



Craig Porteous

Principal Consultant

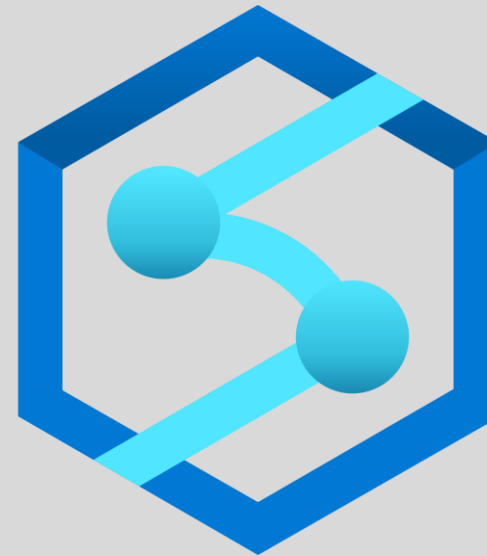


 <https://craigporteous.com>

 @cporteous

 <https://github.com/cporteu>

Adventures in CI/CD with Azure Synapse



Thank you, sponsors



K[◇]HERA

element
experience & expertise

 Microsoft

inetum.
realdolmen
Positive digital flow

bmatix
Act informed

LACO/ KNOWLEDGE,
AND MORE.

lytix

 DataSense
Because your data makes sense!

MICROPOL

KPMG

delaware
we commit. we deliver.



 AKABI

 ADVANCING
ANALYTICS

u2u

de
Adapt
and
Enable

 cegeka
IN CLOSE COOPERATION

 Business & Decision

 MONIN
Database Managed Services

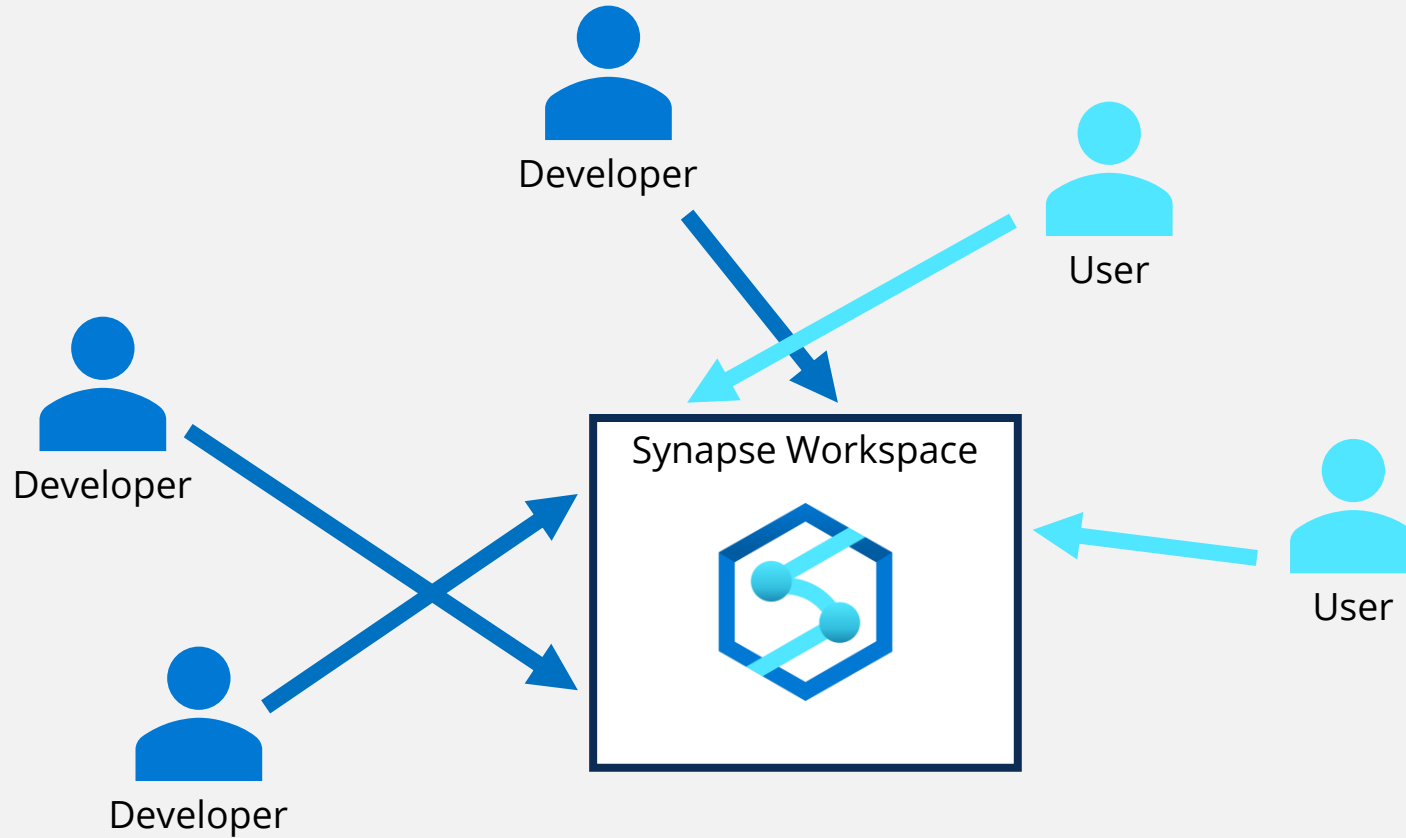
ORDINA
Ahead of change

9Δ nine
altitudes
REACH NEW HEIGHTS

 Tabular Editor

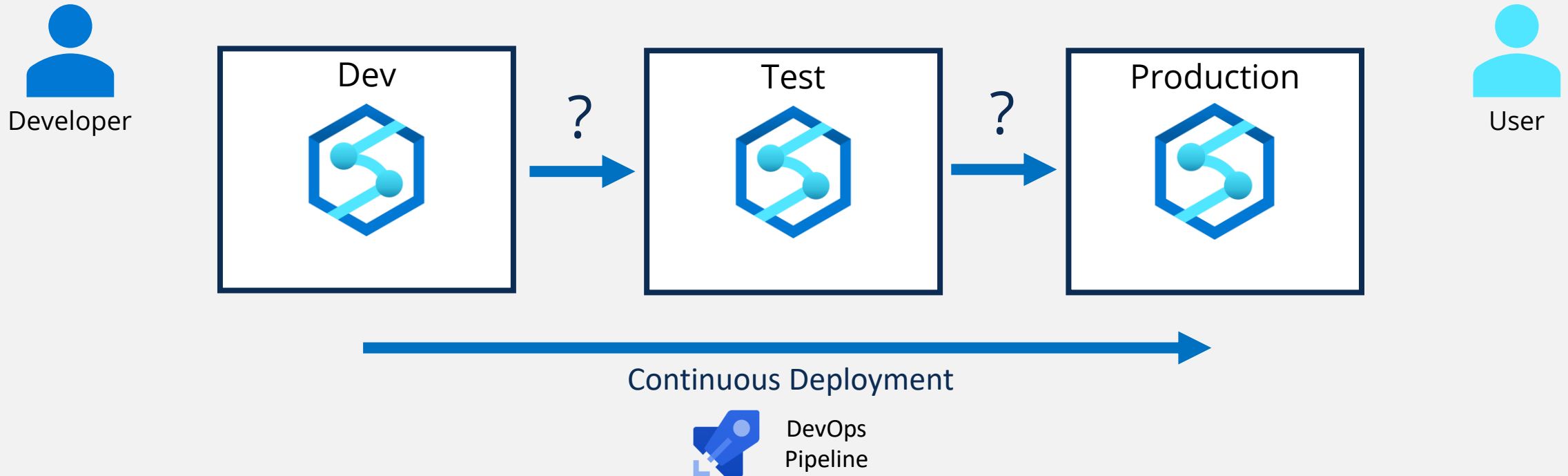
Development challenges

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



Multiple environments

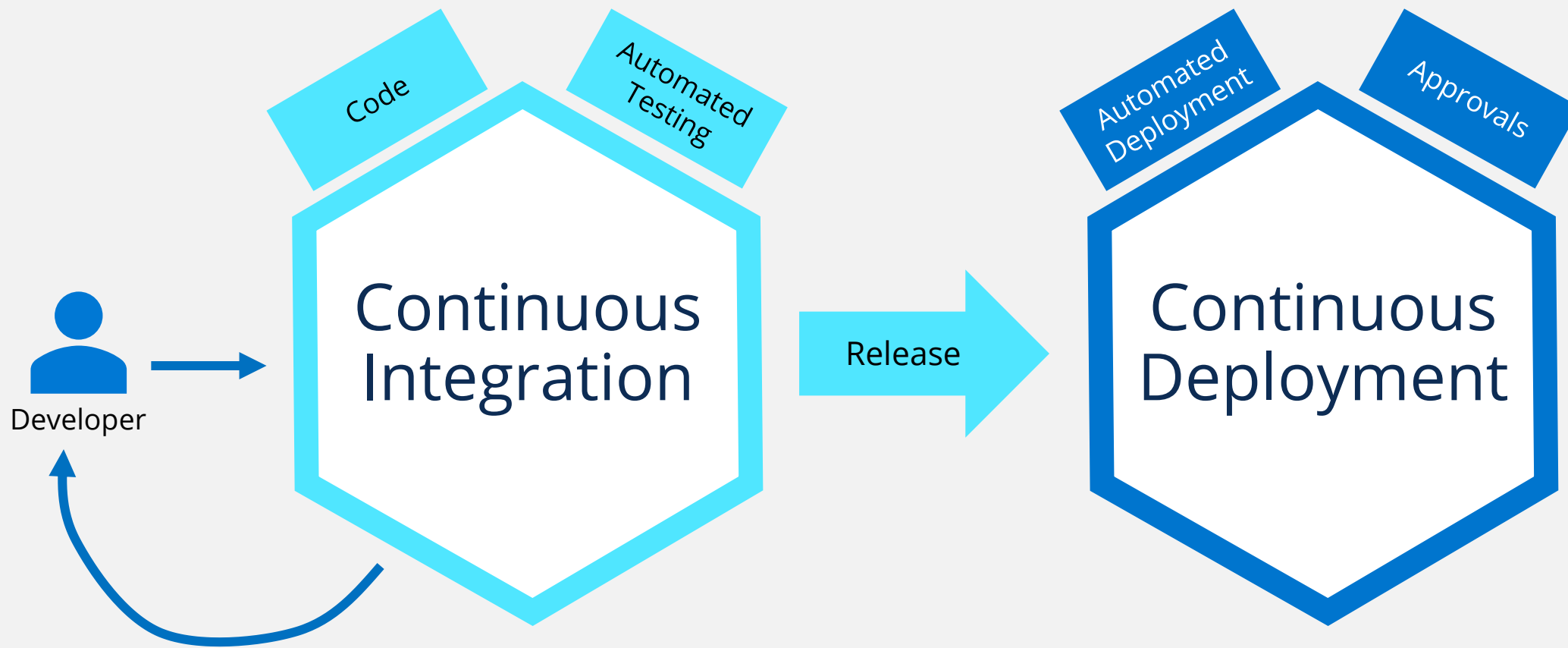
- ❌ Progressing content between environments is difficult
- ❌ Consistent deployment and testing difficult



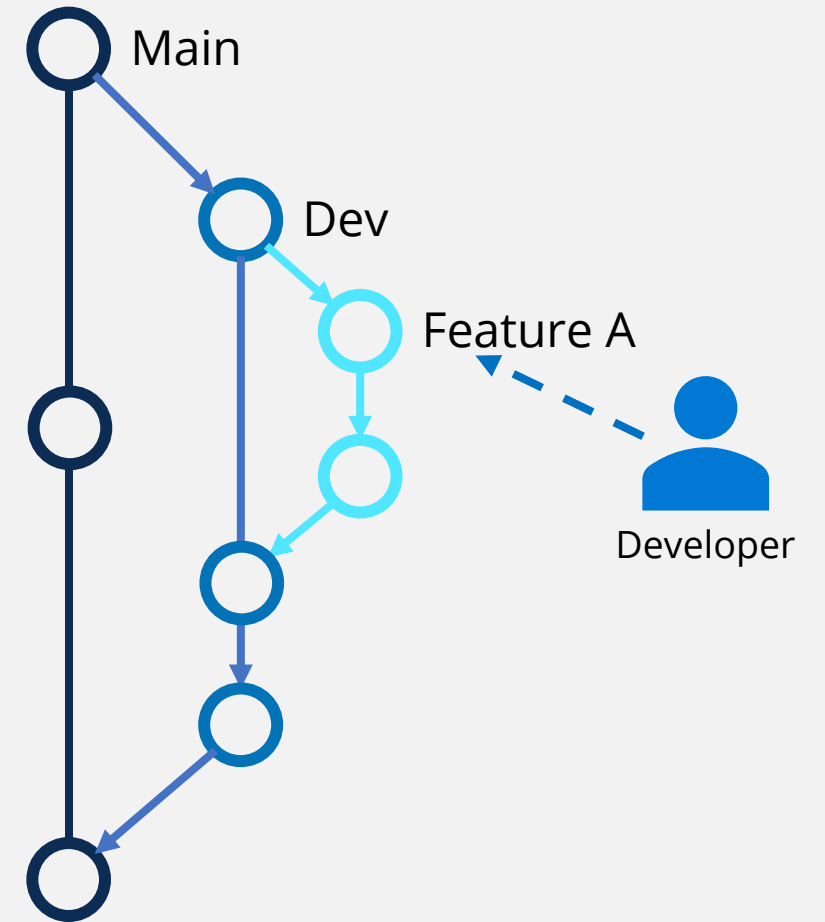
What is CI/CD?

Continuous
Integration

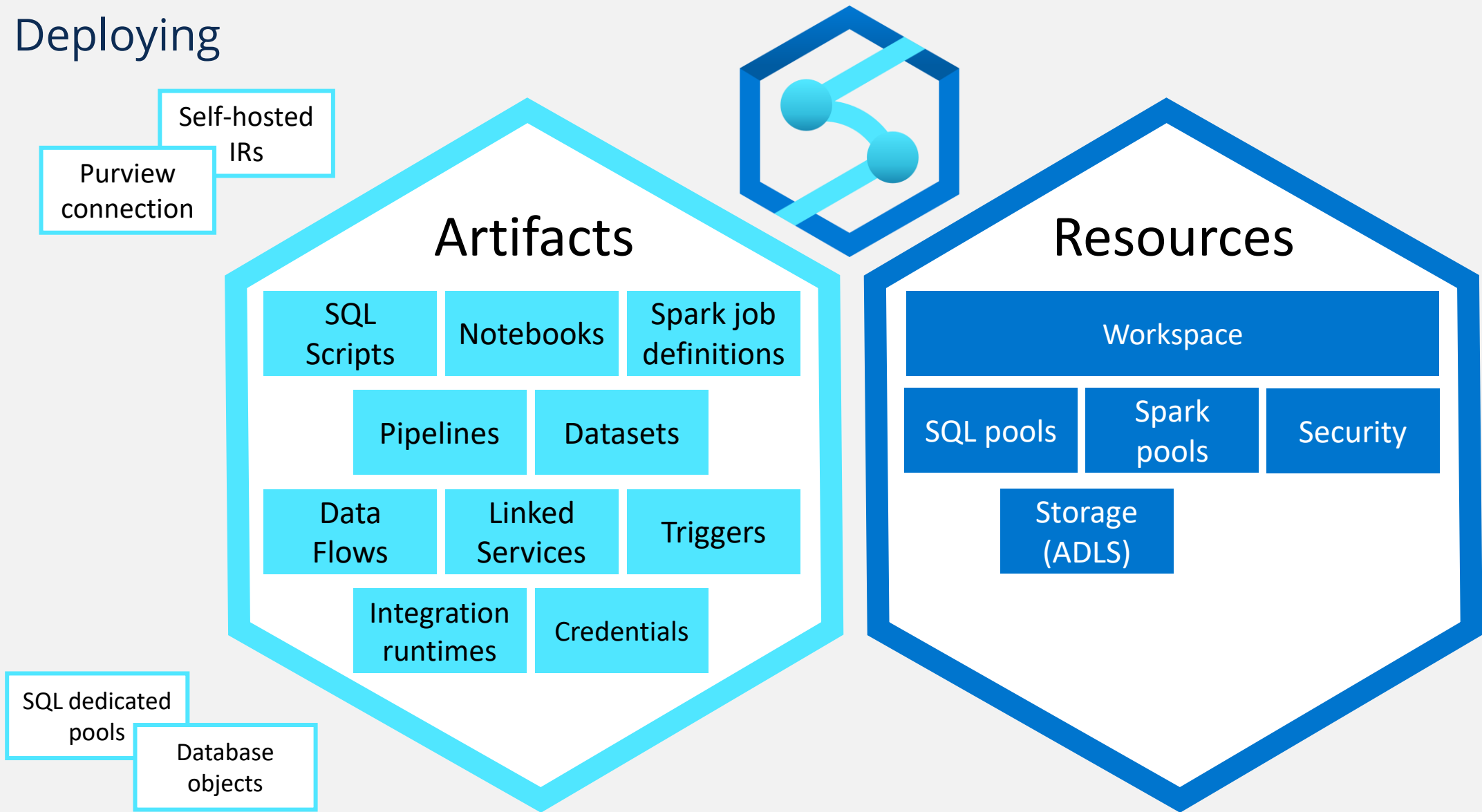
Continuous
Deployment



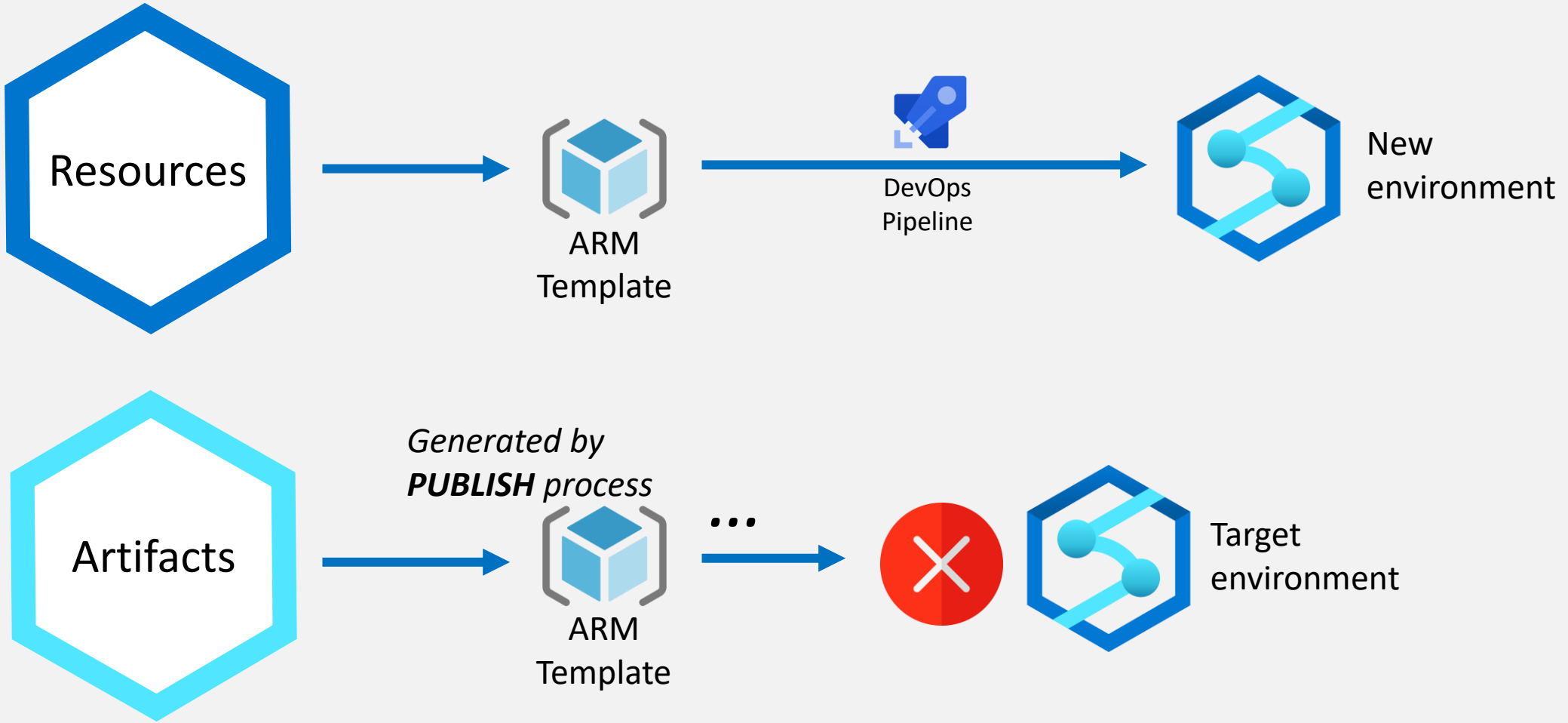
Prerequisites



Deploying

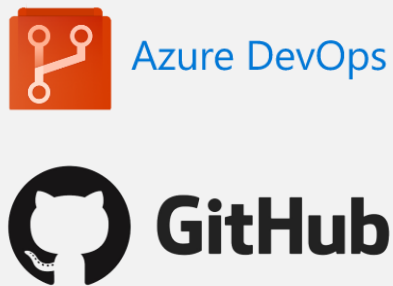


This is not Data Factory

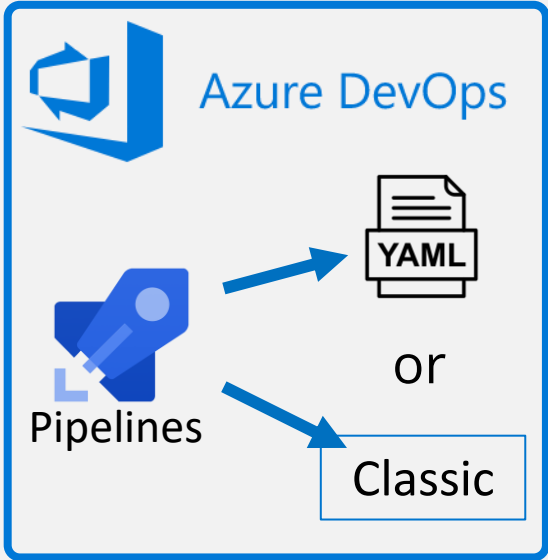


Deploying Artifacts

Repository



Pipelines



+

Visual Studio | Marketplace

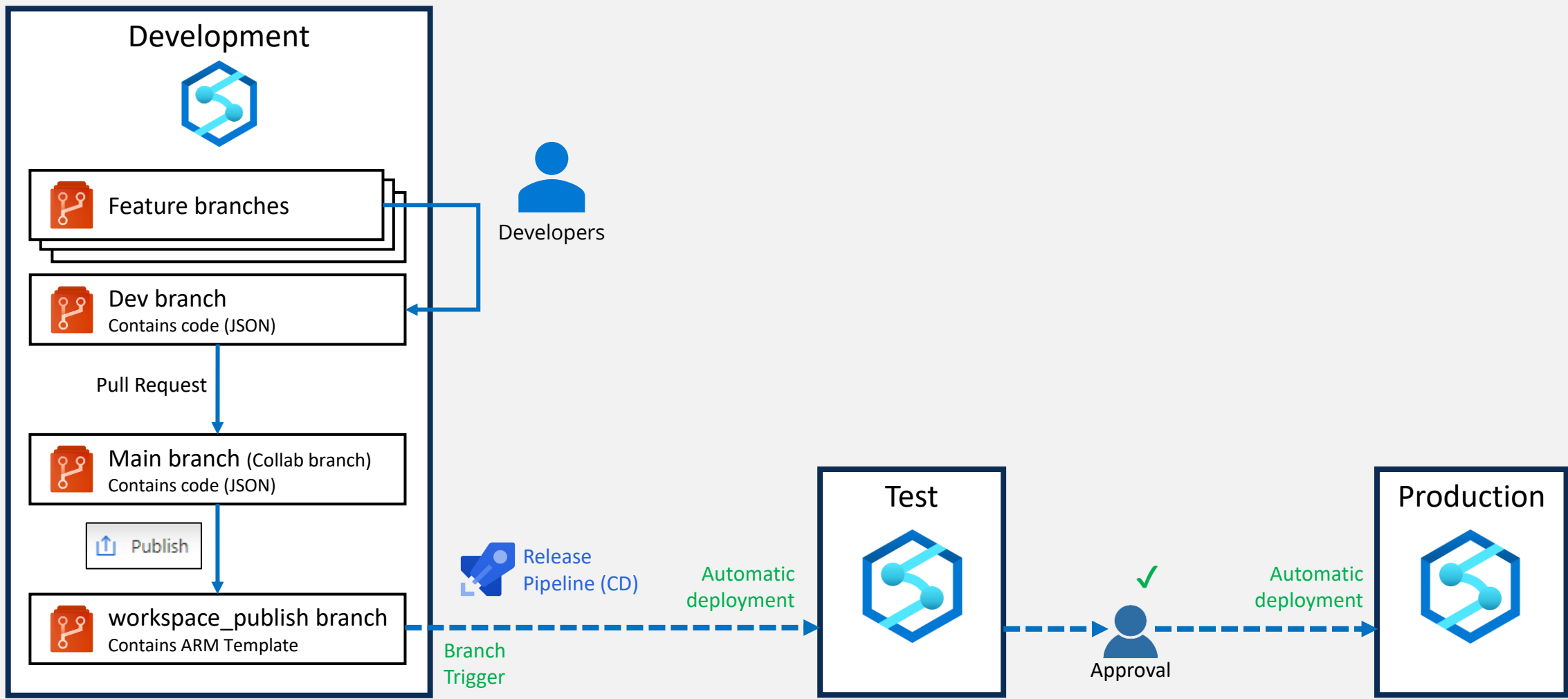
Synapse workspace deployment

Artifacts

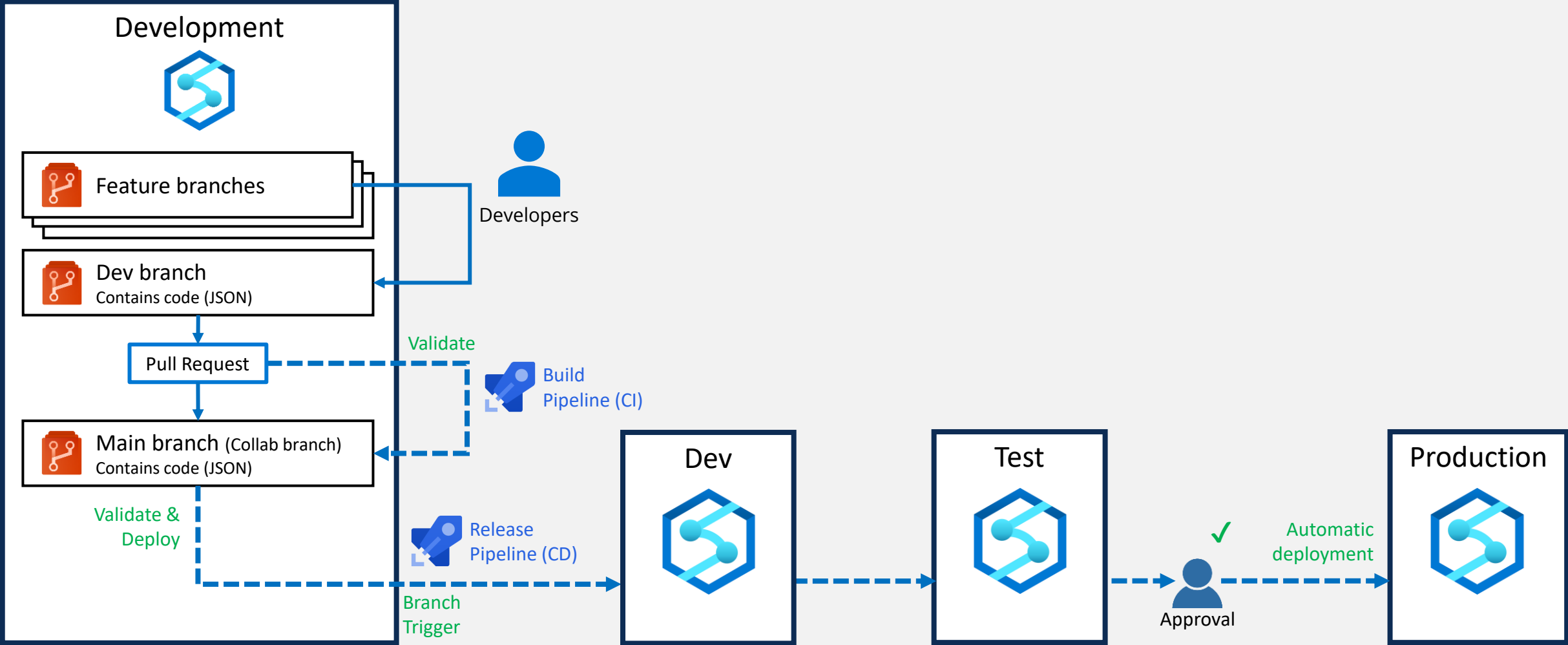


Limited CI/CD

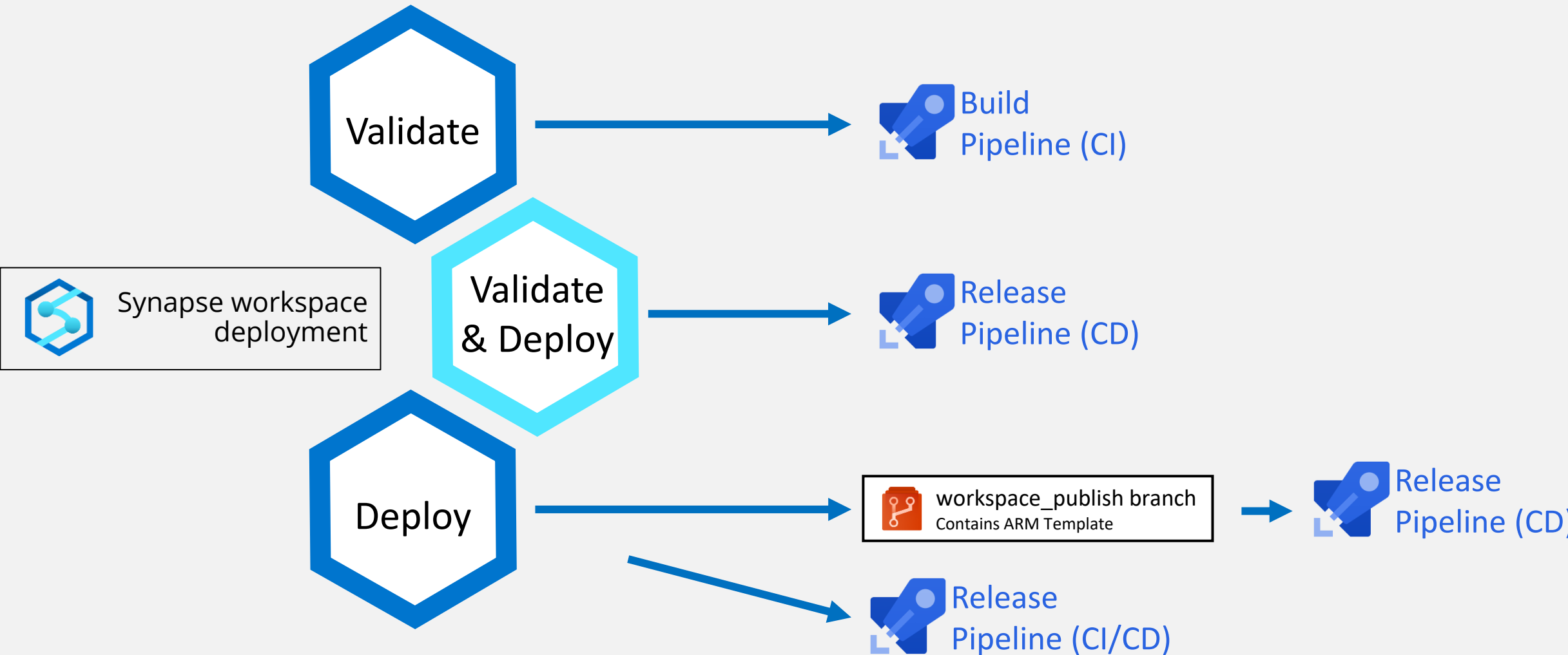
<https://craigporteous.com/cicd-for-azure-data-factory-with-azure-devops/>



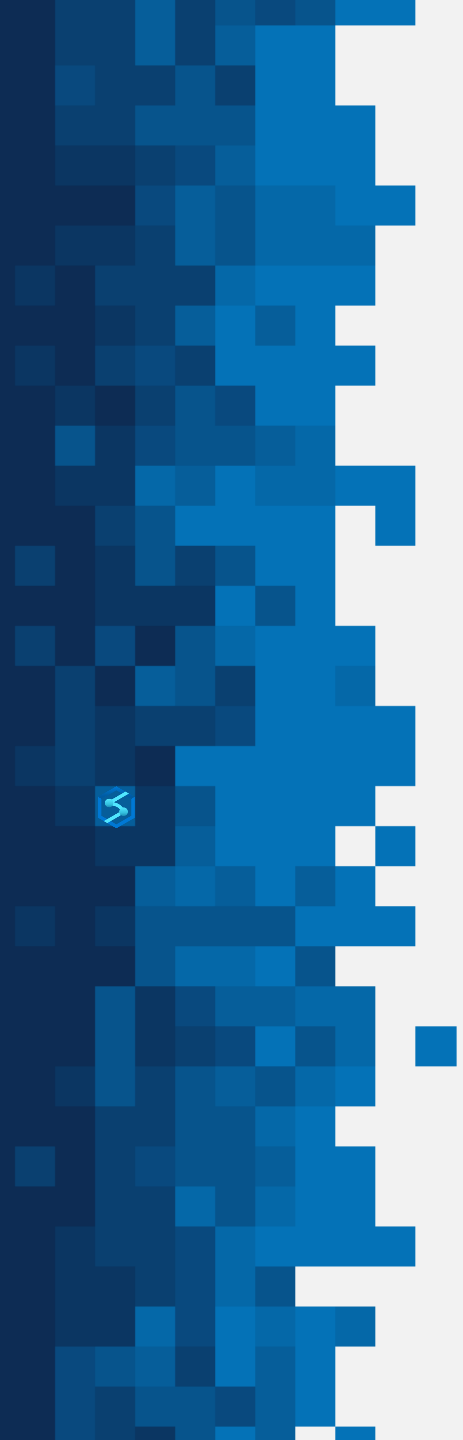
Azure Synapse Analytics CI/CD












Synapse Extension Modes



Demo



Things 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

Session Feedback



Thank You



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<https://github.com/cporteous>

https://bit.ly/dMC2022_SessionFeedback