Azure Resource Manager, Automation & 3rd Party Integrations

→ Infrastructure as Code,
built-in

→ Azure Config & Automation

→ Support for 3rd party and OSS
tooling such as Terraform,
Ansible, Chef, Puppet &
SaltStack



TERRAFORM



ANSIBLE



CHEF



puppet



SALTSTACK

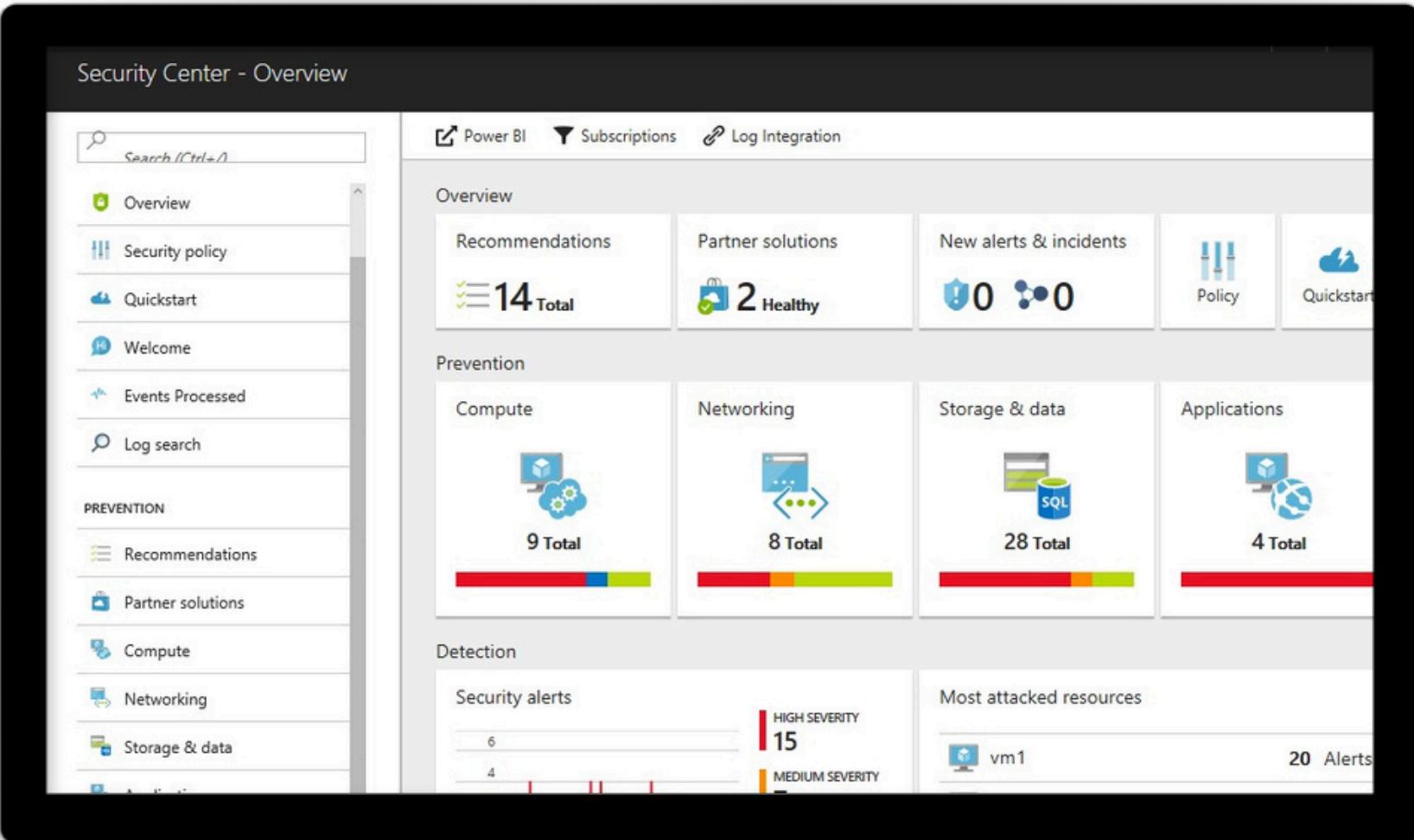
The screenshot shows the Microsoft Azure portal interface. On the left, the sidebar lists various services like Dashboard, Resource groups, Virtual machines, and Automation Accounts. The main area displays a 'Resource groups' view with several resource groups listed: 'AustraliaDevelopment', 'AustraliaProduction', 'autoSnapshot', 'cloud-shell-storage-westus', 'DefaultResourceGroup-EU5', and 'securitydata'. To the right of this, a specific 'Automation script' resource group is selected. The 'Automation script' blade shows tabs for Overview, Activity log, Variables, Resources, Deployments, Policies, Properties, Locks, and Automation script. The 'Automation script' tab is active, displaying a JSON-based ARM template. The template defines a deployment schema, content version, parameters, and resources. It includes parameters for 'azurerm_distro_onprem' and 'azurerm_distro_onprem' resources, each with properties like 'location', 'sku', and 'tags'. The template also defines variables for 'SDD_name', 'A_vote_name', 'A_draft_name', 'A_devops_name', and 'A_*.draft_name'.

```
1 {
2   "$schema": "https://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json#",
3   "contentVersion": "1.0.0.0",
4   "parameters": {
5     "azurerm_distro_onprem": {
6       "defaultValue": "onprem",
7       "type": "String"
8     },
9     "SDD_name": {
10       "defaultValue": "#",
11       "type": "String"
12     },
13     "A_vote_name": {
14       "defaultValue": "vote",
15       "type": "String"
16     },
17     "A_draft_name": {
18       "defaultValue": "draft",
19       "type": "String"
20     },
21     "A_devops_name": {
22       "defaultValue": "devops",
23       "type": "String"
24     },
25     "A_*.draft_name": {
26       "defaultValue": "*_draft",
27       "type": "String"
28     }
29   },
30   "resources": [
31     {
32       "type": "Microsoft.Resources/deployments",
33       "name": "[concat(parameters('azurerm_distro_onprem'), '/onprem')]",
34       "apiVersion": "2015-01-01",
35       "dependsOn": [],
36       "properties": {
37         "mode": "Incremental",
38         "template": {
39           "$schema": "https://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json#",
40           "contentVersion": "1.0.0.0",
41           "parameters": {
42             "SDD_name": {
43               "value": "[variables('SDD_name')]"
44             }
45           },
46           "resources": [
47             {
48               "type": "Microsoft.Compute/virtualMachines",
49               "name": "[concat(variables('SDD_name'), '/onprem')]",
50               "apiVersion": "2015-05-01",
51               "dependsOn": [],
52               "properties": {
53                 "hardwareProfile": {
54                   "vmSize": "Standard_D2_v2"
55                 },
56                 "osProfile": {
57                   "computerName": "[variables('SDD_name')]",
58                   "adminUsername": "Administrator",
59                   "adminPassword": "[parameters('A_vote_name')]"
60                 },
61                 "networkProfile": {
62                   "networkInterfaces": [
63                     {
64                       "id": "[resourceId('Microsoft.Network/networkInterfaces', concat(variables('SDD_name'), '-nic'))]"
65                     }
66                   ]
67                 }
68               }
69             }
70           ]
71         }
72       }
73     }
74   ]
75 }
```

Continuous Security

Azure Security Center

- Gain full visibility and control of your cloud security state
- Leverage ML to Proactively identify and mitigate risks to reduce exposure to attacks
- Quickly detect and respond to threats with advanced analytics



The screenshot shows the Azure Security Center - Overview page. The top navigation bar includes 'Power BI', 'Subscriptions', and 'Log Integration'. The main area is divided into several sections:

- Overview:** Shows 14 Total recommendations (2 Healthy), 0 alerts, and 0 incidents.
- Prevention:** Breaks down recommendations by category: Compute (9 Total), Networking (8 Total), Storage & data (28 Total), and Applications (4 Total).
- Detection:** Shows 6 HIGH SEVERITY and 15 MEDIUM SEVERITY security alerts.
- Most attacked resources:** Lists 'vm1' with 20 Alerts.

The sidebar on the left contains links for Overview, Security policy, Quickstart, Welcome, Events Processed, Log search, PREVENTION (Recommendations, Partner solutions, Compute, Networking, Storage & data), and DETECTION (Security alerts, Most attacked resources).

Smarter Insights, Faster

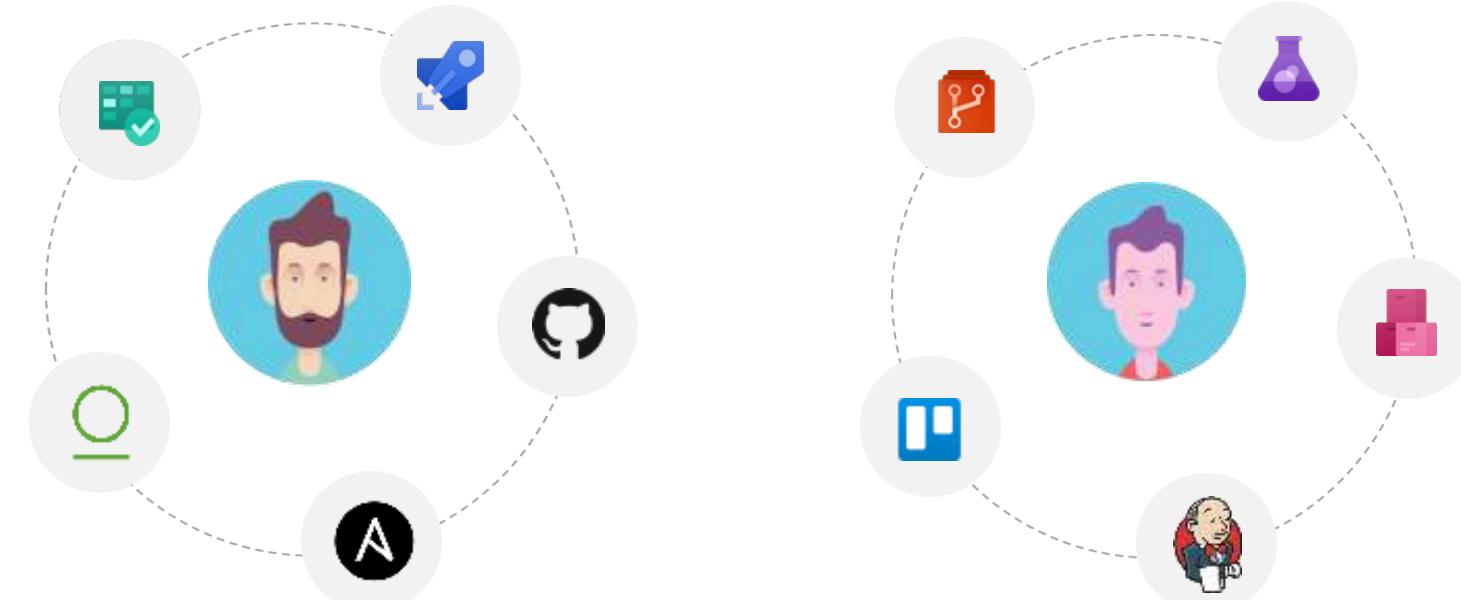
Azure Monitor, Application Insights & Log Analytics

- Pre-defined solutions with smart thresholds
- Visualize data in intuitive and customizable dashboards
- Separate the signal from the noise and accelerate root-cause analysis
- Integrate your existing processes & tools like Service Now



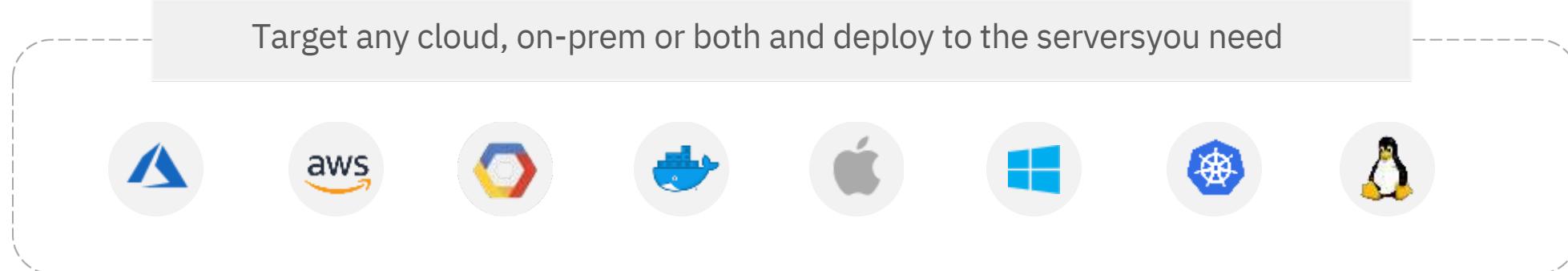
Azure DevOps: Choose the tools and clouds you love

Azure DevOps lets developers choose the tools that are right for them



Mix and match to create workflows with tools from Microsoft, open source or your favorite 3rd party tools

Target any cloud, on-prem or both and deploy to the servers you need



Azure DevOps supports small teams to largest enterprise



“Instead of telling people to wait for 6 months for a new feature, we can give it to them in a few weeks...Our 2800 worldwide developers can use the same backlog, user stories and tests whether they’re on Windows or Linux... building for iOS or Android.”



“ Speed is gained in moving to the PaaS offering of Azure DevOps. PaaS provides regularly released features and a future-proof capability, eliminating the need for Accenture to maintain infrastructure and go through upgrade cycles. ”



“Microsoft made it really easy to break outside the silos... and tie the DevOps process into the fulfillment of business process. Without the tools that we have today, we would not be successful.”



“Branches sync 500 percent faster. Builds are 400 percent faster, with the typically six-hour process reduced to 90 minutes. We (now have) a highly streamlined process that operates with a few button clicks—and one-button deployment.”

DevOps at Microsoft

Azure DevOps is the toolchain of choice for Microsoft engineering with over 90,000 internal users



<https://aka.ms/DevOpsAtMicrosoft>

372k
Pull Requests per month

4.4m
Builds per month

5m
Work items viewed per day

2m
Git commits per month

500m **500k**
Test executions per day

500k
Work items updated per day

78,000
Deployments per day

Data: Internal Microsoft engineering system activity, August 2018

TFS - Prod Config Chan X +

https://dev.azure.com/mseng/VSOnline/_releaseProgress?releaseId=5536521&_a=release-pipeline-progress

Azure DevOps mseng / VSOnline / Pipelines

VSO Online TFS - Prod Config Change > TFS - Prod Config Change 7179

Pipeline Variables History + Deploy Cancel Refresh Release (old view) Edit release ...

Release

Manually triggered by Shady Ibraheem 30/08/2018 21:01

Artifacts

VSO.Release.CI VSO.Release.CI_M139_20180830.30 releases/M139

Stages

Ring 0 ✓ Succeeded on 30/08/2018 21:24

Ring 1 ✓ Succeeded on 30/08/2018 21:44

Ring 2 ⏱ Pending intervention... Job 1/2 1/1 tasks Waiting on Pause Between Rings 08:49

Ring 5 ⏱ Not deployed

Resume

Overview Boards Repos Pipelines Builds Releases Releases* Library Task groups Deployment groups XAML WhiteSource Bolt Test Plans Artifacts Project settings

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

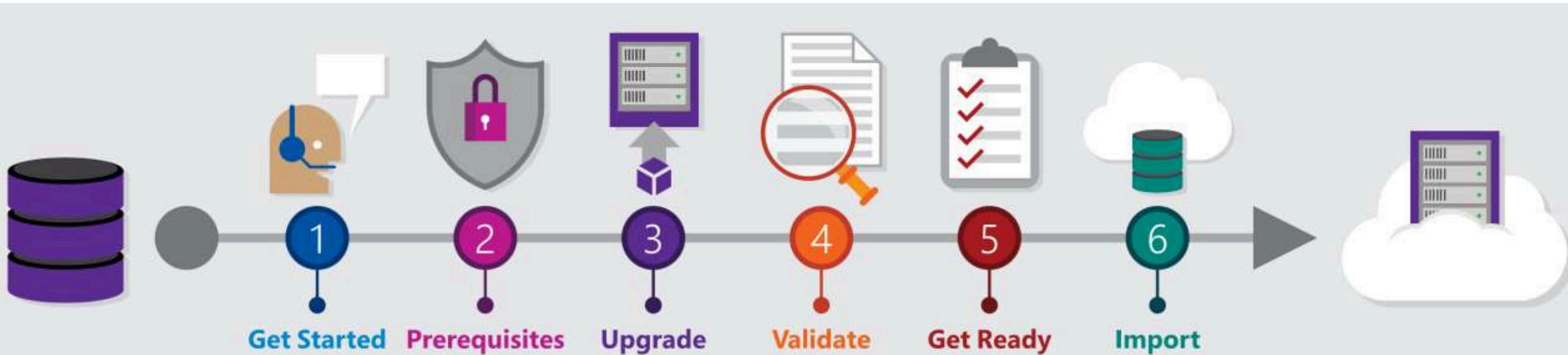
Benefits of Cloud Hosted Azure DevOps Services

- 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



Azure Boards



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



Azure Repos



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



Azure Pipelines



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



Azure TestPlans



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



Azure Artifacts



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

Start free today



<https://azure.com/devops>

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 private Git repos
- **Azure Artifacts:** package management
- Load testing (20,000 VUMs/month)
- 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 private Git repos
- **Azure Artifacts:** package management
- Load testing (20,000 VUMs/month)
- Unlimited stakeholders
- Visual Studio subscribers included free

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



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

Thank You

ευχαριστώ Salamat Po متشرّم شكرًا Grazie

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

ឃុំបញ្ជីណូរីប Obrigado شكريه Terima Kasih Dziękuję

Hvala Köszönöm Tak Dank u wel дякую Tack

Mulțumesc спасибо Danke Cám ơn Gracias

多謝晒 Ďakujem הַתֵּה දෙන්ගි Děkuji 감사합니다



Azure DevOps PowerPoint Template

Deck Resources

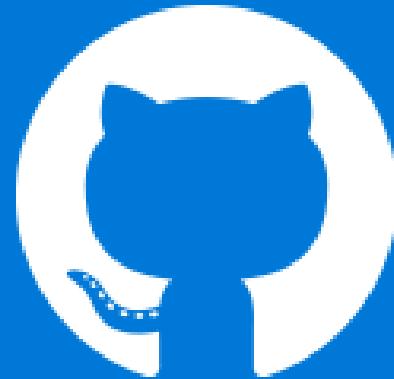
Spare Slides
Fonts
Brand Colors
Common Icons (SVG format)

DevOps Pipelines in Minutes

Azure DevOps Projects

- Create a full DevOps pipeline with 3 easy steps from the Azure Portal
- Start with a Git repo and any source language
- Web apps, Kubernetes, soon VMs and more.
- Customize, extend and scale when needed.

The screenshot shows the Azure DevOps CI/CD Pipeline interface. On the left, the pipeline stages are listed: Code, Build, and Production. The Code stage shows a commit from 'nodesampleproject' on the 'master' branch. The Build stage shows a build named 'nodesampleprojectsite' that succeeded 1 minute ago. The Production stage shows a deployment to 'nodesampleprojectsite' that is currently in progress. On the right, the 'Azure resources' section displays an Application endpoint at <http://nodesampleprojectsite.azurewebsites.net>, an App Service named 'nodesampleprojectsite' which is running, and Application Insights for 'nodesampleprojectsite'. A legend at the bottom indicates 'SERVER REQUEST' (blue bar) and 'FAILED REQUEST' (red bar).



Early adopters

GitHub projects already powered
by Azure Pipelines for CI



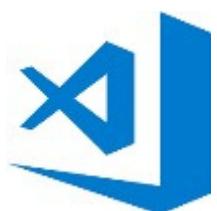
atom/atom



python/cpython



dotnet/reactive



microsoft/vscode

Device layout

Subhead Segoe UI 28pt

Subhead Segoe UI 28pt

Subhead Segoe UI 28pt



Segoe UI is the font that's used for on-screen and digital executions

Follow these guidelines for PowerPoint

Size and weight

Limit type to no more than three sizes on a slide.

Use Semibold for text larger than 28pt.

Use Regular for increased legibility at small sizes or over backgrounds.

Use Semibold for subheads and headlines.

Segoe Black, Light and Condensed should not be used.

Case

Sentence case is our standard for all communications.

Use all-uppercase sparingly –for titles, short headings, or subheadings, and never for full paragraphs.

Don't use all-lowercase type.

Justification

Type should be set flush left, ragged right.

Avoid widows, orphans and lines that end with hyphens.

Segoe UI Regular

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890@#\$%&*

Segoe UI Semibold

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890@#\$%&*

Azure brand colors

Digital and on-screen applications use RGB or HEX color formulas.

The color formulas are shown below.

Azure blue —a classic member of the Microsoft family of colors.

Azure Blue

R0 G120 B215
0078D7

Medium Blue

R77 G176 B255
4DB0FF

Light Blue

R177 G214 B242
B1D6F2

Chart Colors

R3 G90 B160
035AA0

R0 G120 B215
0078D7

R77 G176 B255
4DB0FF

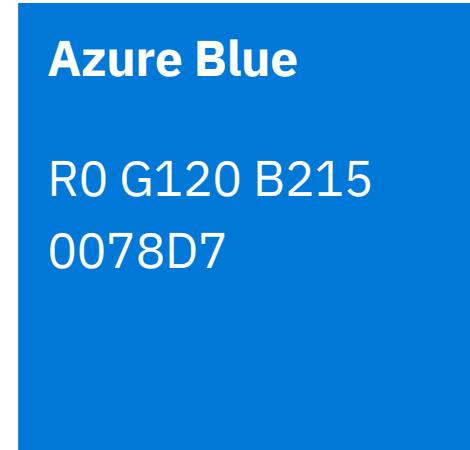
R148 G208 B255
94D0FF

R177 G214 B242
B1D6F2

Azure DevOps colors

Digital and on-screen applications use RGB or HEX color formulas.

The color formulas are shown below.



Service Colors

R0 G178 B148 00B294 Boards	R216 G59 B1 D83B01 Repos	R37 G96 B224 2560E0 Pipelines	R133 G76 B199 854CC7 TestPlans	R203 G46 B109 CB2E6D Artifacts
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Colors and Accessibility

Type and background combinations must meet a minimum 4.5:1 contrast ratio or greater for accessibility.
Examples below demonstrate correct color use for on-screen applications.
Colors shown with notched corners require black/dark text to be accessible.

Light Yellow R255 G241 B0 FFF100	Light Orange R255 G140 B0 FF8C00	Light Magenta R227 G0 B140 E3008C	Light Purple R180 G160 B255 B4A0FF	Light Blue R0 G188 B242 00BCF2	Light Teal R0 G178 B148 00B294	Light Green R186 G216 B10 BAD80A	Light accent colors
Yellow R255 G185 B0 FFB900	Orange R216 G59 B1 D83B01	Red R232 G17 B35 E81123	Magenta R180 G0 B158 B4009E	Purple R92 G45 B145 5C2D91	Blue R0 G120 B215 0078D7	Teal R0 G130 B114 008272	Green R16 G124 B16 107C10
	Dark Red R168 G0 B0 A80000	Dark Magenta R92 G0 B92 5C005C	Dark Purple R50 G20 B90 32145A	Dark Blue R0 G32 B80 002050	Dark Teal R0 G75 B80 004B50	Dark Green R0 G75 B28 004B1C	Dark accent colors (+ one mid accent color)
				Mid Blue R0 G24 B143 00188F			
For more information on accessibility, visit: Microsoft.com/enable	White R255 G255 B255 FFFFFF	Light Gray R210 G210 B210 D2D2D2	Mid Gray R115 G115 B115 737373	Dark Gray R80 G80 B80 505050	Rich Black R0 G0 B0 000000		White, black and gray accent colors

Azure DevOps Branding Guidelines

Our umbrella suite name is **Azure DevOps**.

We will use Azure DevOps Services & Azure DevOps Server to disambiguate between the cloud & on-premise versions (i.e. formerly VSTS & TFS) but where possible just use Azure DevOps as the umbrella term to refer to both.

No abbreviations should be used (especially not ADS). Azure DevOps or #AzureDevOps are the only permitted forms. DevOps should always be PascalCase.

While Azure DevOps is the term for the encompassing suite, emphasis should be placed on the core service being referred to, i.e."Build and Release to Any Cloud, Any Platform with Azure Pipelines".

There is no need to prefix with Microsoft for the name, (i.e. you do not need to say Microsoft Azure Pipelines). There are no trademark symbols required.

While the focus for Azure Repos will be Git version control, the centralized version control system it supports is still referred to as TFVC and the command line for it remains tf



Suite Icon for launch will remain the same as the VSTS Icon. However, as per corporate guidelines we will not be using the icon prominently in swag, stickers and launch materials. Instead focusing on the Microsoft and Azure brands.

Backlinks

When referencing Azure DevOps or an Azure DevOps service in the web then try to ensure the first reference in the content body of the page is back-linked to the appropriate landing page (see table below). In articles that historically mention VSTS or TFS then please link to the main landing page for Azure DevOps.

Area	Destination URL
Azure DevOps	https://azure.microsoft.com/services/devops/
Azure Pipelines	https://azure.microsoft.com/services/devops/pipelines/
Azure Boards	https://azure.microsoft.com/services/devops/boards/
Azure Repos	https://azure.microsoft.com/services/devops/repos/
Azure Artifacts	https://azure.microsoft.com/services/devops/artifacts/
Azure Test Plans	https://azure.microsoft.com/services/devops/test-plans/

Azure DevOps Icons



Azure DevOps (Preferred)



Azure DevOps Shaded



Overview



Wiki



Azure DevOps White Flat



Azure Boards



Azure Repos



Azure Pipelines



Azure Test Plans



Azure Artifacts



Azure DevOps White Shaded



Azure



Azure (Shaded)



Azure

Logos and Wordmarks



Azure DevOps



Azure DevOps



ICON SVGS



API Apps



API Management



App Service



Applications Gateway



Application Insights



Automation



Azure



Azure Active Directory



Azure Advisor



Azure Analysis Services



Azure Backup



Azure Bot Services



Azure Cache Redis
Product Icon



Azure Container Registry



Azure Container Service
ACS & AKS



Azure Content Delivery Network



Azure Database
for PostgreSQL



Azure Database
Migration Service



Azure DDoS Protection



Azure DevTestLabs



Azure DNS



Azure Event Grid



Azure Functions



Azure Media Player

ICON SVGS



Azure Monitor



Azure MySQL ClearDBDatabase



Azure Policy



Azure SDK



Azure Search



Azure Service Health



Azure SQL Data Warehouse



Azure SQL Database



Azure Virtual Machines



Azure Virtual Network



Backup Online



Batch



Blob Storage



Blockchain



Bug



Cloud



Cloud Services



Cloud Shell



Cognitive Services



Content Protection



Cosmos DB



Data Catalog



Data Factory



Database Generic

ICON SVGs



Encoding



Event Hubs



Express Route



File Storage



Game Controller



Gears



HD Insight



IoT Hub



Key Vault



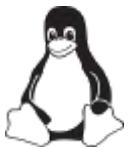
kubernetes



Linux Virtual Mach.



Windows Virtual Mach.



Linux Penguin



Live + On-Demand Streaming



Load Balancer



Load Balancer (Generic)



Logic Apps



Machine Learning Studio



Maintenance



Media Services



Mobile Apps



Multi-Factor Authentication



Network Watcher



Notification Hubs

ICON SVGS



OMS Log Analytics



Power BL



PowerShell Script File



Queue Storage



Resource Group



Scheduler



Script File



Security Center



Server Farm



Server Rack



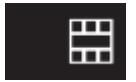
Server Bus



Service Fabric



Site Recovery



Smartcard



SQL Server Switch Database



Status Badge –Cancelled



Status Badge –Critical



Status Badge –Info



Status Badge –Success



Status Badge –Warning



Storage



StorSimple



Stream Analytics



Table Storage

ICON SVGS



Tasks



Time Series Insights



Traffic Manager



Video



Visual Studio



VS Code



VPN Gateway



Web



Web Apps



XML Web Services

World map

