



DevOps with Visual Studio Team Services (VSTS)

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Application Lifecycle Management



GitHub Download URL

<https://github.com/subodhsohoni/training>

DevOps is a job?



DevOps Engineer - Contract

StackOverdrive DevOps Consulting + Cloud Consulting

New York, New York

StackOverdrive.io is hiring a DevOps Engineer...



Easy Apply



Head of Development Operations (DevOps)

DV Trading LLC

Chicago, Illinois

...DevOps engineer... and the design and implementation... of technologies and procedures to address true DevOps...



Easy Apply



Development Operations (DevOps) Engineer, Senior

Zebra Technologies

Holtsville, US-NY

...administrator for the DevOps systems. Help automate... and DevOps environments Prepare firmware and software...

NO!

DevOps is a product?

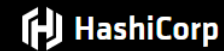
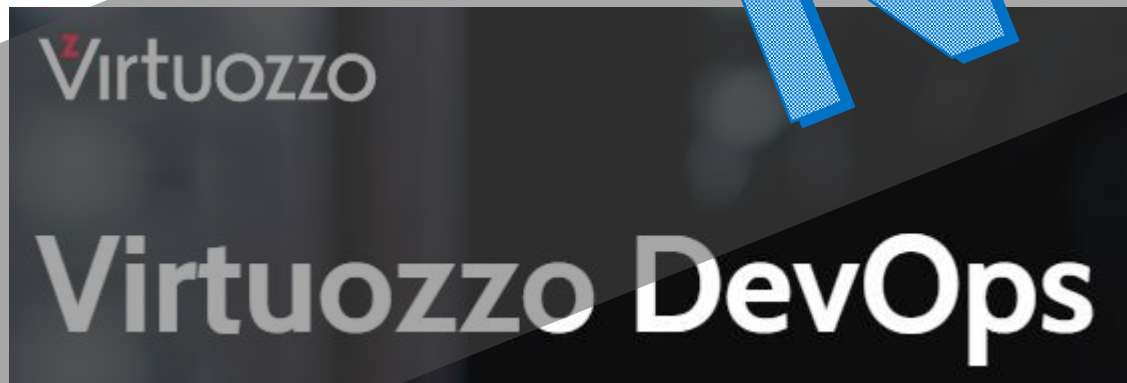


Products & Solutions Industries & Roles Training & Services Partners & Developers

Application
Deployment and
DevOps

DevOps tool, which shows application release cycles

NO!



DevOps Delivered

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

Donovan Brown
Group Program Manager DevOps

DevOps

- DevOps is the union of **Mindset, Automation, and Tools** to enable continuous delivery of value to our end users.

Why is DevOps important

- Your competition is already doing this
- Increase velocity
- Reduce downtime
- Reduce human error

Any Language, Any Platform

- Program in any language

- .NET
- Java
- Python
- Ruby
- Nodejs
- ...

- Develop on any OS

- Linux
- Mac
- Windows

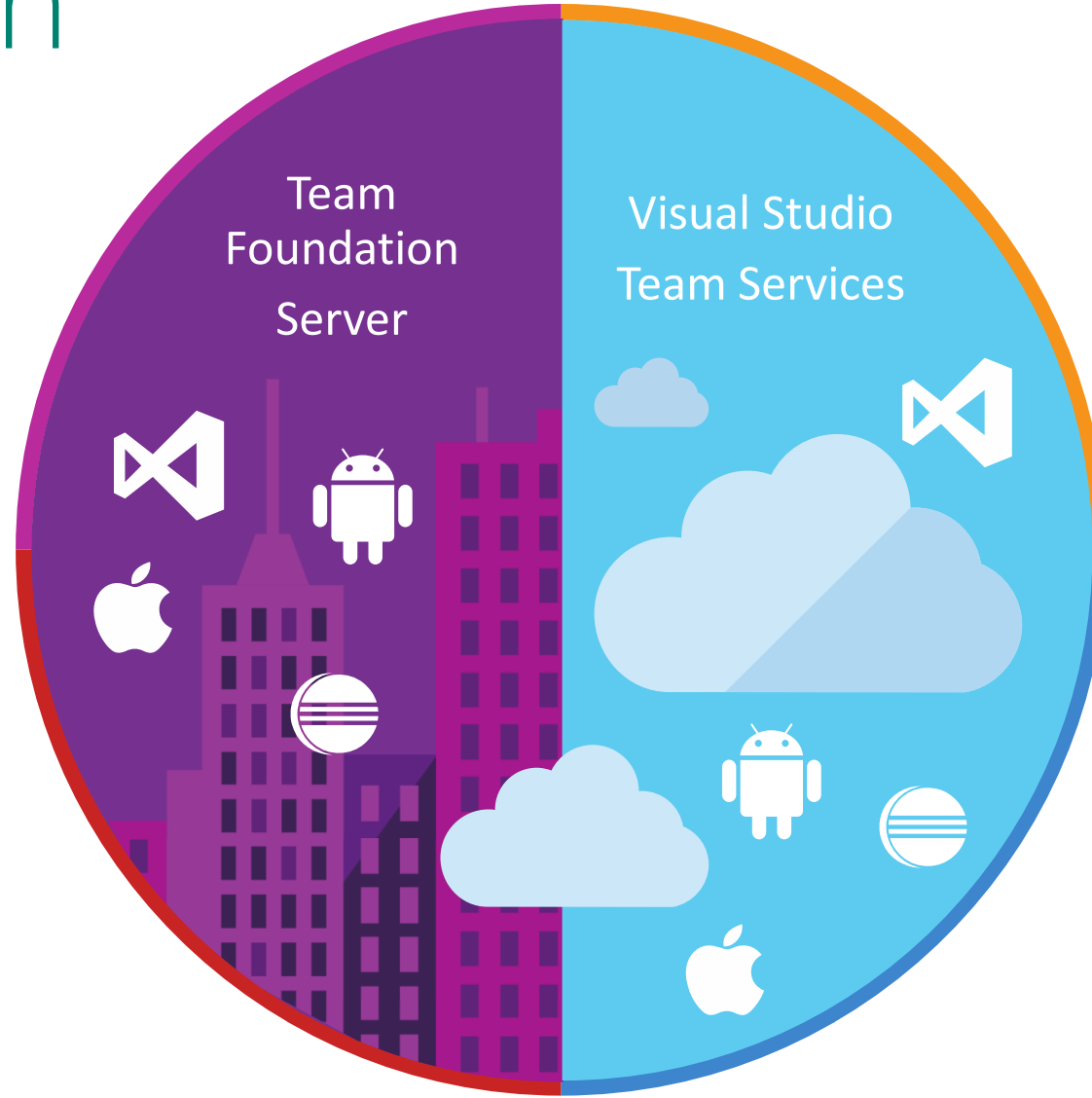
- Deploy to any Platform

- Android
- iOS
- Windows Phone
- Docker
- Azure
- AWS
- Linux
- Mac
- ...

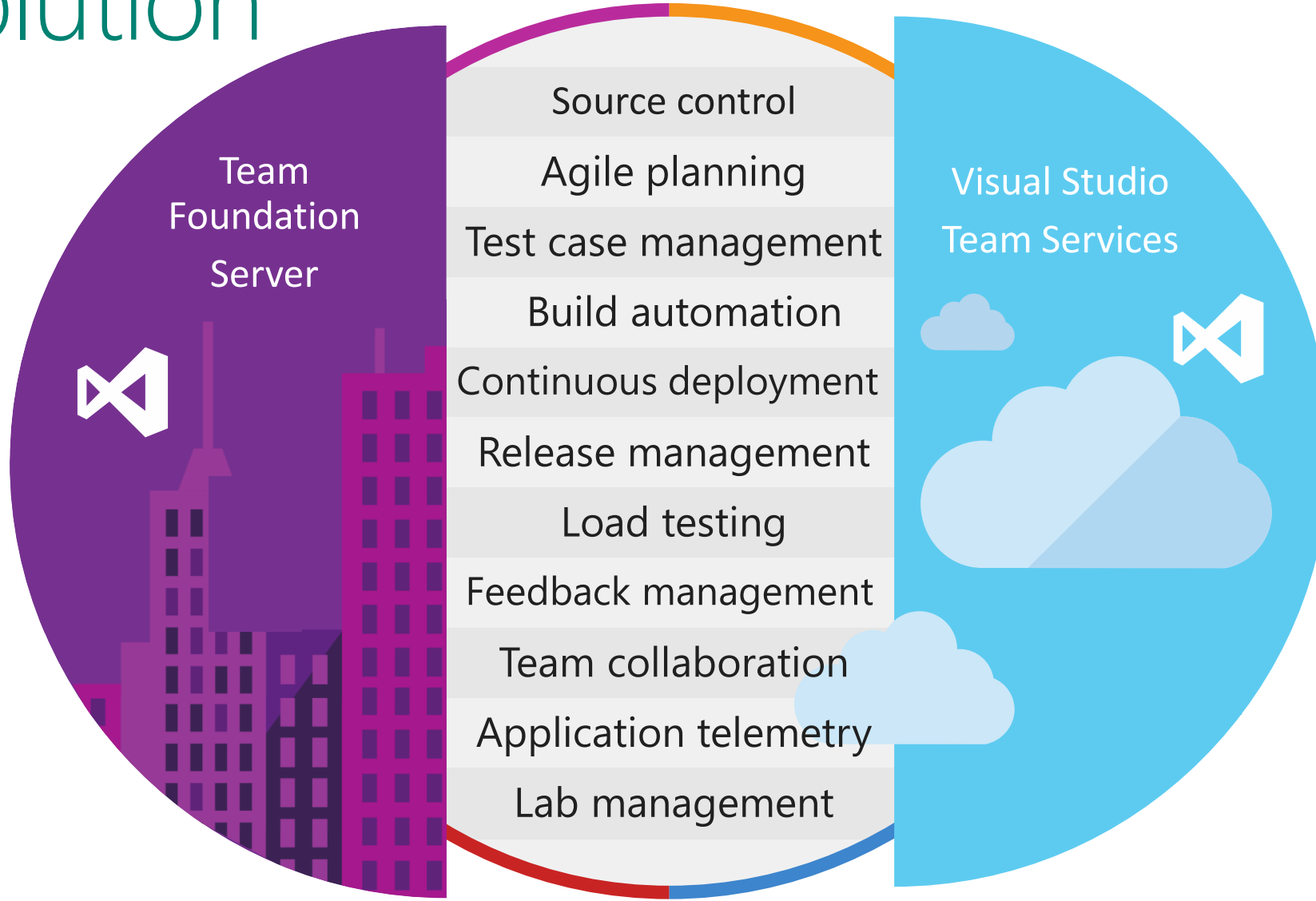
Manage the full stack

Monitor/Learn	Telemetry	Application Insights
	Diagnostics	Application Insights
	Performance	Application Insights
Approve	Collect Approvals	Release Management
	Notify Approvers	Release Management
Test	Manual Tests	Microsoft Test Manager
	Automated Tests	Coded UI, Web, Load
	Create Test Data	BacPac with SSDT
App	Configure Application	Tokenization
	Install Application	NuGet, WebDeploy, etc
Infra	Configure Environment	Desired State Configuration
	Provision Environment	Azure Resource Manager
Plan	Tracking Work	TFS / VSTS
	Planning Work	TFS / VSTS

Our solution



Our solution



Microsoft Ecosystem

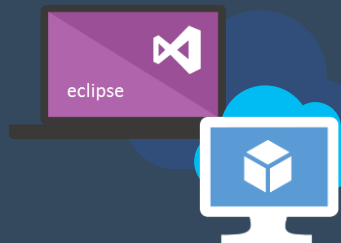
People | Process | Products



01

Develop

Developer Workstation



Team Collaboration

TFS / VSTS



Workstations - On-Premises | Hybrid | Cloud

02

Build & Test

Build/CI

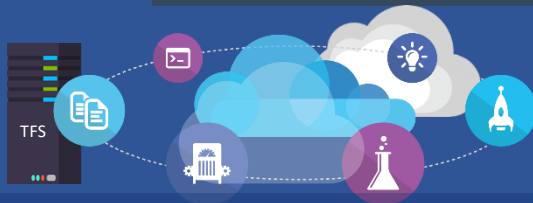
TFS / VSTS

Release Management
for Visual Studio

Test

TFS / VSTS

Microsoft Test Manager



ALM Services - On-Premises | Hybrid | Cloud

03

Deploy

Release

Microsoft
System Center

Release Management
for Visual Studio

Automation
Service

PowerShell | WAML

Azure
Resource
Management

xPlat Command Line



Environments - On-Premises | Hybrid | Cloud

04

Monitor & Learn

Monitor

Microsoft
System Center

VSTS

Application Insights



Monitoring - On-Premises | Hybrid | Cloud

Mixed Ecosystem

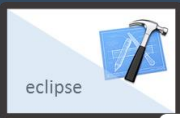
People | Process | Products



Develop

01

Developer Workstation



Team Collaboration

GitHub
CodePlex

02

Build & Test

Build/CI



Test



03

Deploy

Configuration



Release



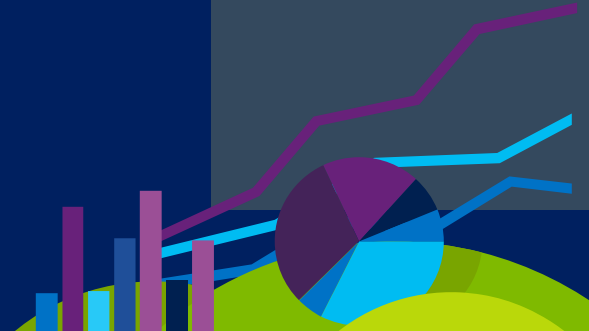
04

Monitor & Learn

Monitor

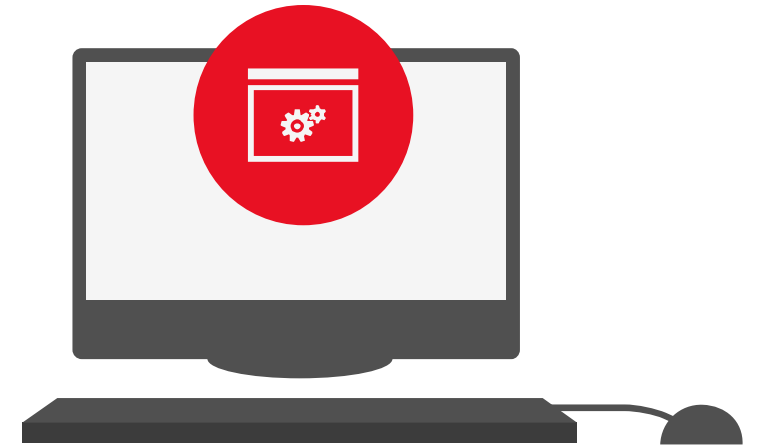
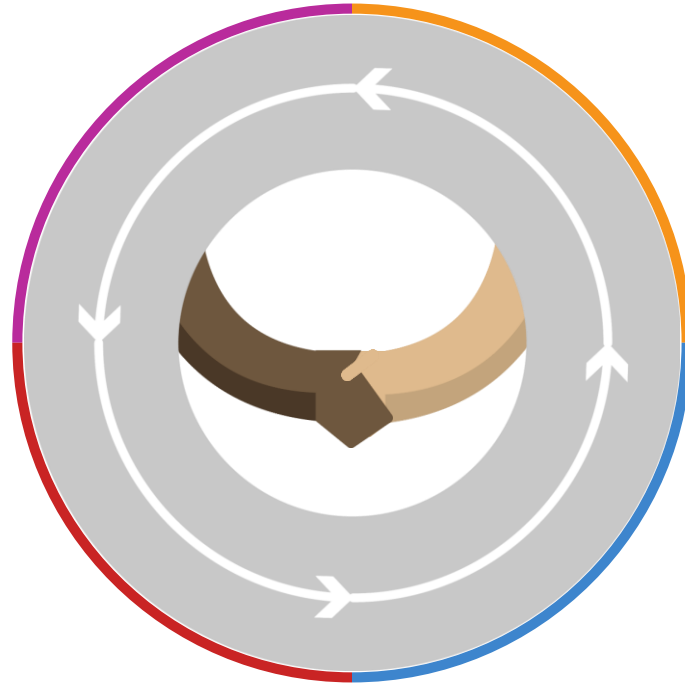
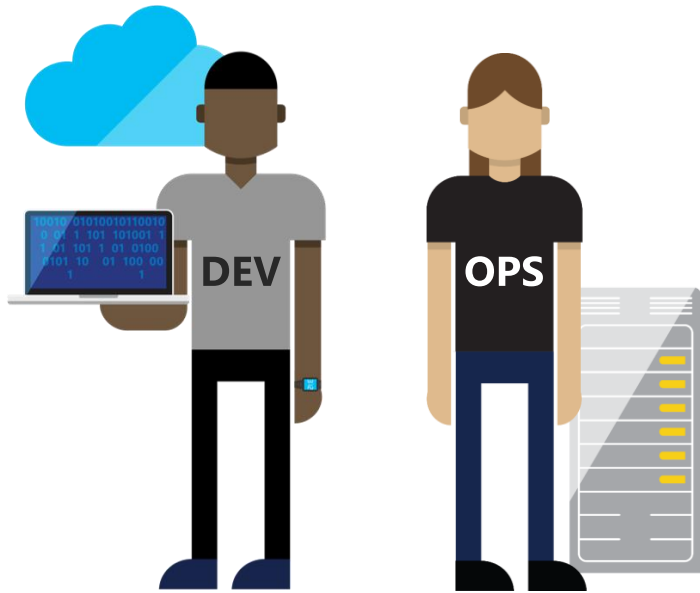
Nagios

ZABBIX



This graphic shows OSS and partner products that are integrated with the Microsoft DevOps solution

DevOps: the three stage conversation



1 People

2 Process

3 Products

What makes up a “DevOps” pipeline

Streamlining the development of your mobile apps

Frequently releasing value to users

Constantly maintaining quality

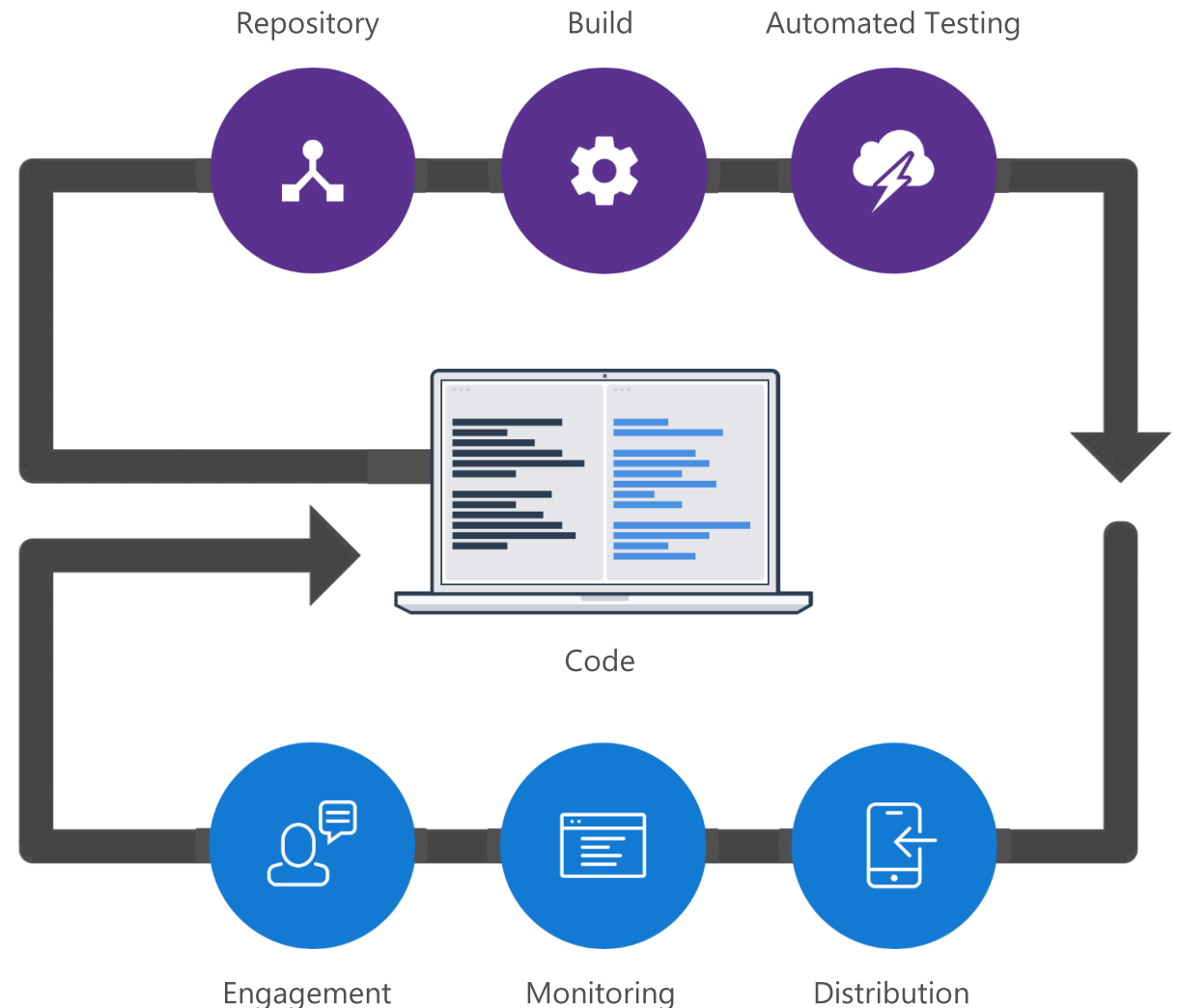
Monitoring app health and engagement in real-time

Automating the process to be repeatable & sustainable

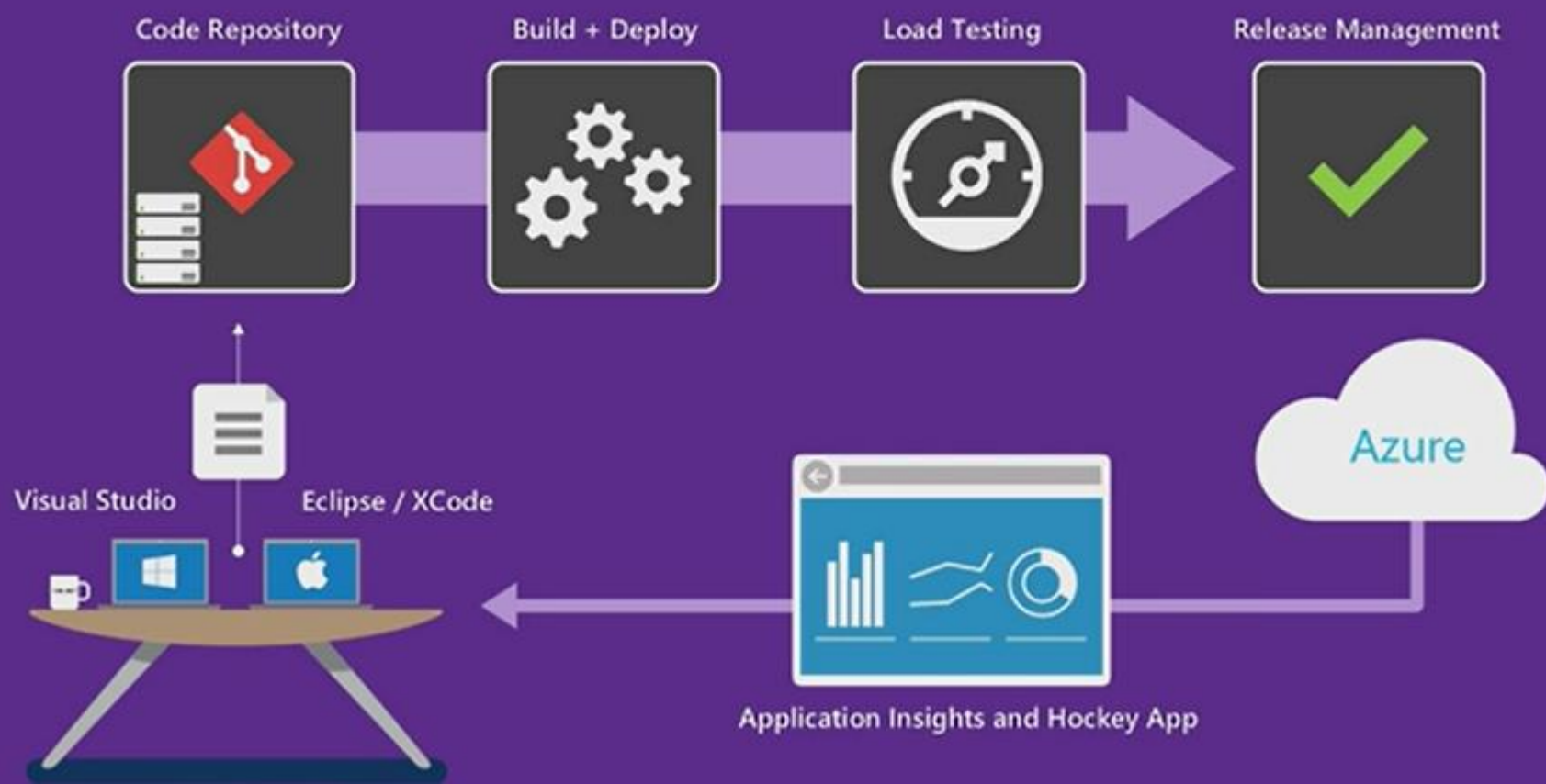
Continuous Integration (CI)

Continuous Delivery (CD)

Continuous Monitoring (CM)



Visual Studio Team Services



DevOps

1 Plan

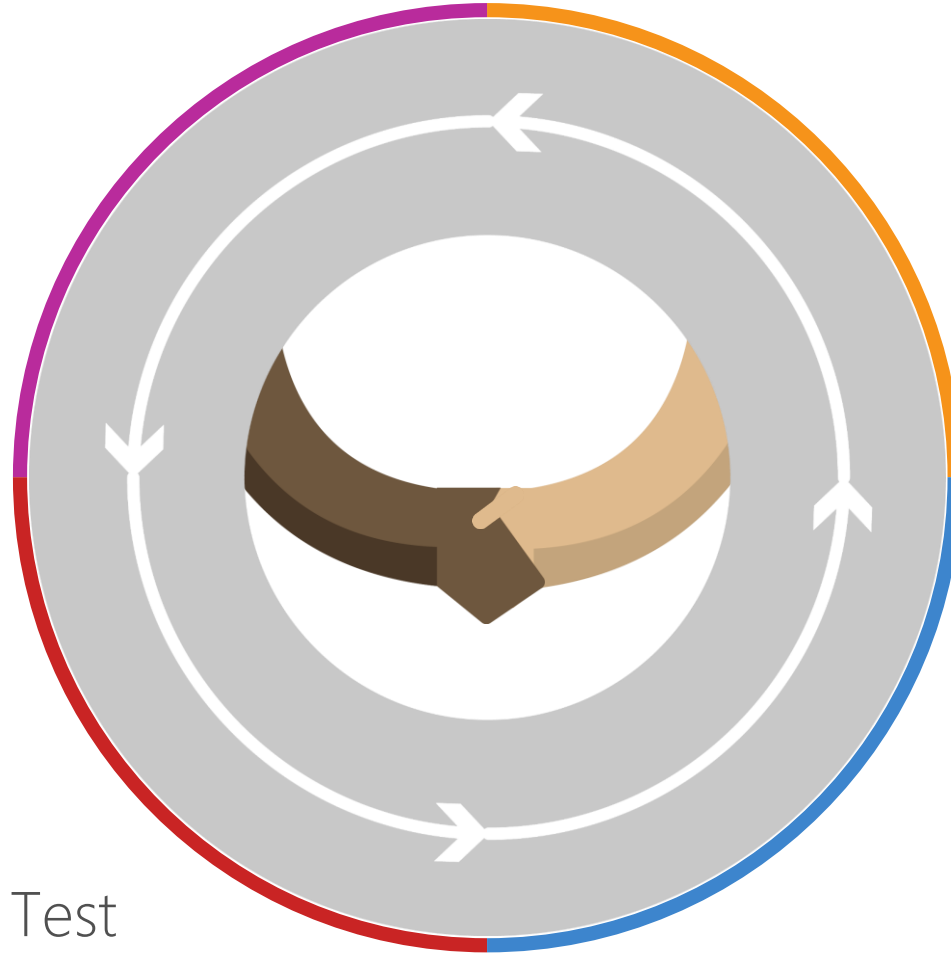
4 Monitor + Learn

Development

Production

2 Develop + Test

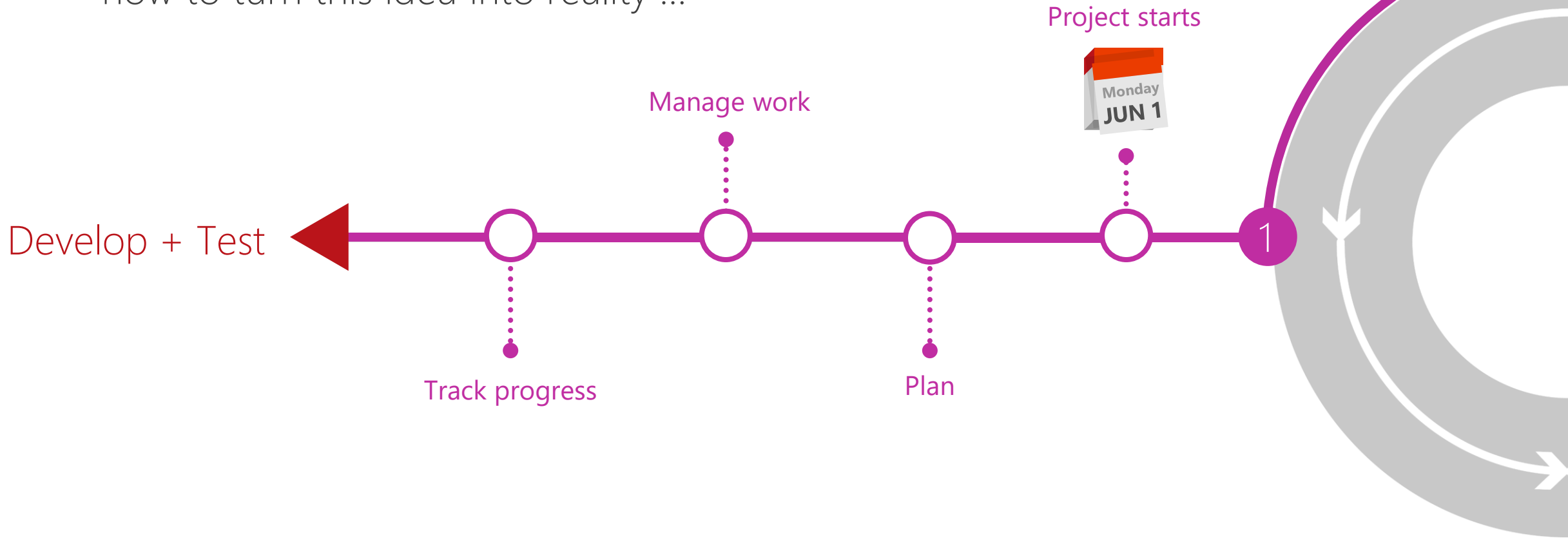
3 Release





Plan

It starts with an idea – and a plan
how to turn this idea into reality ...



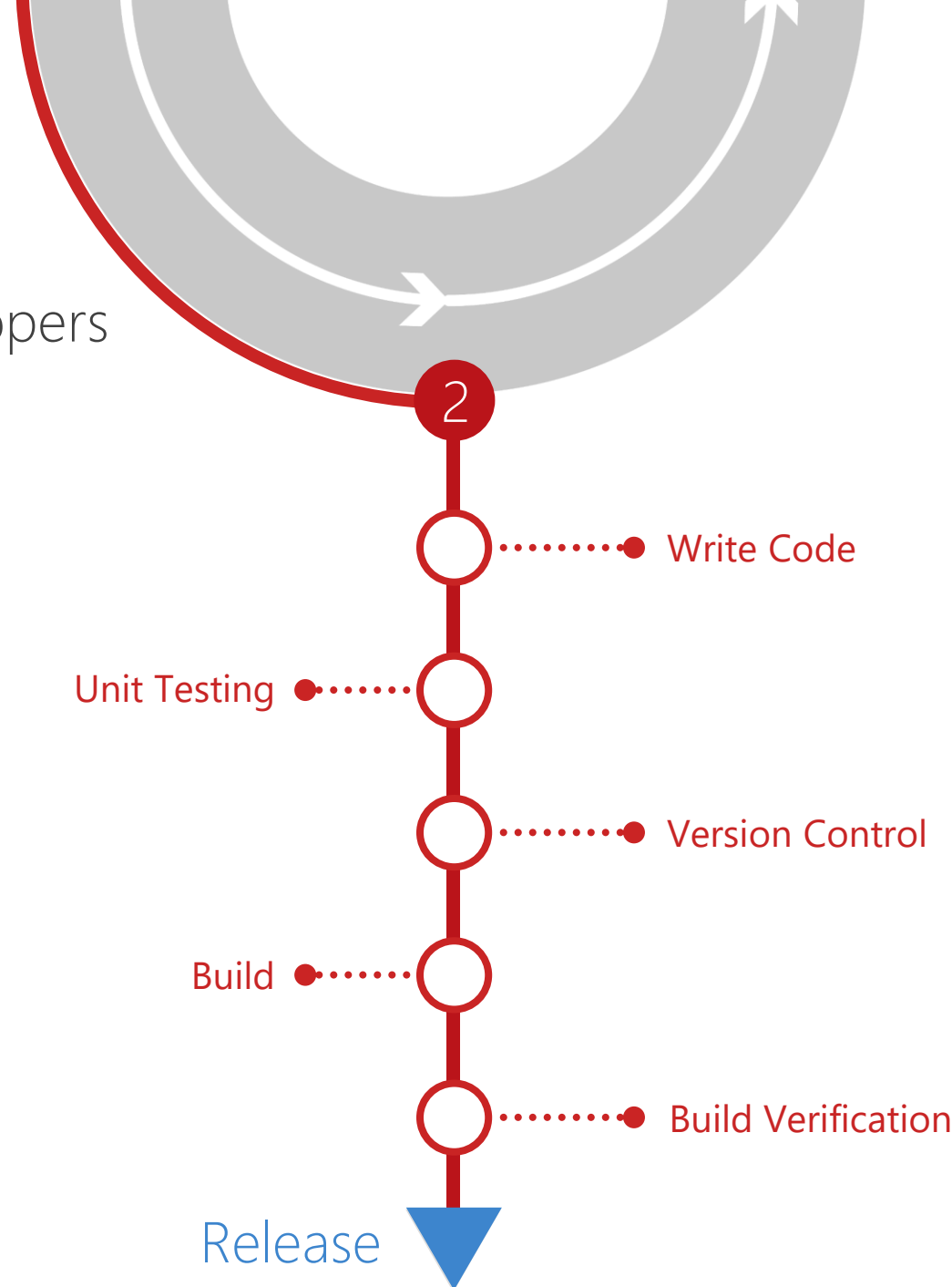
Demo

Project and resource planning using VSTS



Develop + Test

Once the iteration starts, developers turn great ideas into features ...



Demo

Setup team project and Version Control in
VSTS

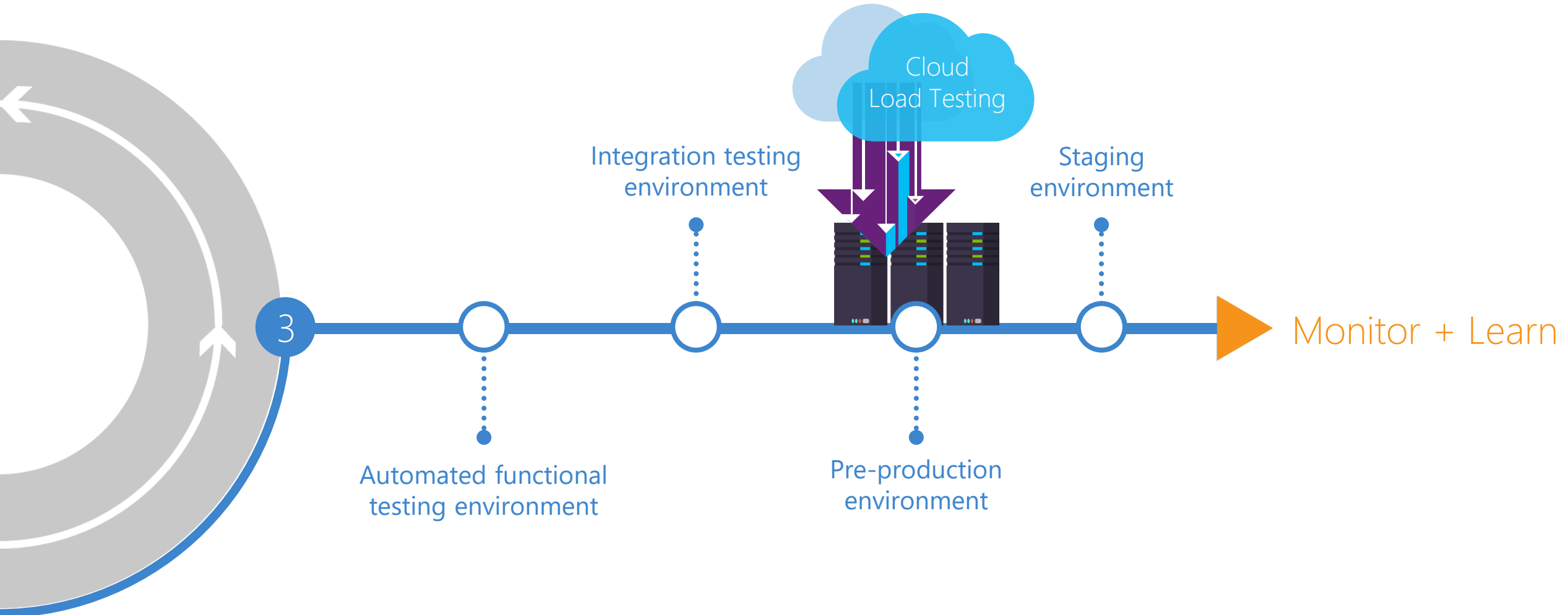
Demo

Build management (CI) in VSTS



Release

When all tests pass, the build is deployed to testing environments for each stage in the release process



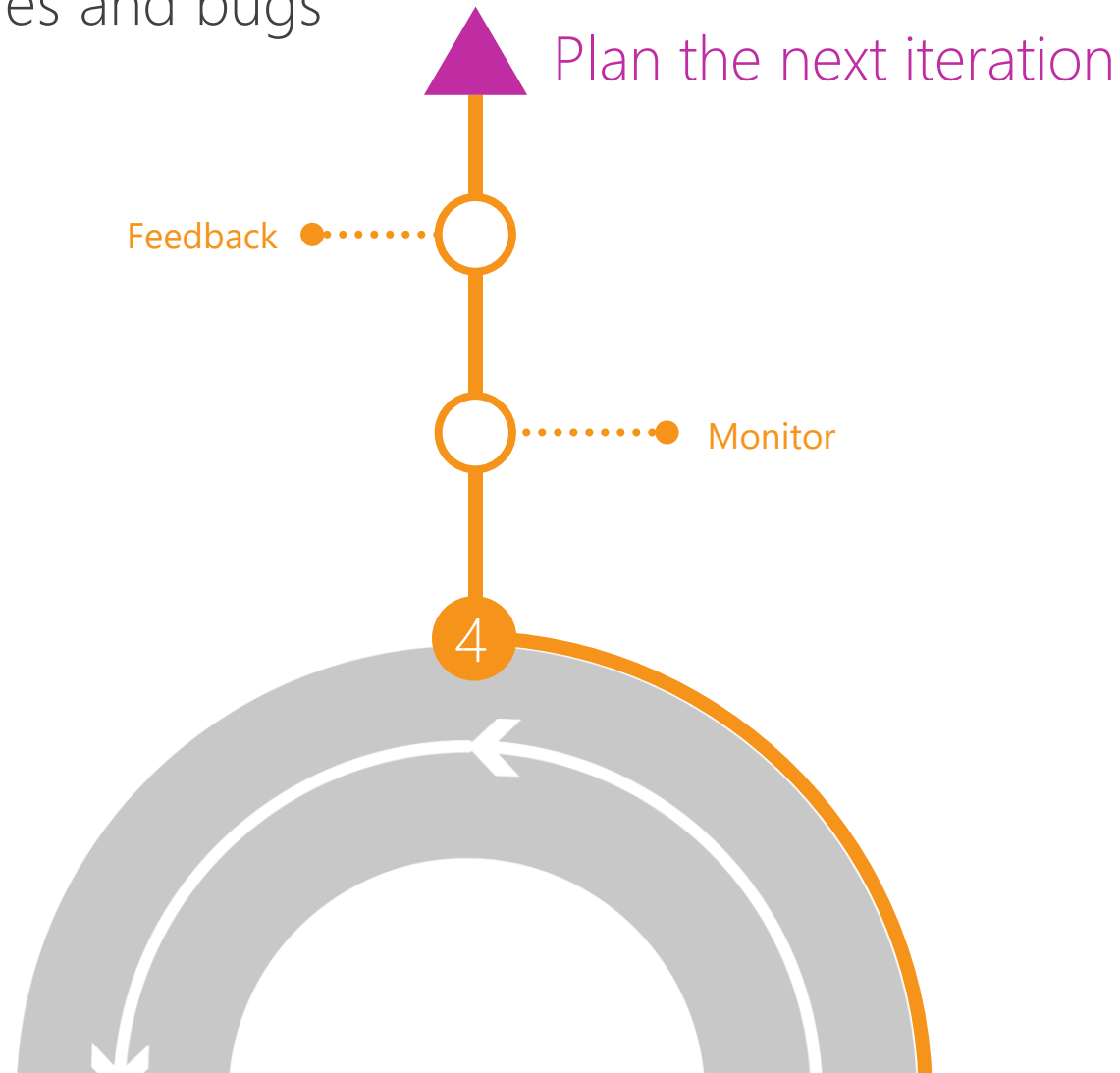
Demo

Release management (CD) in VSTS



Monitor + Learn

Learn and understand how users use your app, how it reacts and quickly fix issues and bugs



Demo

Application Insights for WebApp in Azure



Visual Studio

ALM Rangers

The Visual Studio ALM Rangers provide professional guidance, practical experience and gap-filling solutions to the developer community.

References

- <https://azure.microsoft.com>
- <https://docs.microsoft.com>
- <https://azure.microsoft.com/en-gb/solutions/devops/>
- <https://docs.microsoft.com/en-us/vsts/index#pivot=services>



Let's connect

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