CI/CD for Containers

Azure Container
Registry

7

4

Visual Studio
Team Services Git

3

Visual Studio
Team Services CI

5

Visual Studio
Team Services CD

6

Azure Container Service
(Managed Kubernetes)

2

8

Visual Studio

1

Engineer

9

Azure Application
Insights

10

Visual Studio
Team Services Backlog
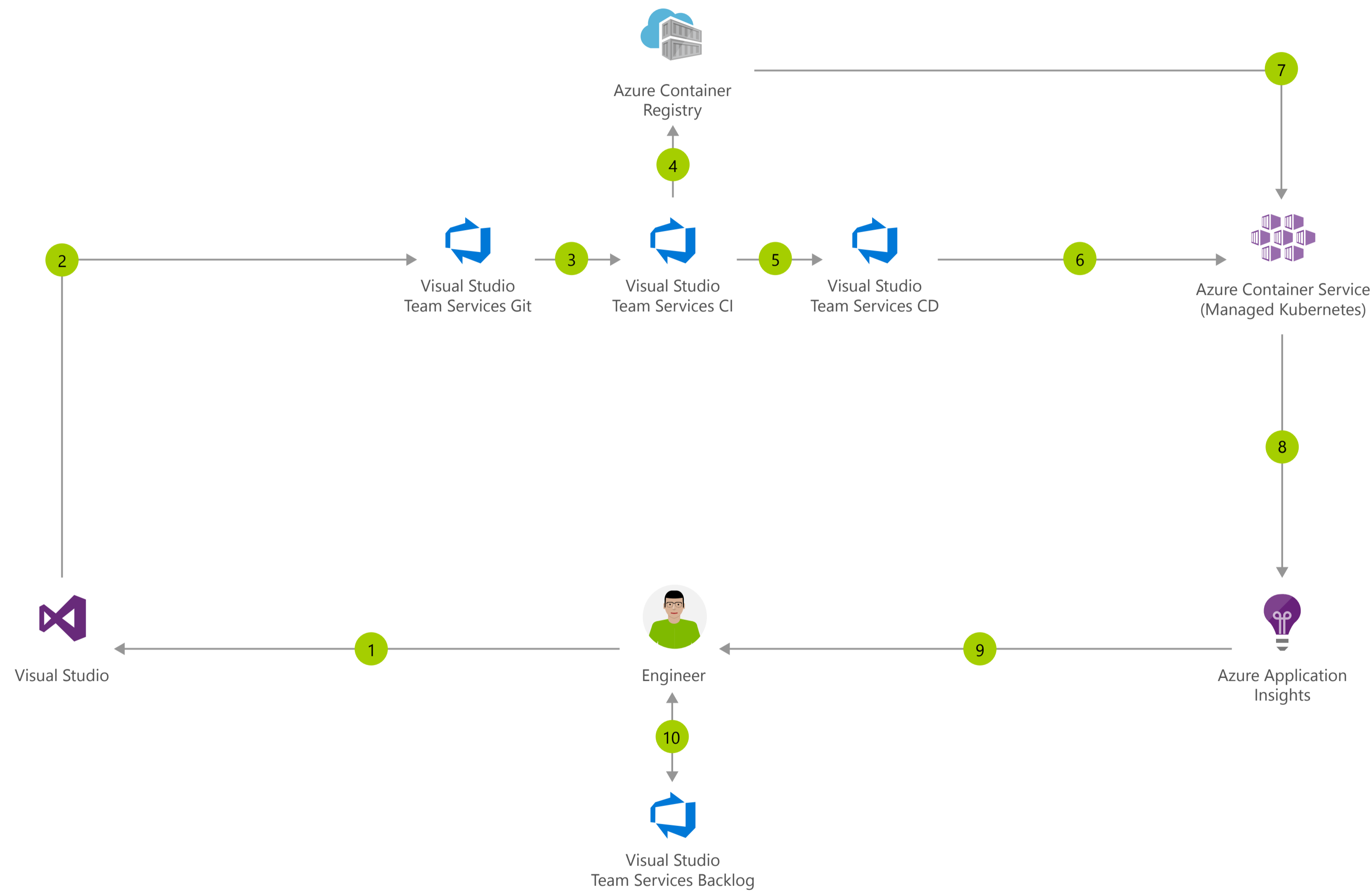
Architecture overview

Containers make it easy for you to continuously build and deploy applications. By orchestrating the deployment of those containers using Kubernetes in Azure Container Service, you can achieve replicable, manageable clusters of containers.

By setting up a continuous build to produce your container images and orchestration, Visual Studio Team Services increases the speed and reliability of your deployment.

1 Change application source code.

2 Commit Application Code.

3 Continuous integration triggers application build, container image build, and unit tests.

4 Container image pushed to Azure Container Registry.

5 Continuous deployment trigger orchestrates deployment of application artifacts with environment-specific parameters.

6 Deployment to Azure Container Service.

7 Container is launched using Container Image from Azure Container Registry.

8 Azure Application Insights collects and analyzes health, performance, and usage data.

9 Review health, performance, and usage information.

10 Update backlog item.

Azure products used in this solution

Visual Studio

Container Service

Application Insights

Visual Studio Team Services

Azure Container Registry

Microsoft

Azure