Azure DevOps with Azure Resources

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About Wintellect

who we are

Wintellect is the only company that offers the combined value of world class consulting services along with onsite, virtual and on-demand developer training. We help companies build better software, faster, helping you maximize and protect your consulting and training investments through ongoing knowledge transfer.

consulting

Wintellect helps you build better software, faster, tackling the tough projects and solving the software and technology questions that help you transform your business.

- Architecture, Analysis and Design
- Full lifecycle software development
- Debugging and Performance tuning
- Database design and development

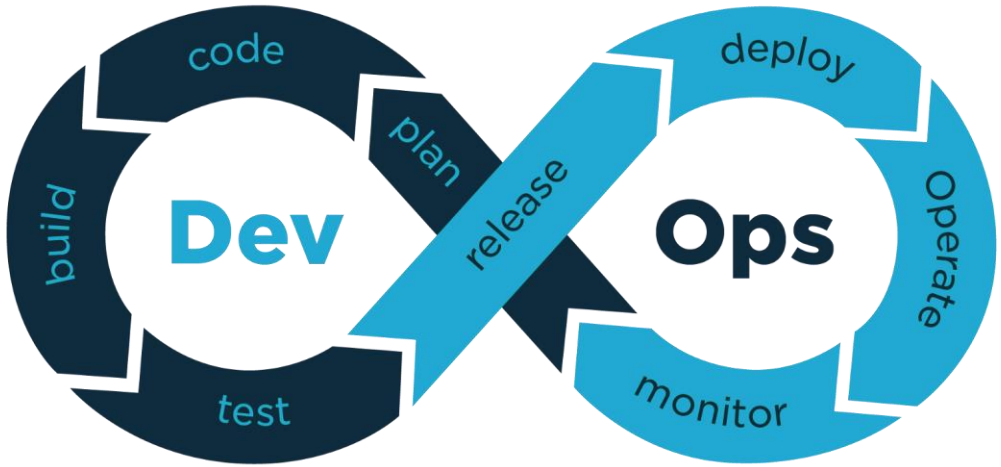
training

Wintellect's courses are written and taught by some of the biggest and most respected names in the Microsoft programming industry.

- Learn from the best. Access the same training Microsoft's developers enjoy
- Real world knowledge and solutions on both current and cutting edge technologies
- Flexibility in training options – onsite, virtual, on demand

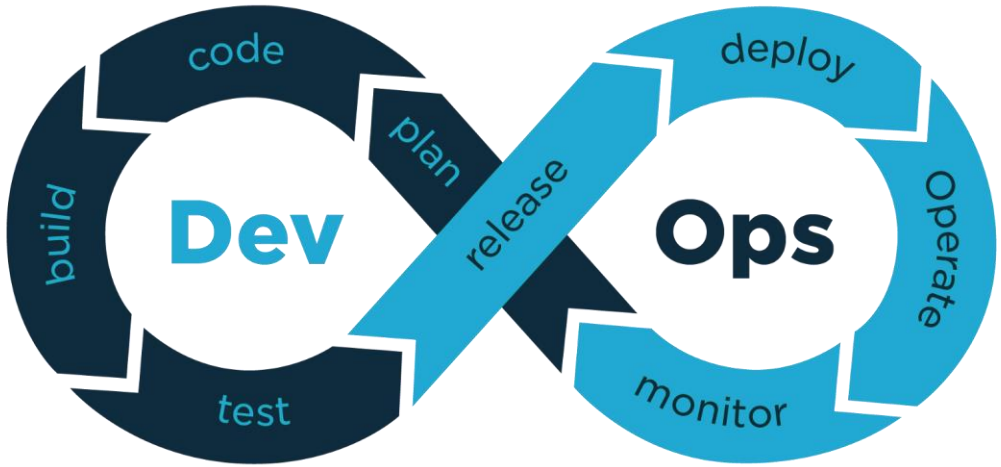
What is DevOps?

- DevOps is ***culture***, not a method, tool, or process for doing things.
- DevOps seeks to break down the siloed approach to building and maintaining application.
- It accomplishes this through empirical, test driven, repeatable processes that facilitate collaboration.

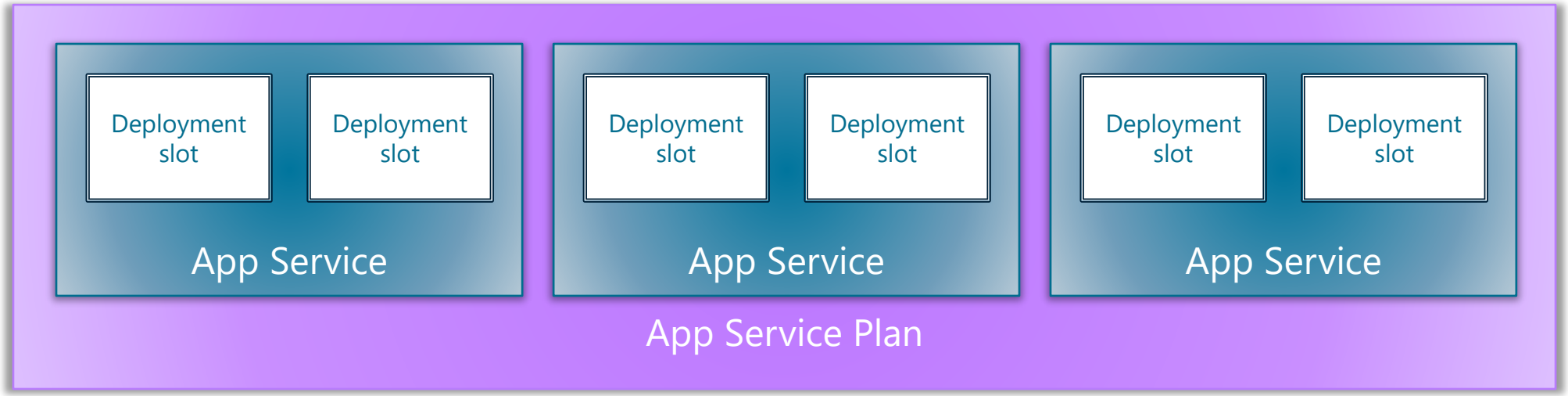


What is Azure DevOps?

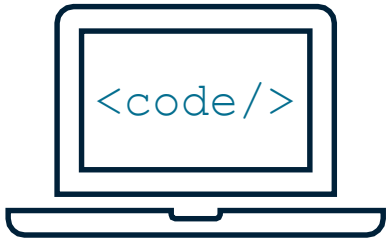
- Azure DevOps is a ***tool*** to facilitate a DevOps culture.
- It integrates…
  - **Boards** for managing projects
  - **Pipelines** to facilitate builds and releases
  - **Artifacts** to manage packages.
  - **Repos** for managing code
  - **Test** Plans for end-to-end testing



Azure App Service Architecture



Azure DevOps with App Services



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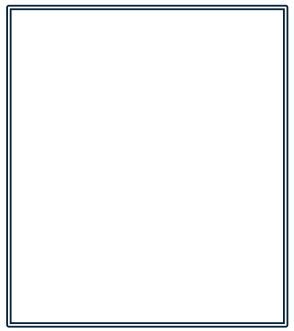
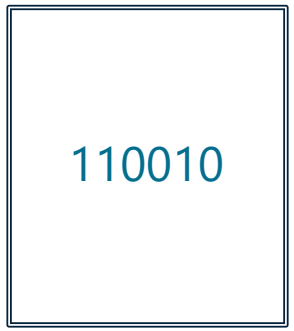
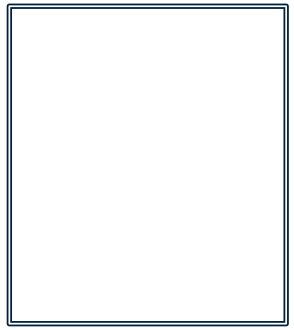


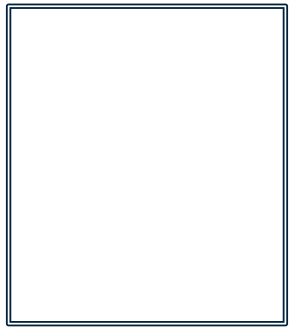
Azure DevOps Git Repo



Build Pipeline

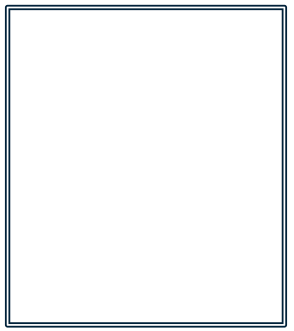


Pipeline Output (Artifact)



Release Pipeline

AZURE DEVOPS



App Service

AZURE

Azure App Services with Azure DevOps

Container Workflow

FROM alpine

Container Image

Dockerfile

```
docker build
docker push
run command
```

Azure DevOps

Azure
Container Registry

Container Image

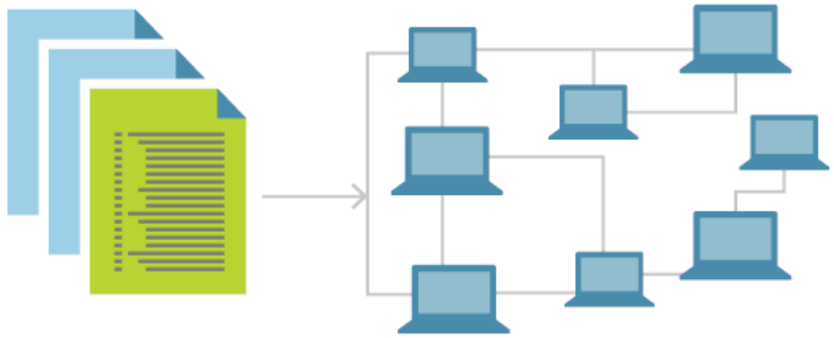
Container

Azure Kubernetes Services

Azure DevOps with
Azure Container Registry and
Azure Kubernetes Services

Infrastructure As Code (IaC)

- Infrastructure as Code allows you define infrastructure (VM's, Networks, Load Balancers, etc) as code.
- Azure performs this through Azure Resource Manager (ARM) Templates
- Infrastructure can therefore be deployed and managed using pipelines.



Azure VM Deployment with ARM Templates

Questions??

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