Job, Function e Service Bus di Azure: divertimento assicurato

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Azure App Service

WEB APPS
Web apps that scale with your business

MOBILE APPS
Build Mobile apps for any device

LOGIC APPS
Automate business process across SaaS and on-premises
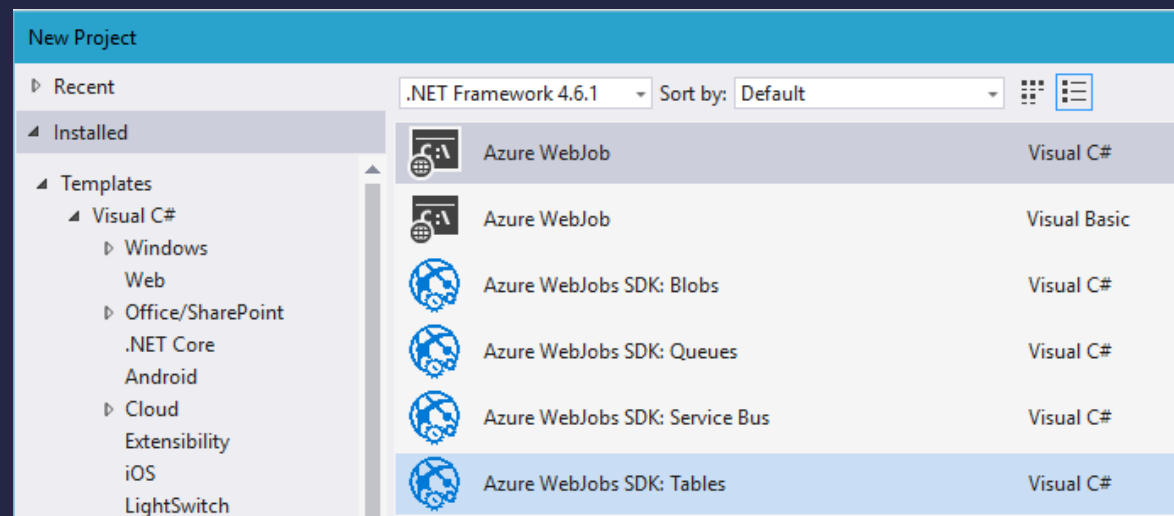
API APPS
Easily build and consume APIs in the cloud

- PaaS
- Multiple languages and frameworks
- Global scale with high availability
- Continuous integration and deployment

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WebJobs di Azure App Service

- Scripts or programs as background processes
  - Same folders tree
  - External process
  - Shared resource
- .cmd, .bat, .exe, .ps1, .sh, .php, .py, .js, .jar
- demand, continuously, or on a schedule
- WebJobs SDK
  - Fast implementation
  - Azure Storage Blobs, Queues and Tables, Service Bus Queues

WebJobs di Azure App Service

- Visual Studio Integration
  - Remote debugging
- Deployment: like web app
  - FTP, WebDeploy, CI
  - Azure Portal
  - Multi job
- Logging
  - Dashboard
- Scale with web app

Azure Functions

- Easily running small pieces of code
    - No application infrastructure
- C#, Node.js, Python, F#, PHP, batch, bash, Java, or any executable
    - Supports NuGet and NPM
- Trigger/input -> processing -> output
- Pay-per-use pricing model
    - Or App Service Plan

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Azure Functions: csx

- File .csx
- Dynamic compilation
- Async support
- Import namespace
- #r «assemblyName»
- #load for external files
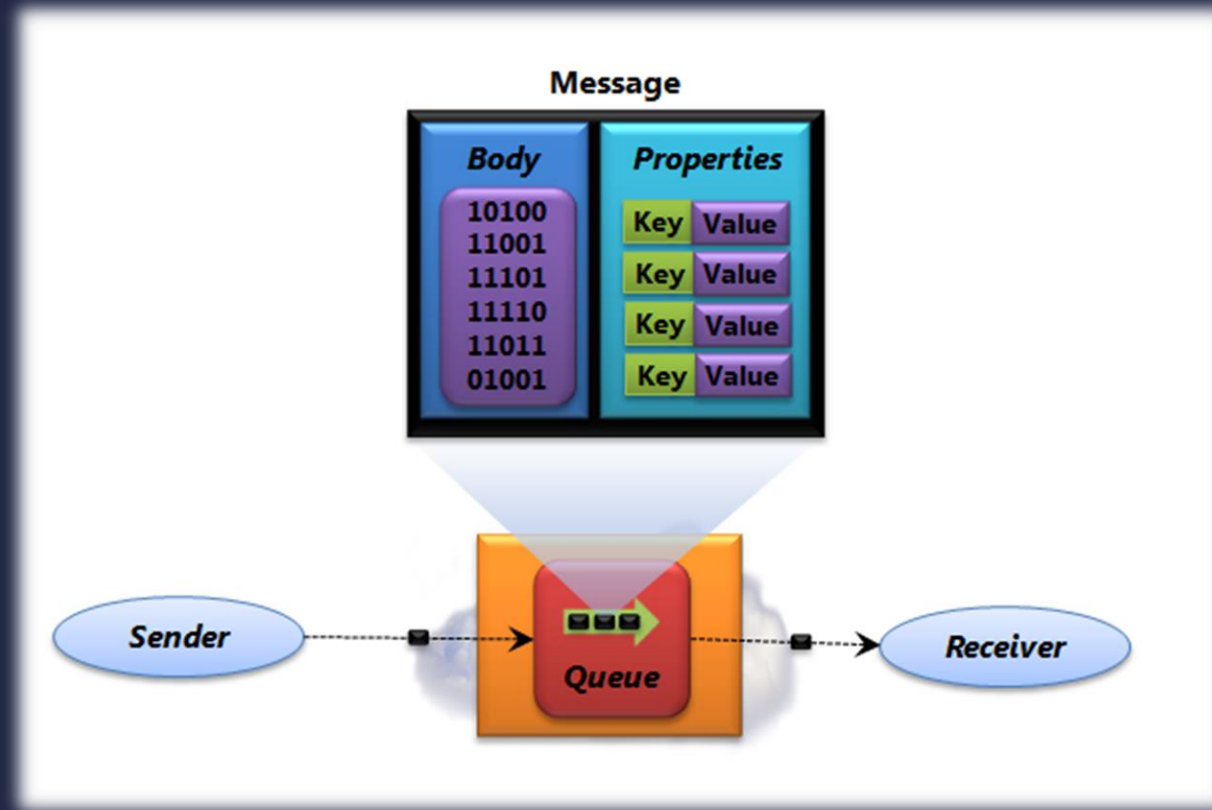- project.json for NuGet
- TraceWriter: logging

Azure Functions: bindings

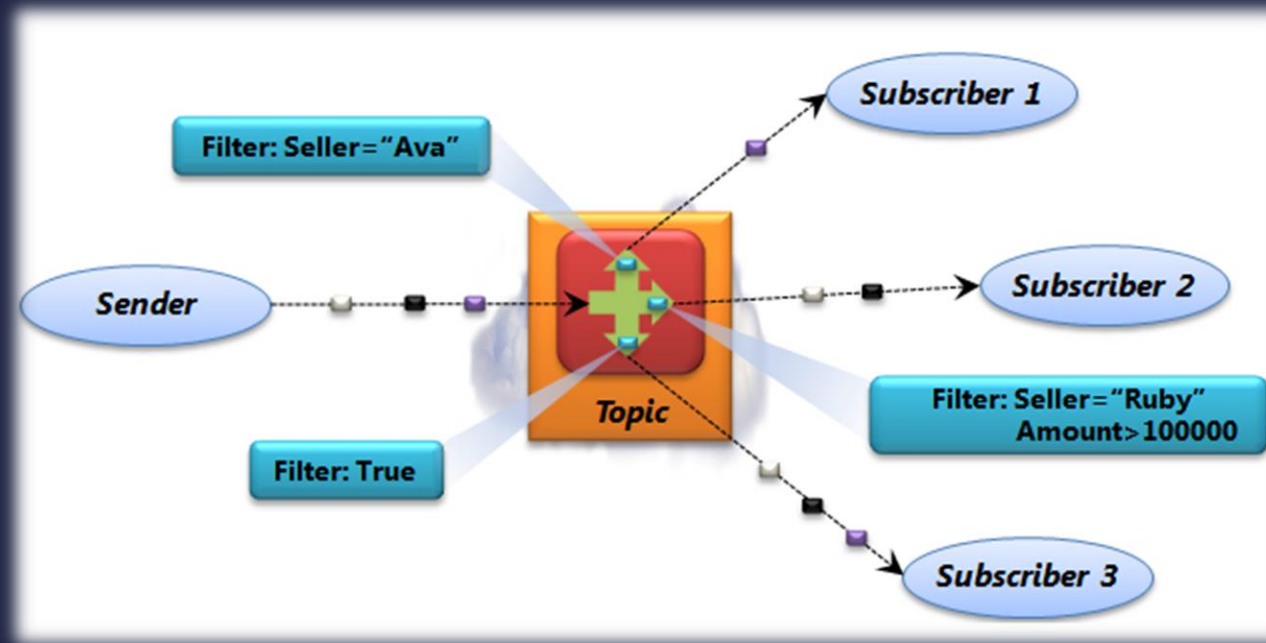| Type	Service	Trigger	Input	Output
Schedule	Azure Functions	✓		
HTTP (REST or webhook)	Azure Functions	✓		✓*
Blob Storage	Azure Storage	✓	✓	✓
Events	Azure Event Hubs	✓		✓
Queues	Azure Storage	✓		✓
Tables	Azure Storage		✓	✓
Tables	Azure Mobile Apps		✓	✓
No-SQL DB	Azure DocumentDB		✓	✓
Push Notifications	Azure Notification Hubs			✓

Azure Service Bus

- Bus
  - Queues
  - Topics
  - Relay
  - Event hubs
- Request/reply
- Publish/Subscription
- REST/TCP
  - Multilanguage
- PaaS
- Global scale with high availability

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Azure Service Bus: queue

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Azure Service Bus: topics

Azure Service Bus: pro

- Async approach
  - Stateless/statefull communication
- Strong and reliable processing
- Decoupling
- Good for SOA and CQRS
- Requests ingestion scenarios

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Microservices?

- SOA
- Small and many deployments
- Independent services
- Multi platform and language