## 3. Build and release pipelines

# └─ 3.3 Advanced pipeline design

## └ 3.3.3 Checks and approvals with YAML environments

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- 9. What limitations or pitfalls exist with environment checks and approvals?
- 10. How do you audit or monitor approval history for environments?

# 1. What are environment checks in Azure Pipelines YAML?

Environment checks are policies (such as approvals, service health, or business rules) that must pass before a deployment can proceed to a given environment.

## 2. How do you configure approvals for a deployment environment in YAML?

Define the environment in the deployment job and set up approvals in the Azure DevOps portal under *Pipelines > Environments*. Approvals are not specified directly in YAML.

# 3. What types of checks can be enforced in an environment?

Common checks include:

- Manual approvals
- Azure Function or REST API checks
- Business rule validations
- Service health checks

### 4. How do you reference and use environments in YAML pipelines?

Use the environment: keyword in a deployment job:

environment: 'staging'

This triggers checks and approvals configured for that environment.

## 5. How do manual approvals work in multi-stage pipelines?

The pipeline pauses at the environment check until designated users approve. Only after approval does the deployment job execute.

#### 6. How can you restrict deployments to specific environments?

Limit access using environment security settings in *Azure DevOps*, specifying who can deploy and approve to each environment.

## 7. How do you require multiple approvers for an environment?

In the *Azure DevOps* portal, add multiple users or groups to the approval list for the environment. You can set whether all or just one must approve.

# 8. What are best practices for designing approval workflows in YAML?

- Use environment approvals for production/staging
- Limit approvers to relevant stakeholders
- Combine automated and manual checks
- Regularly review and update approver lists

# 9. What limitations or pitfalls exist with environment checks and approvals?

- Approval policies must be managed in the portal, not in YAML
- Delays if approvers are unavailable
- Lack of fine-grained conditional logic for approvals
- Inability to automate some business rules fully

# 10. How do you audit or monitor approval history for environments?

View approval history and audit logs in the *Azure DevOps* portal under the environment's "History" tab. This includes who approved, when, and comments if provided.