Compute Services – A Comparison

Feature/Service	Virtual Machines	Azure Virtual Desktop	Azure App Service	Containers	Azure Functions
Primary Use	General computing, full control over OS and environment	Virtualized desktop experience	Web hosting and mobile backends	Lightweight, isolated environments for applications	Event-driven, serverless compute functions
Scalability	Manually scalable	Scalable with user demand	Autoscaling capabilities	Easily scalable, often used in microservices architecture	Automatically scales based on demand
Management Overhead	High (OS, networking, etc.)	Medium (managed by Azure, user manages apps)	Low (platform managed by Azure)	Low (minimal OS, focus on app only)	Minimal (serverless, no infrastructure management)
Flexibility	Highly customizable	Desktop experience from anywhere	Highly optimized for web apps	High for application deployment and portability	High flexibility in responding to events
Ideal for	Complex applications, full-stack control	Remote work, BYOD policies	Web applications, RESTful APIs	Microservices, rapid development/deployment	Short-lived, event-triggered tasks, microservices
Pricing	Based on compute resources, storage, and networking	Based on usage and compute resources	Based on compute resources	Based on container size and execution time	Pay-per-use based on executions and resource consumption

Source: Based on KodeKloud content