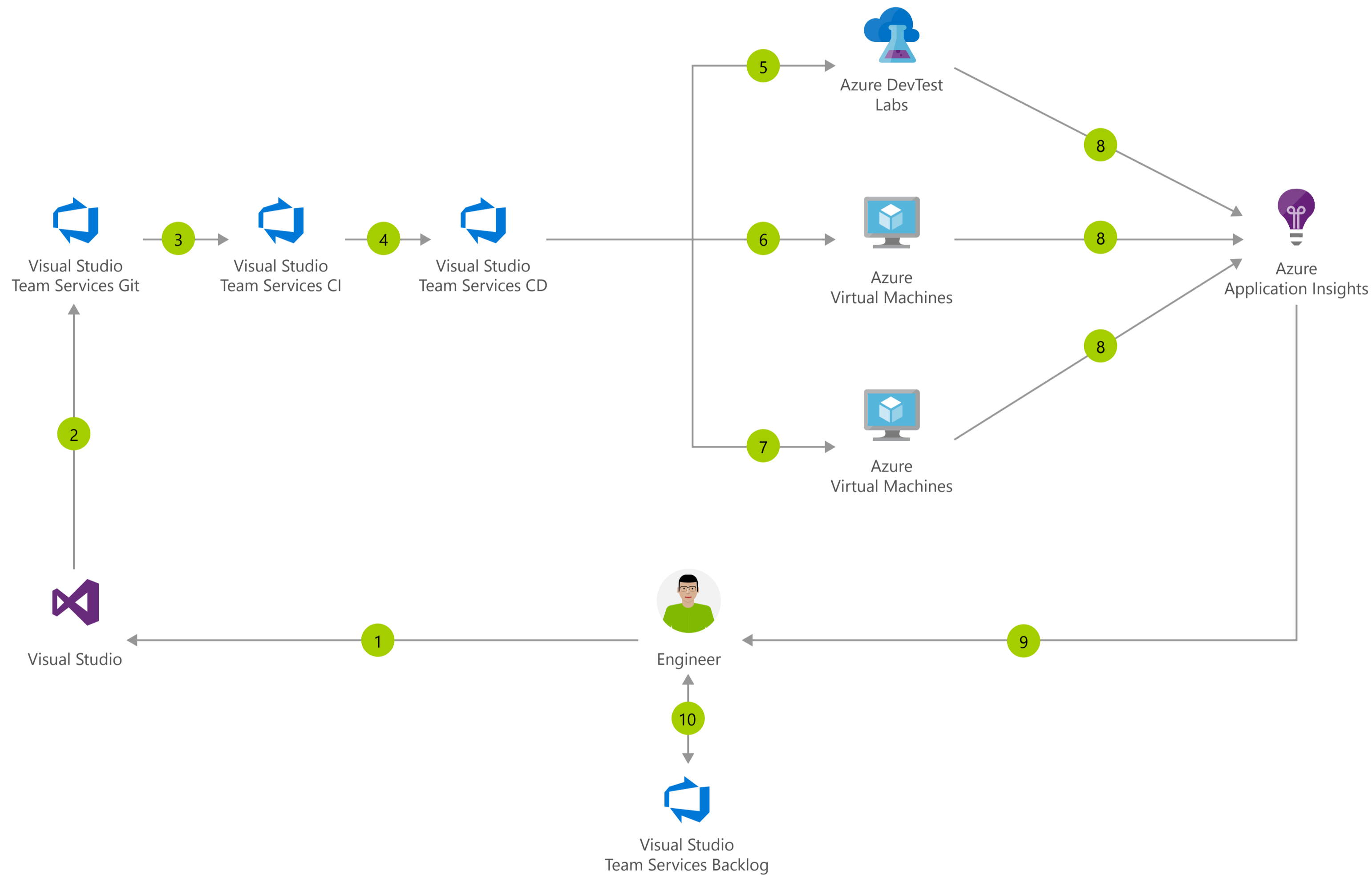


CI/CD for Azure Virtual Machines








Architecture overview

Azure is a world-class cloud for hosting virtual machines running Windows or Linux. Whether you use ASP.NET, Java, Node.js, or PHP to develop applications, you'll need a continuous integration and continuous deployment (CI/CD) pipeline to push changes to these virtual machines automatically.

Visual Studio Team Services provides the CI/CD pipeline, starting with a Git repository for managing your application source code and infrastructure code (Azure Resource Manager templates), a Build system for producing packages and other build artifacts, and a Release Management system for setting up a pipeline to deploy your changes through dev, test, and production environments. The pipeline uses Resource Manager templates to provision or update your infrastructure as necessary in each environment, and then deploys the updated build. You can also use Azure DevTest Labs to automatically tear down test resources that are not in use.

- 1 Change application source code.
- 2 Commit application code and Azure Resource Manager template.
- 3 Continuous integration triggers application build and unit tests.
- 4 Continuous deployment trigger orchestrates deployment of application artifacts with environment-specific parameters.
- 5 Deployment to QA environment.
- 6 Deployment to staging environment.
- 7 Deployment to production environment.
- 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
-  Virtual Machines
-  DevTest Labs
-  Application Insights
-  Visual Studio Team Services