



# Craig Porteous

Principal Consultant

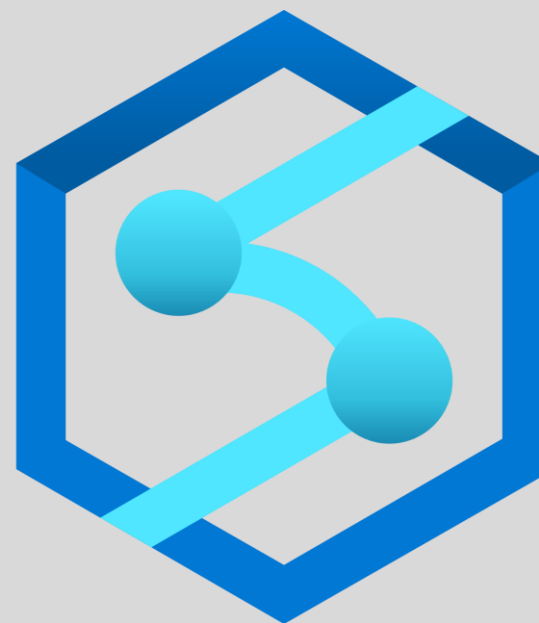


 <https://craigporteous.com>

 @cporteous

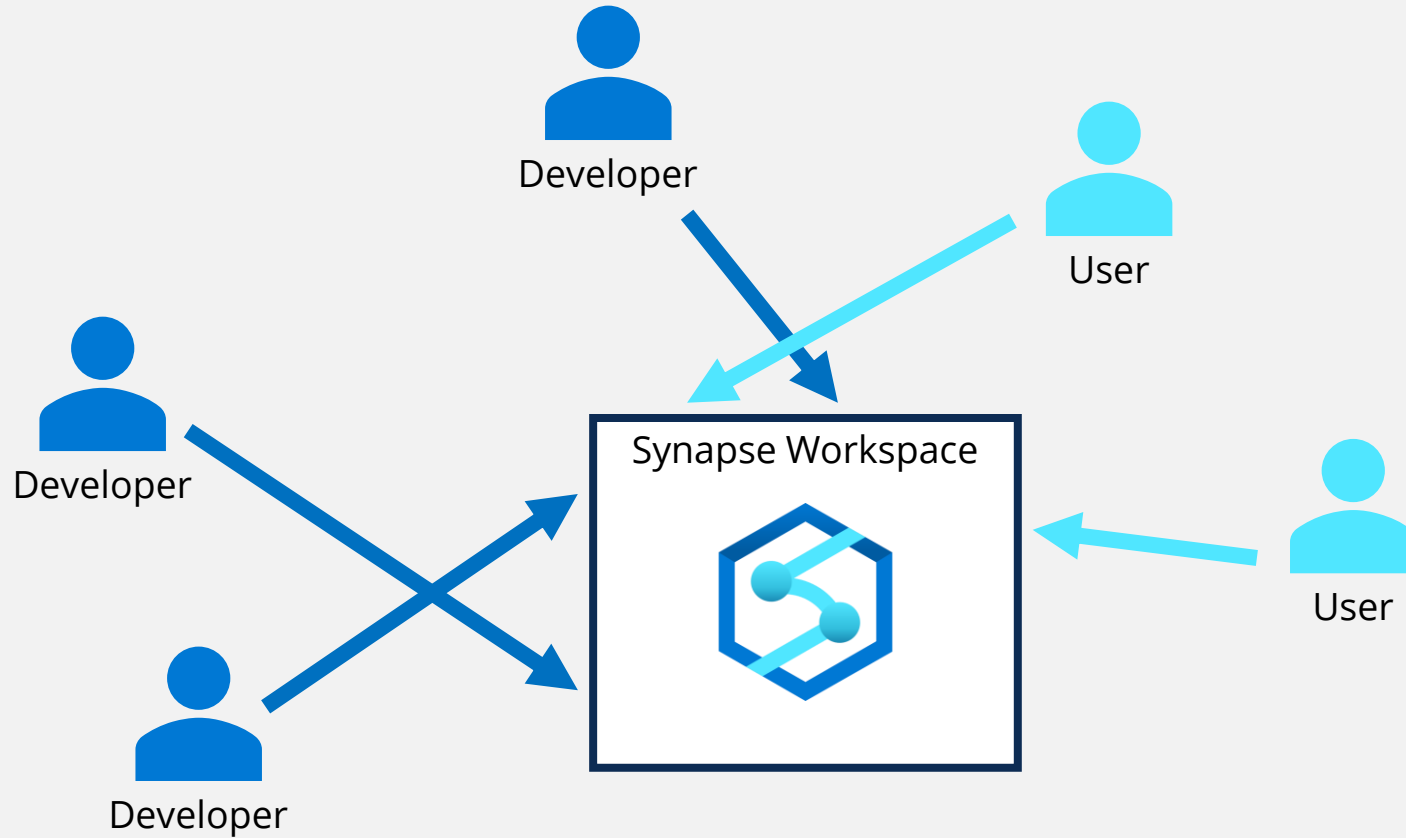
 <https://github.com/cporteu>

# Adventures in CI/CD with Azure Synapse



# Single environments

- ❌ Cross development conflicts
- ❌ Difficult to test
- ❌ Developing on a moving target



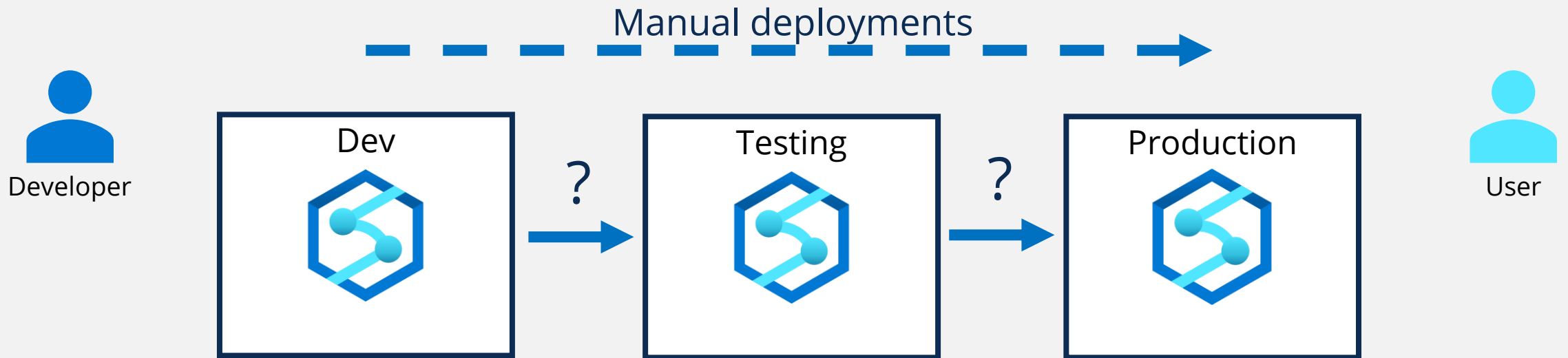
# Multiple environments



Progressing content between environments is difficult



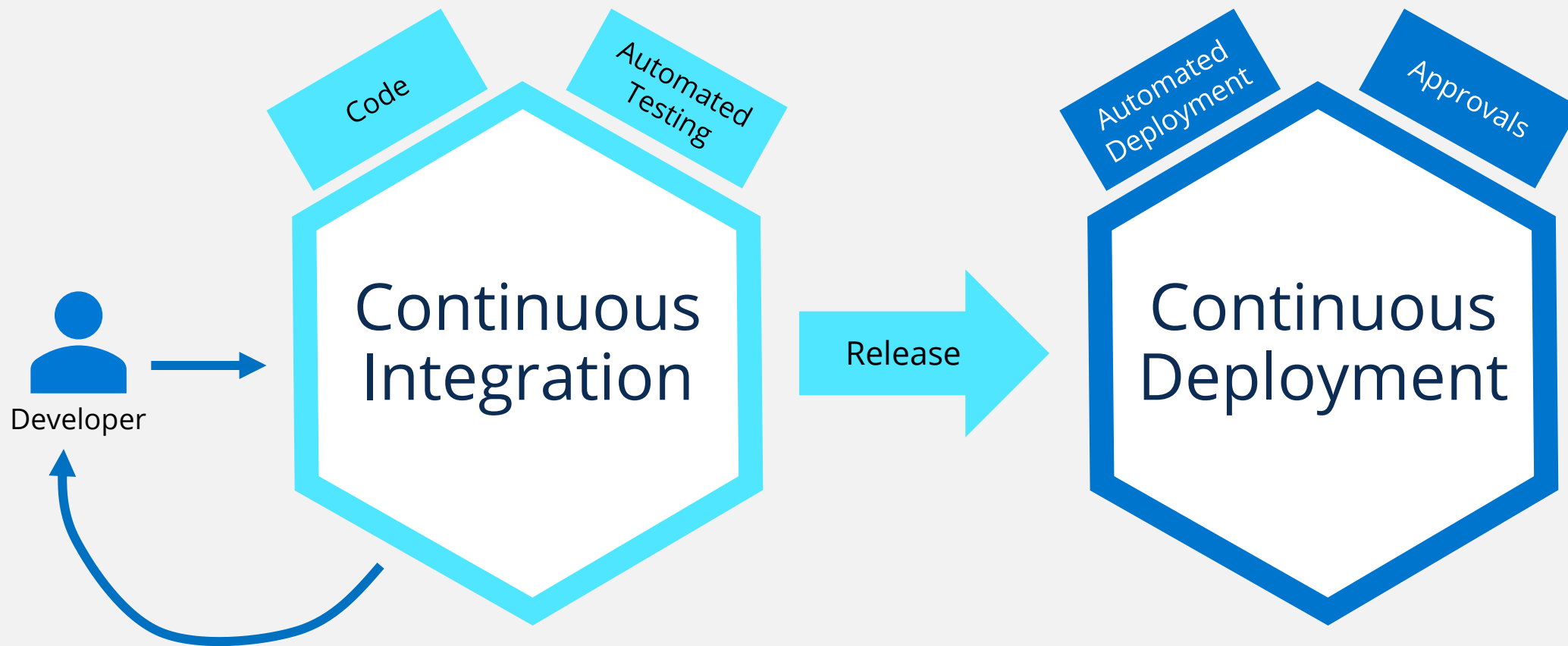
Consistent deployment and testing difficult



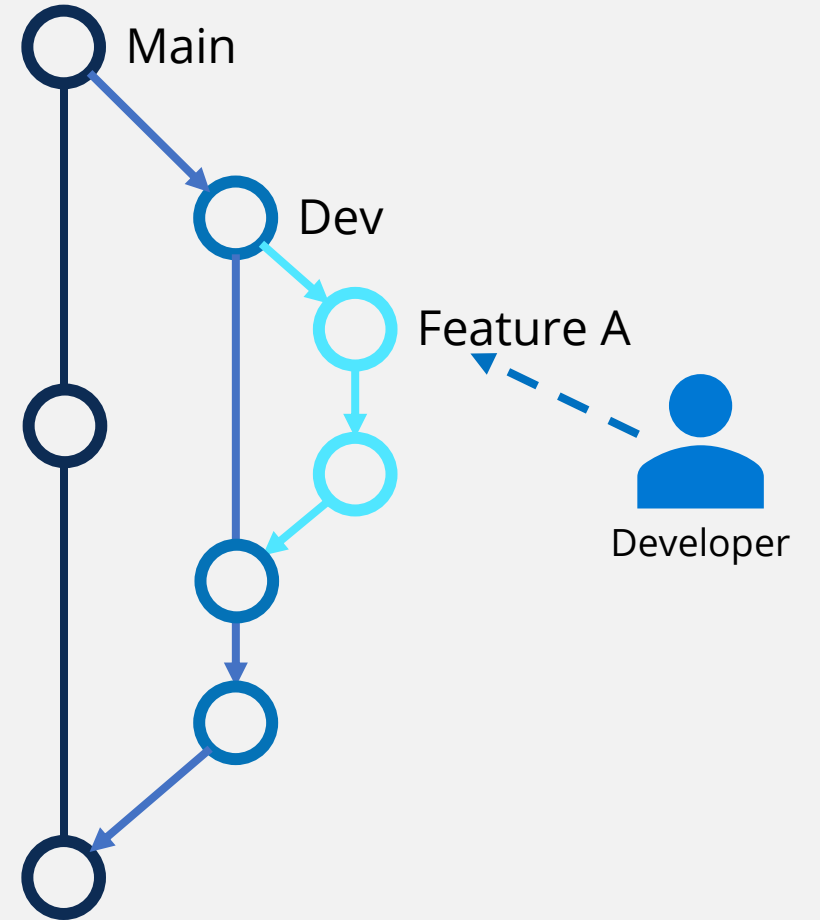
# What is CI/CD?

Continuous  
Integration

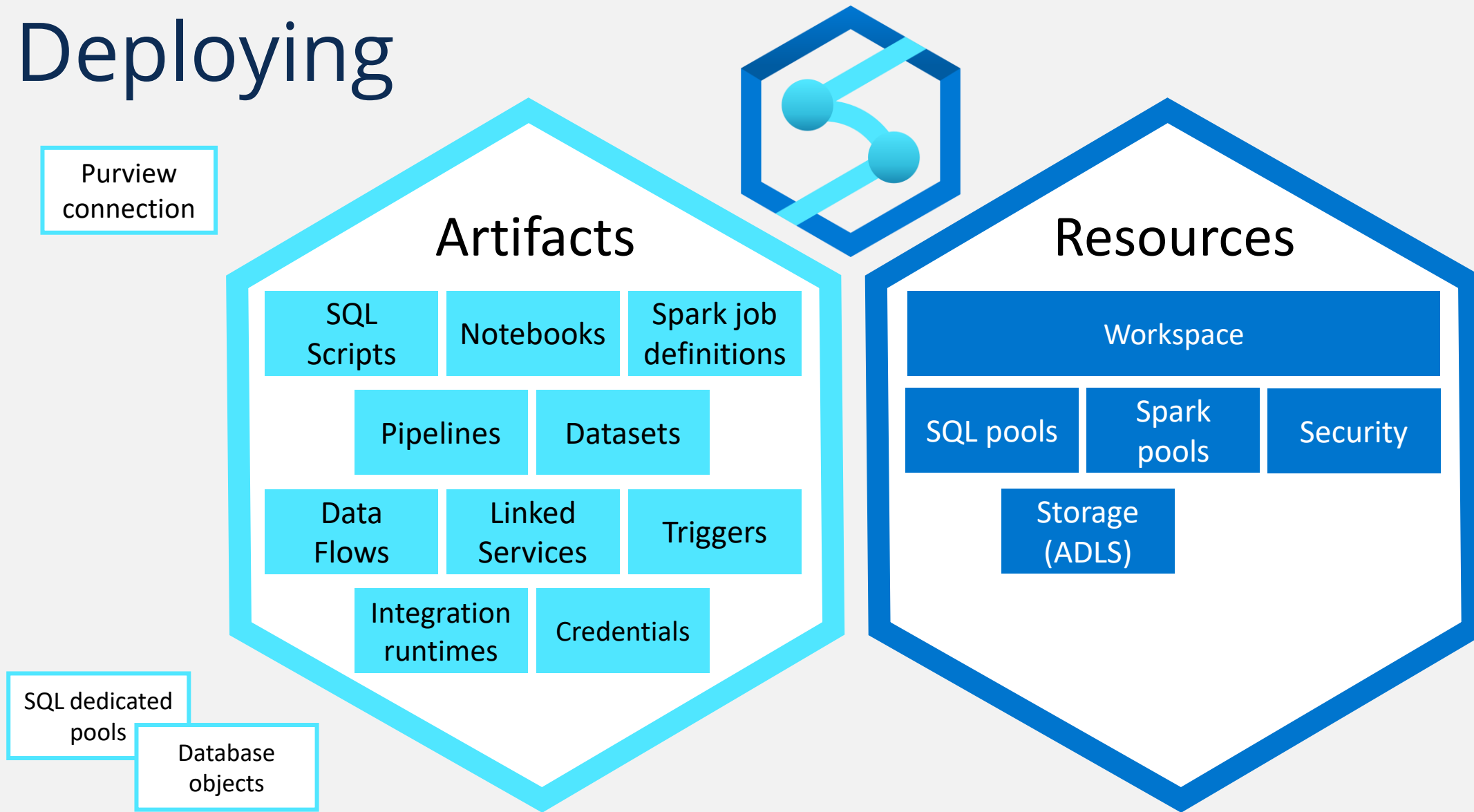
Continuous  
Deployment



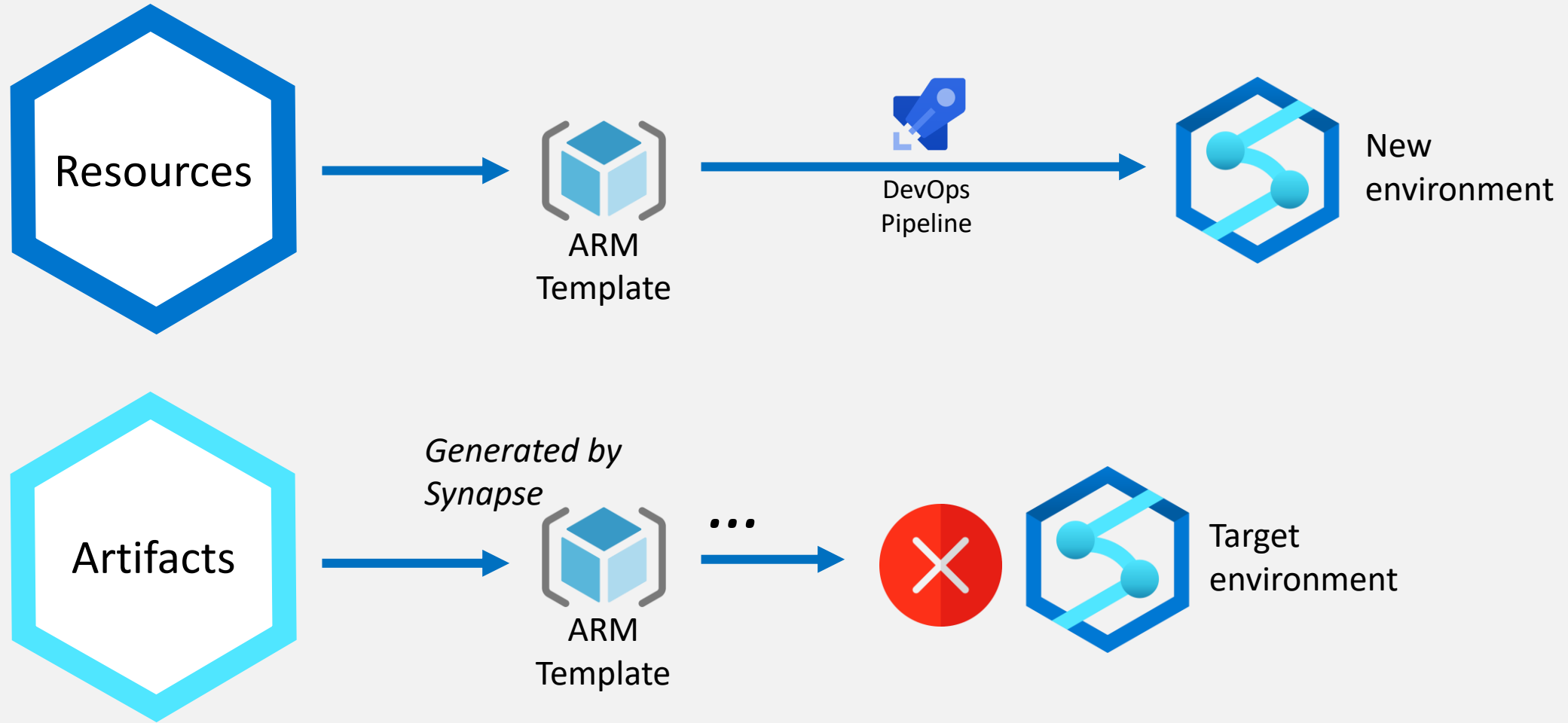
# Prerequisites



# Deploying



# Deploying



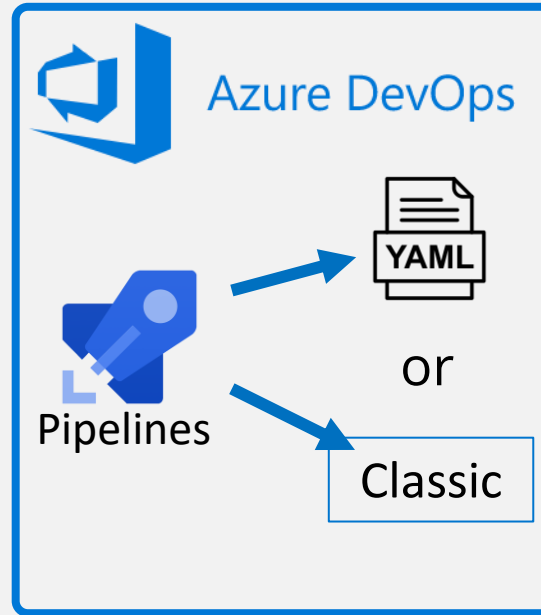


# Tools

## Repository

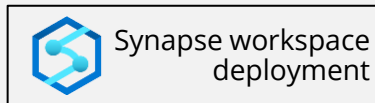


## Pipelines



+

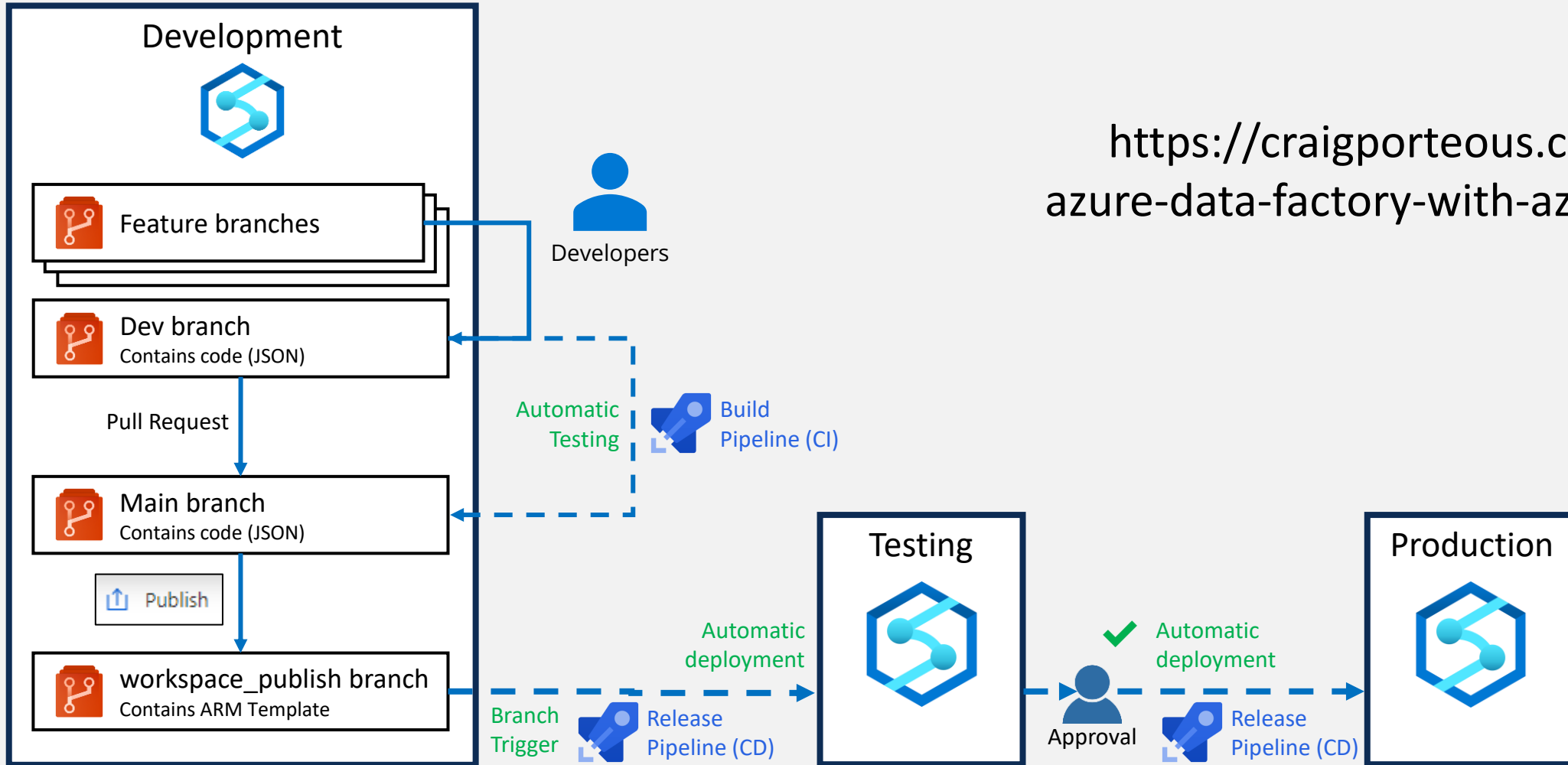
 Visual Studio | Marketplace



## Artifacts

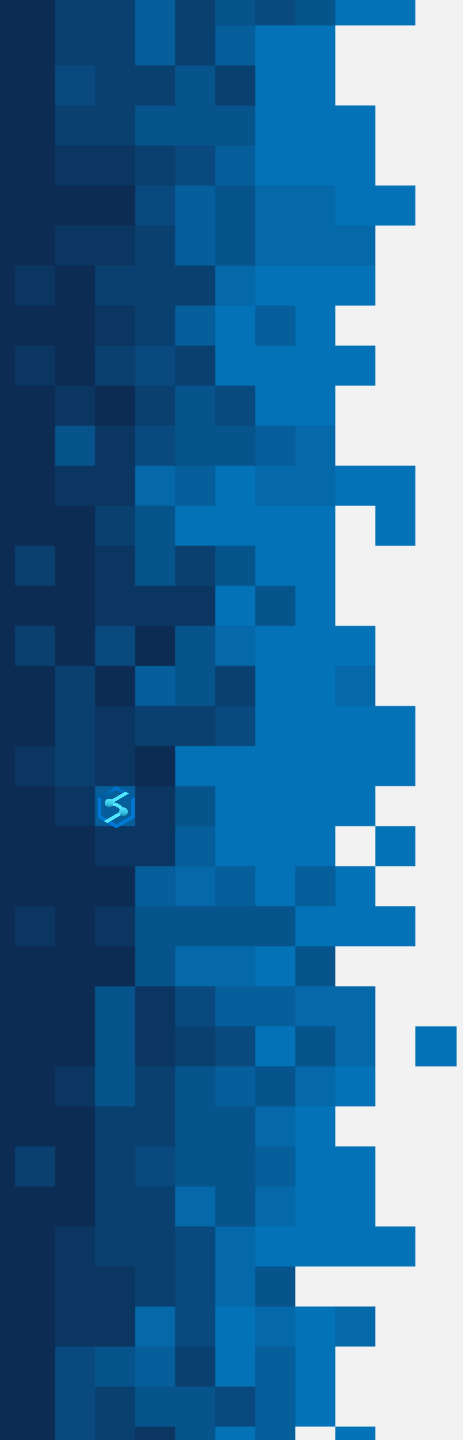


# Azure Synapse Analytics CI/CD












<https://craigporteous.com/cicd-for-azure-data-factory-with-azure-devops/>

# Demo



# Key points to remember

-  Integration Runtime's need to be the same type in all environments
-  Notebook pool connections need to be updated (manually or by Find/replace)
-  Deploying Artifacts as ARM templates will give inconsistent results
-  Template (definition) updates are only performed on [Publish].
-  Required resources (e.g. Pools) need to be in place before deploying artifacts
-  Perform clean up tasks with PowerShell (az.Synapse) module
-  Try to avoid using the “built in” linked services.
-  Dedicated pool objects aren't handled – deploy with DACPAC step
-  Dedicated pools need to be online in target environment for CD pipeline

# Is this DevOps in Synapse?



Synapse is constantly evolving



The Dev/deploy process is still in its infancy



The DevOps extension is getting regular updates

# Thank You



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<https://github.com/cporteous>