Serverless Solutions

Building highly-scalable, event-driven applications.





Application hosting continuum











laaS Infrastructure Platform

CaaS
Container Orchestration
Platform

PaaS Application Platform

FaaS Serverless Platform

Low Code
App and Orchestration
Platform



Virtual Machines



Azure Kubernetes Service



Azure Container Apps



Azure Spring Apps



Azure App Service



Azure Functions



Azure Logic Apps



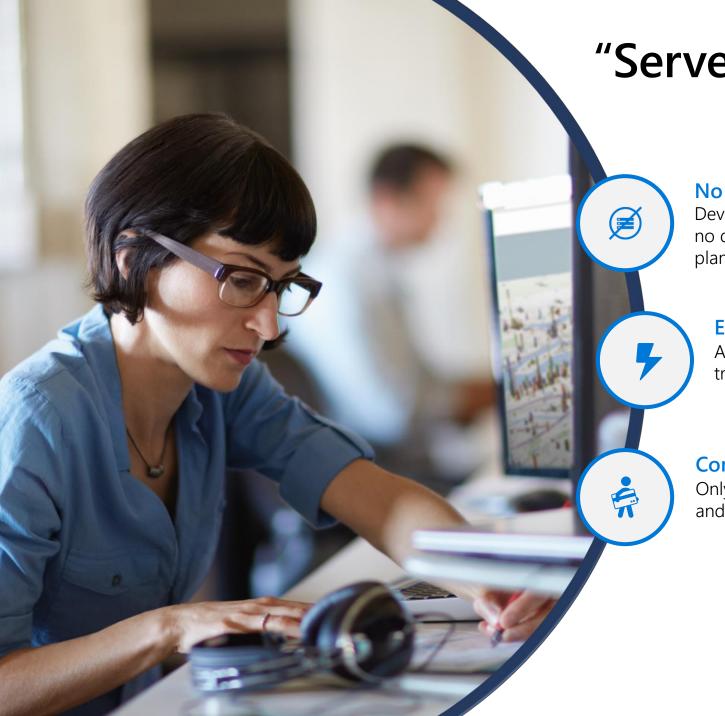
Power Apps

More Control of execution environment

Less Control of execution environment

Less Agile development & deployment

More Agile development & deployment



"Serverless" benefits

No server management

Developers can just focus on their code—there are no distractions around server management, capacity planning, or availability.

Event-driven processing

Application components react to events and triggers in real-time.

Consumption billing

Only pay for what you use by automatically scaling up and down based on system usage and throughput.

Serverless architecture

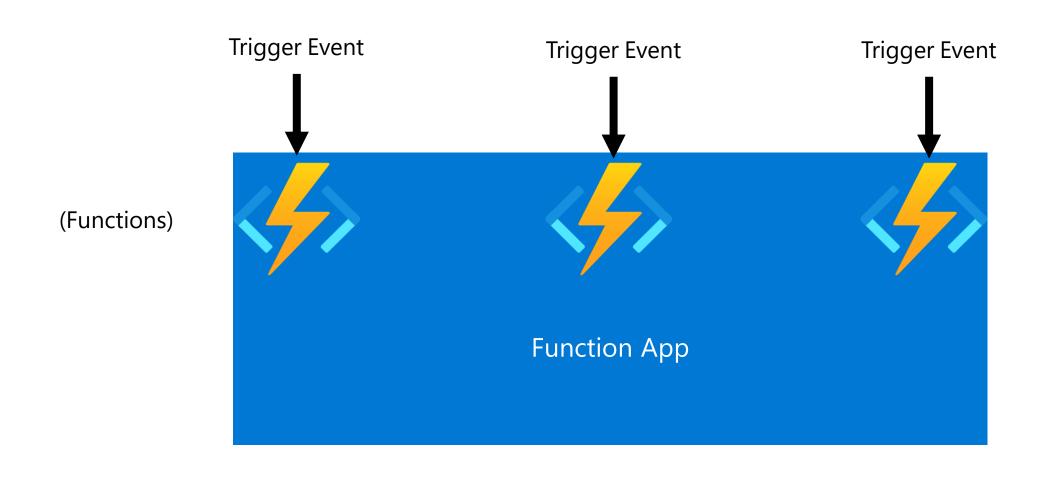
> Order management > Service delivery Azure API Management > Financial transactions (Modify Order) Azure Event Grid Topic **Azure Functions** Azure Event Grid Topic (New Order Event) (Order Processing) (Order Change Event)

Azure Cosmos DB

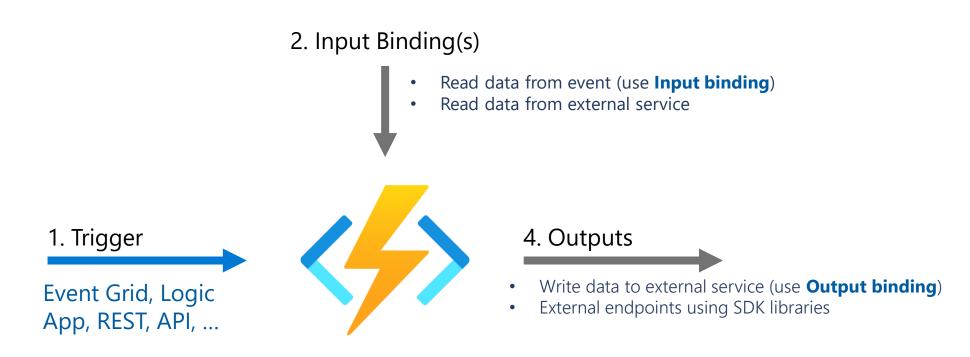
(Order Database)

Use case(s) and patterns

Anatomy of a Function App



Anatomy of a Function



3. Function Processing & Logic

Thinking about Functions



Single responsibility

Functions are singlepurposed, reusable pieces of code that process an input and return a result



Stateless

Functions don't hold any persistent state and don't rely on the state of any other processes



Short lived

Functions don't stick around when finished executing, freeing up resources for further executions



Event driven & scalable

Functions respond to predefined events, and can scale out to handle high-load scenarios



Integrated programming model

Use built-in triggers and bindings to define when a function is invoked and to what data it connects



Enhanced development experience

Code, test and debug locally using your preferred editor or the easy-to-use web-based interface including monitoring



Hosting options flexibility

Choose the deployment model that better fits your business needs without compromising development experience

First-class Functions languages









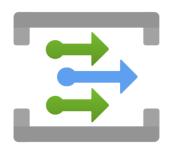








Events and messaging



Event Grid

Modern eventbased reactive systems (subscription)



Service Bus

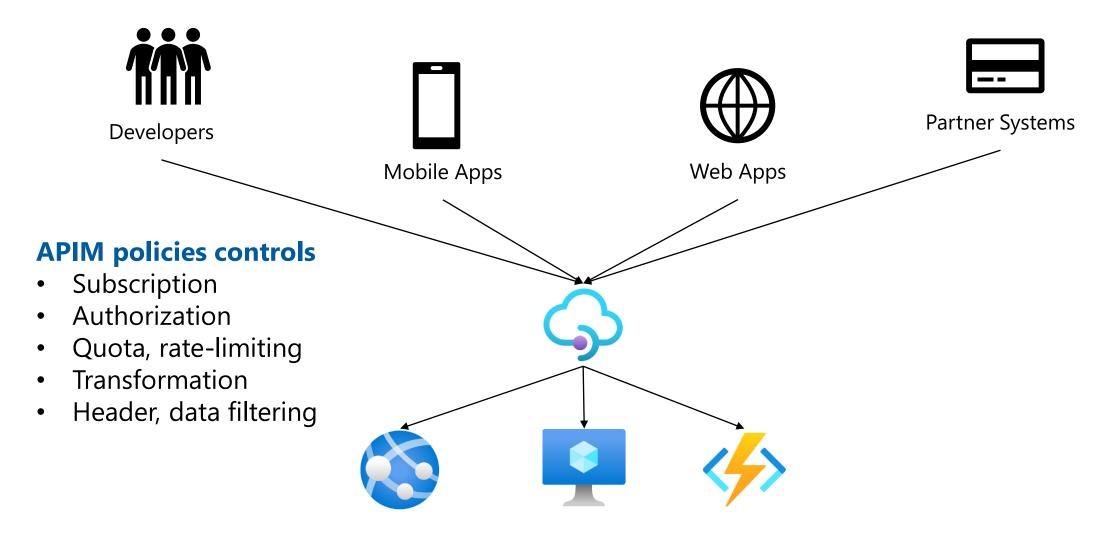
Queue or topic; Publish, subscribe model; 1-to-1, or 1-to-many



Event Hubs

High throughput event ingestion (streaming, IoT)

API Management



APIs (Azure, On-premises, AWS, GCP)

Cosmos DB













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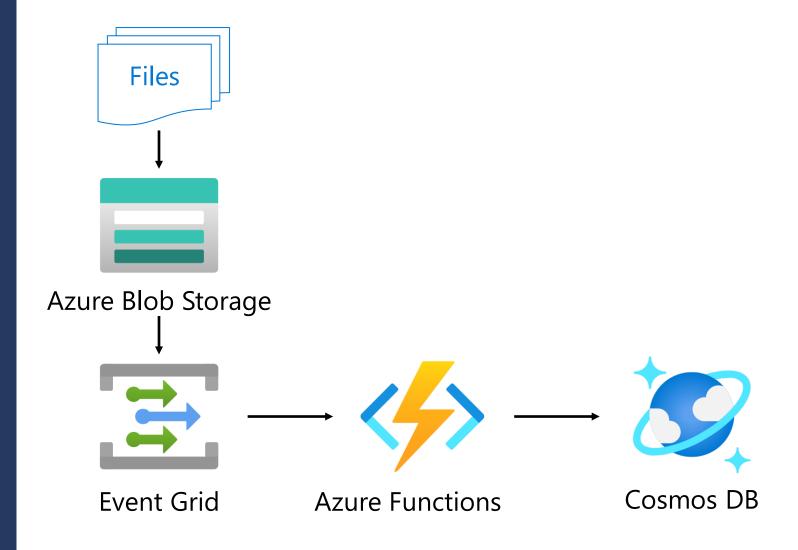
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Serverless Solutions Lab





aka.ms/azuredevdaylabs/serverless