#### # Service Connection in Azure DevOps

#### Overview

A **Service Connection** in **Azure DevOps** is a secure way to connect Azure DevOps with external services such as Azure, AWS, GitHub, Docker Hub, or other repositories. It allows pipelines to authenticate and interact with external resources like cloud services, container registries, and artifact repositories without exposing credentials directly in the pipeline YAML.

# **Types of Service Connections**

Some commonly used service connections in Azure DevOps include:

- 1. **Azure Resource Manager (ARM)** Connects to Azure for managing resources.
- 2. **AWS Service Connection** Connects to AWS for managing infrastructure.
- 3. **GitHub Service Connection** Allows integration with GitHub repositories.
- 4. **Docker Hub / Container Registry** Connects to container registries for pushing/pulling images.
- 5. **ServiceNow / Jenkins / SonarQube** Integrates with external CI/CD and ITSM tools.

### Steps to Create a Service Connection in Azure DevOps

## 1. Navigate to Service Connections

- 1. Sign in to Azure DevOps.
- 2. Select your **project**.
- 3. Click on Project settings (bottom left corner).
- 4. Select Service connections under Pipelines.

## 2. Create a New Service Connection

- 1. Click on New service connection.
- 2. Choose the type of service connection (e.g., Azure Resource Manager).
- 3. Select an authentication method:
  - Service principal (automatic) Recommended if you have Azure admin rights.
  - Service principal (manual) Requires entering App ID, secret, and tenant ID manually.
  - Managed identity If using an Azure VM with a managed identity.
- 4. Provide necessary details like **subscription**, **resource group**, or **credentials**.
- 5. Click on **Verify and Save**.

### 3. Use the Service Connection in a Pipeline

Once created, reference the service connection in your Azure DevOps YAML pipeline:

pool:

vmlmage: 'ubuntu-latest'

steps:
- task: AzureCLI@2

inputs:

azureSubscription: '<your-service-connection-name>'

scriptType: 'bash'

scriptLocation: 'inlineScript'

inlineScript: |

az account show