**Azure App Service Overview**

**What is Azure App Service?**

Azure App Service is a PaaS (Platform as a Service) that helps you quickly build, host, and scale webapps, APIs, and mobile backends without managing servers. You just focus on code — Microsoft takes care of infrastructure.

**Key Capabilities**

* Supports multiple languages: **.**NET, Java, PHP, Python, Node.js
* Works on Windows or Linux
* Offers custom Docker container support
* Continuous deployment via GitHub, Azure DevOps, etc.
* Built-in scaling, load balancing, and security
* Supports custom domains, SSL, authentication, and compliance

**App Service Plans (Hosting Models)**

These determine pricing, performance, and scalability:

* Free & Shared – For learning or trials (limited resources)
* Basic – Simple web apps with dedicated compute
* Standard – Production-ready apps with autoscale and backups
* Premium – High performance, VNet support, more instances
* Isolated – Fully private, enterprise-level, high-scale hosting

**App Service Environment (ASE)**

* A fully isolated and secure environment for large-scale apps.
* Deployed into your own virtual network (VNet).
* Used by companies needing network isolation, advanced scaling, and compliance.

**Typical Use Cases**

* Hosting web applications
* Backend services for mobile apps
* Public-facing or internal REST APIs
* Enterprise/line-of-business apps

**“Compare with App Service”**

Microsoft suggests when to choose App Service vs. other Azure options:

* **Use App Service**: When you want easy deployment of web apps or APIs without worrying about infrastructure. Best for developers who want speed and built-in scaling.
* **Use Azure Virtual Machines**: If you need full control over the operating system, custom software installations, or older apps that can’t run on managed platforms.
* **Use Azure Functions**: For event-based code (like sending an email when a file is uploaded) or background processing. It’s serverless, meaning you only pay when your code runs.

So, App Service sits in the middle — more managed than VMs, but more structured and code-focused than Azure Functions.