### 5. Connect to and consume Azure services and third-party services

## **□** 5.1 Implement API Management

### □ 5.1.2 Create and document APIs

- 1. How do you import an API into Azure API Management?
- 2. What API definition formats are supported for import?
- 3. What are the common ways to create an API manually in APIM?
- 4. What is the purpose of API operations and how are they defined?
- 5. How do you add or modify request/response parameters in APIM?
- 6. How does versioning work in APIM for APIs?
- 7. How do you document APIs using OpenAPI (Swagger) in APIM?
- 8. What is the role of the developer portal in API documentation?
- 9. How do you secure developer portal access?
- 10. What tools support automated API documentation publishing to APIM?

# 1. How do you import an API into Azure API Management?

Use the Azure Portal, CLI, or ARM/Bicep to import via OpenAPI, WSDL, GraphQL, or direct URL.

az apim api import \

- --resource-group myrg \
- --service-name myapim \
- --path myapi \
- --specification-format OpenApi \
- --specification-path ./openapi.json

## 2. What API definition formats are supported for import?

- OpenAPI 2.0/3.0 (JSON/YAML)
- WSDL (SOAP)
- GraphQL schemas
- Azure Functions or App Services (via App Insights tracing)

#### 3. What are the common ways to create an API manually in APIM?

- Define operations manually in the Azure Portal
- Use Azure CLI or ARM templates
- Add operations under a base path, define HTTP verbs, request parameters, and response types

# 4. What is the purpose of API operations and how are they defined?

Operations define how the API is consumed (e.g., GET /users). Each includes:

- HTTP method
- URL template
- Request/response schema
- Optional policies (rate limits, auth)

# 5. How do you add or modify request/response parameters in APIM?

Via Portal or CLI:

- Define path/query/header parameters for requests
- Define expected status codes and response body schemas
- Example: Add header param in operation settings under Inbound Processing

## 6. How does versioning work in APIM for APIs?

Supported methods:

- Path-based (e.g., /v1/orders)
- Query string (e.g., ?api-version=1.0)
- Header-based (e.g., X-Version: 1.0)
  APIM supports version sets to group versions under a single API entity.

## 7. How do you document APIs using OpenAPI (Swagger) in APIM?

Import an OpenAPI file to auto-generate operations and documentation. OpenAPI description appears in both the Azure Portal and developer portal. Supports Swagger UI rendering in developer portal.

## 8. What is the role of the developer portal in API documentation?

Provides a public or private interface for users to:

- Discover and test APIs
- View request/response details
- Access API keys
- Read autogenerated documentation

### 9. How do you secure developer portal access?

- Enable require sign-in in portal settings
- Configure identity providers (AAD, Facebook, etc.)
- Assign users to products with subscription-based access

# 10. What tools support automated API documentation publishing to APIM?

- Swagger/OpenAPI CLI
- Postman → export to OpenAPI
- Azure DevOps/GitHub Actions → automate import via az apim api import
- Supports CI/CD for keeping API definitions in sync