

SERVERLESS AND MESSAGING ARCHITECTURES

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[LINKEDIN PROFILE](#)

Introduction

- 8.5 Years of Experience
- Active in MSDN Forums (Logic Apps,BizTalk)
- TechNet Blogger
- Part Of Aims Performance Pro
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What is Serverless?

Benefits of Serverless

No
Infrastructure

Emphasis On
Logic

Scale Out

Cost Saving

Rapid
Development

Easy
Deployments

Drawback's of Serverless

Outages

Less
Control

Costs

Monitoring

Serverless Technologies

Logic Apps	Functions
Logic Apps are based on Workflows.	Azure functions is where you could write your own code
They can be Event driven. It can be HTTP Triggered or when an Email Comes or Scheduled Triggers etc.	Events can be HTTP Triggered or you want this Function to run for everyone Hour etc.
There are over 200 Connectors Like Outlook, Twitter etc.	Azure Functions can run on Cross Platform Networks as well

Messages and Events

Message	Event
Payload Contains the Data	Payload is information about Data
Something that Happened	Something has happened

Service Bus

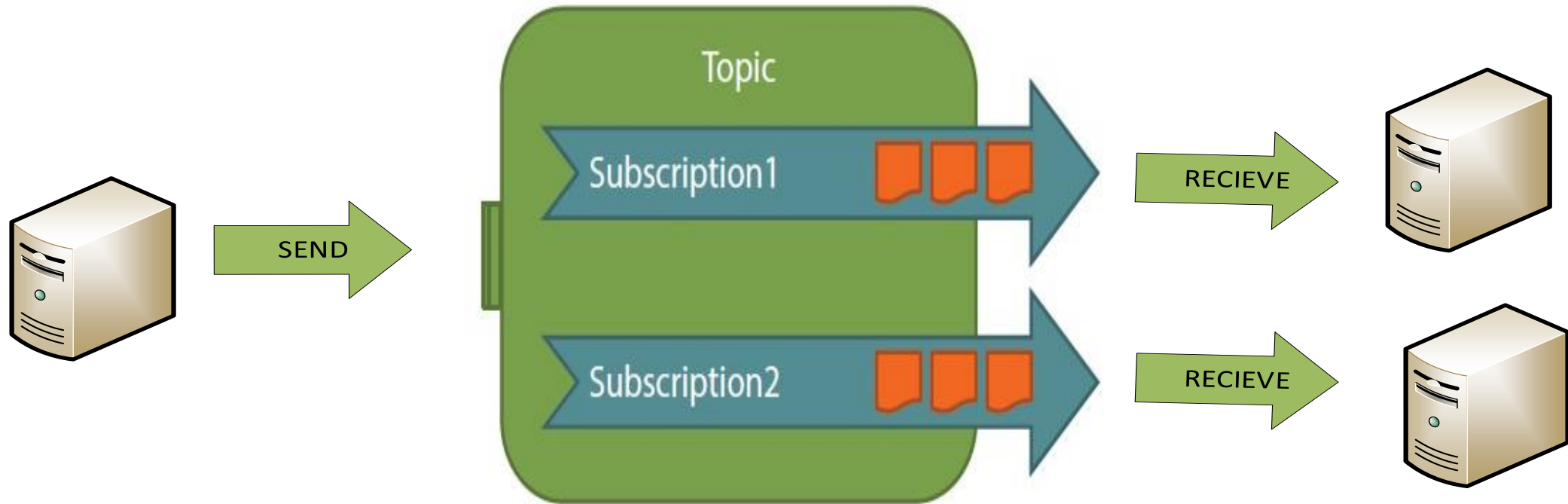
- Helps for Brokered Messaging
- Queues and Topics
- Queues helps for Ordered Messaging
- Topics Helps to Create Subscriptions
- Allows Dead Lettering
- You can also Leverage Other Features like Sessions to Correlate the Messages.

Brokered Messaging-Queues



- Point To Point Messaging
- First in First Out (FIFO)

Brokered Messaging-Topics



- Publish Subscribe Mechanism
- Messages are received from subscriptions
- Filters determine message Subscription

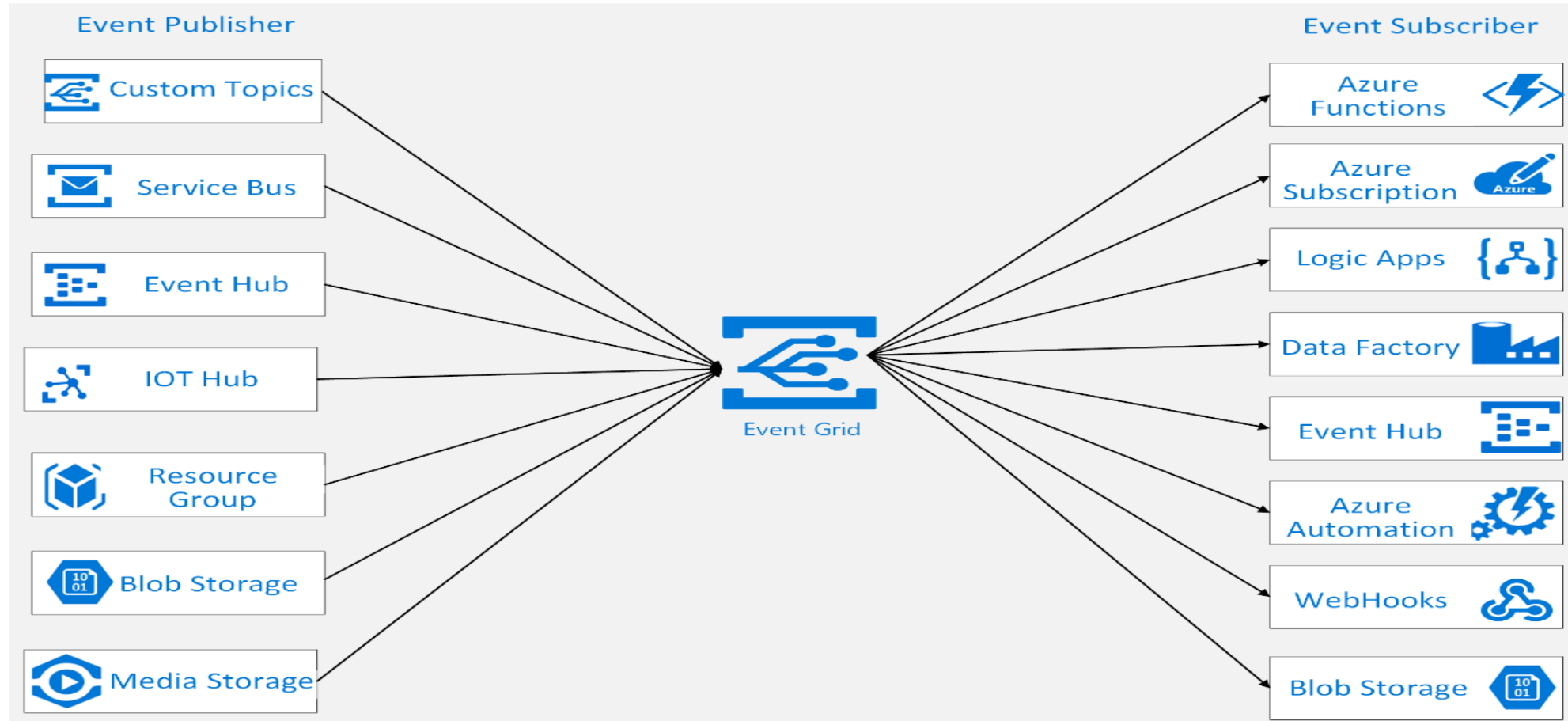
Storage Queues vs Service Bus

Feature	Storage Queues	Service Bus Queues
Maximum Message Size	64 KB	256 KB
Maximum Time to Live	7 Days	Unlimited
Receive Modes	Get-Delete	Peek-Lock ,AutoCompleted
Maximum Queue Size	200 TB	5 TB
Message Expiration	Supported	Supported
Publish-Subscribe		Supported
Duplicate Detection		Supported
Message sessions		Supported
Dead-Lettering		Supported

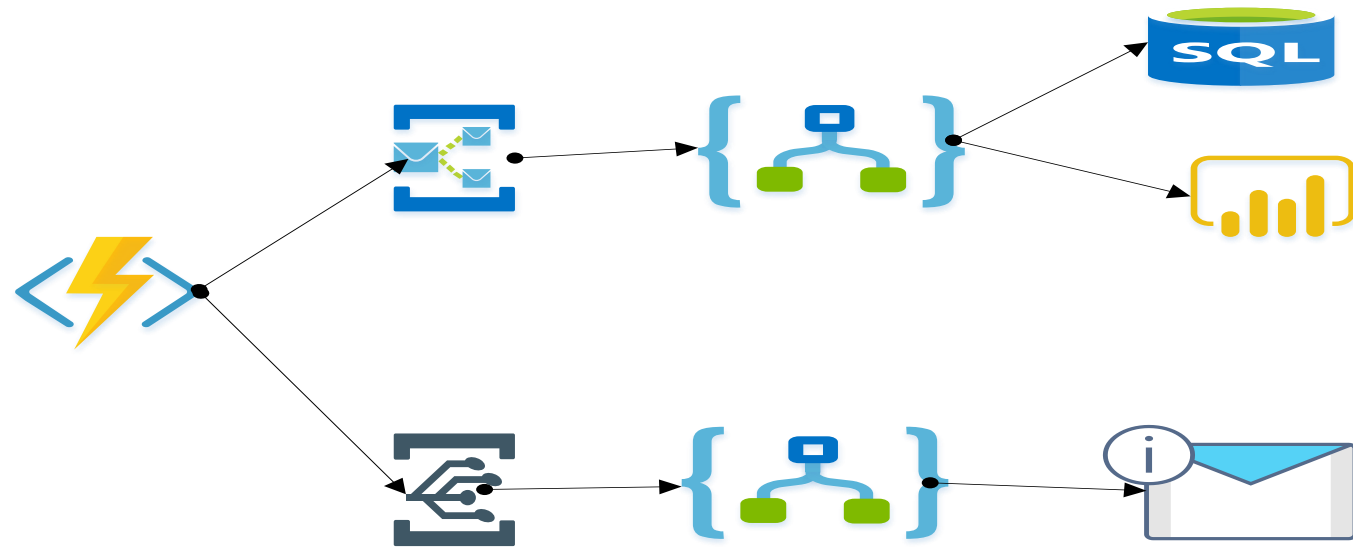
Event Grid

- Helps to build Notification Based Design Pattern rather than a Pull Based Design Model.
- Helps to Create Reactive Solutions
- Publish Subscriber Patterns Through Event Grid Topic.
- On Demand Scaling Abilities
- Multi Language Support through Unified SDK

Event Grid Publishers and Subscribers



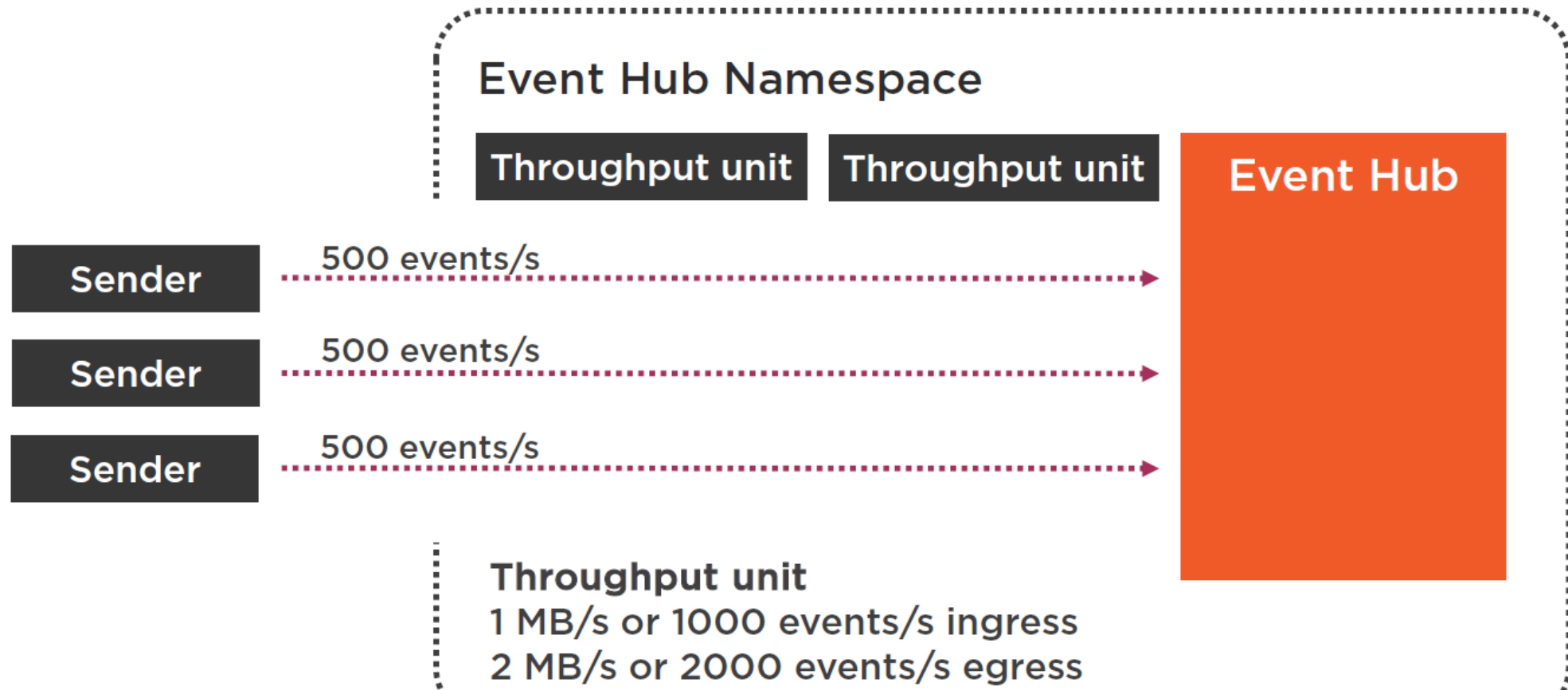
Demo-1



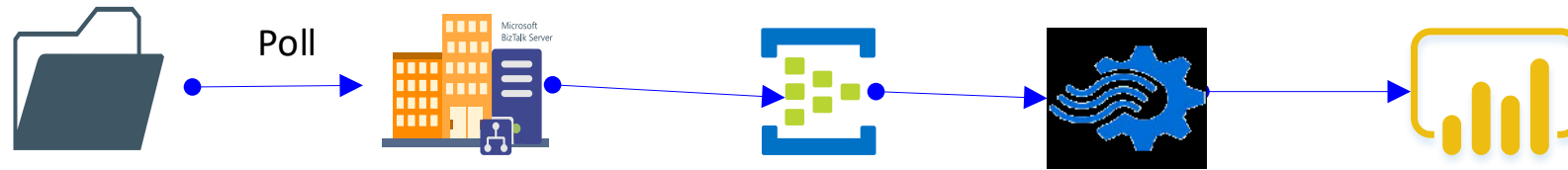
Event Hubs

- Throughput Units (1 MB Per Second Or 1000 Events Per Second of Ingress Data)
- Auto Inflate is Possible.
- Partitions Can be done on the Event Hub
- Receiver can be done using the Consumer Group

Event Hubs- Throughput Units



Demo-2

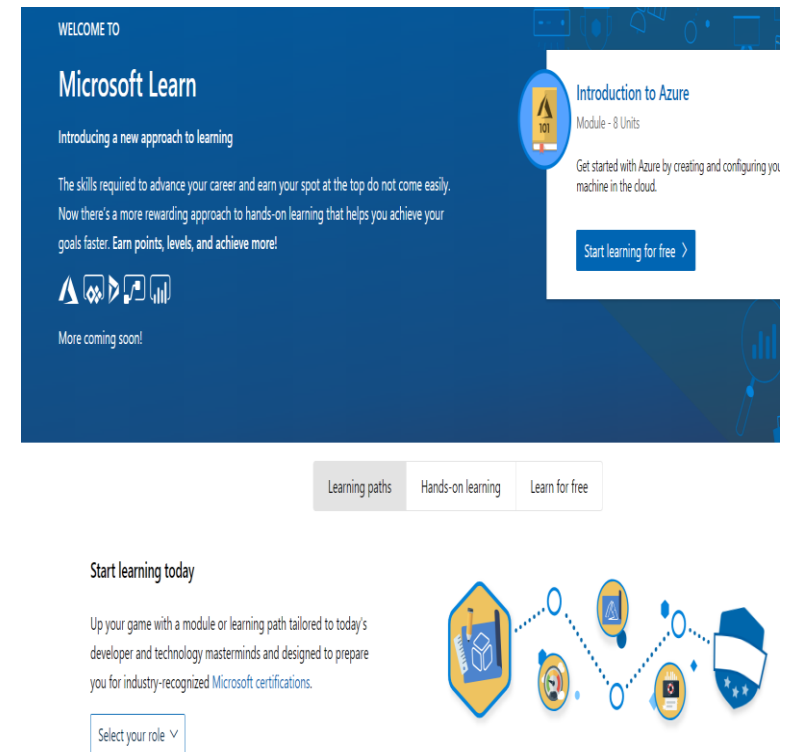
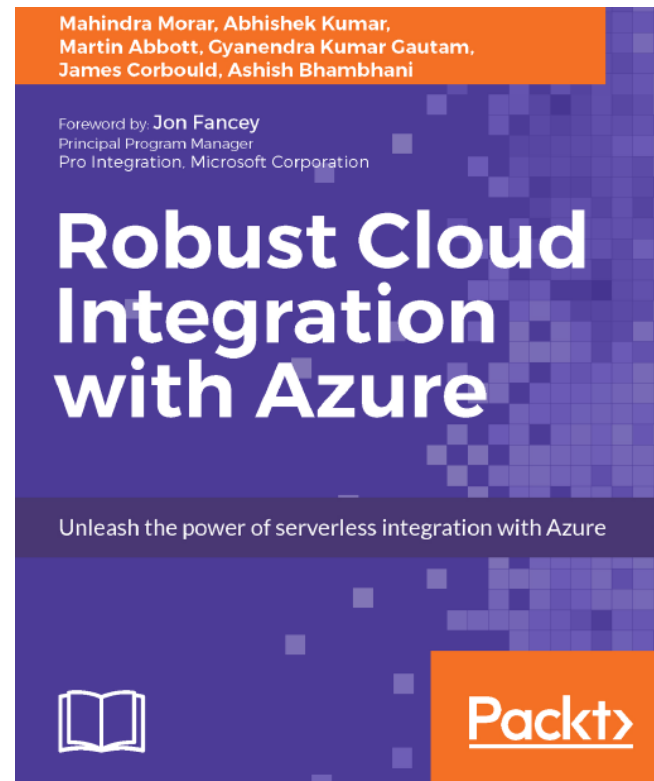
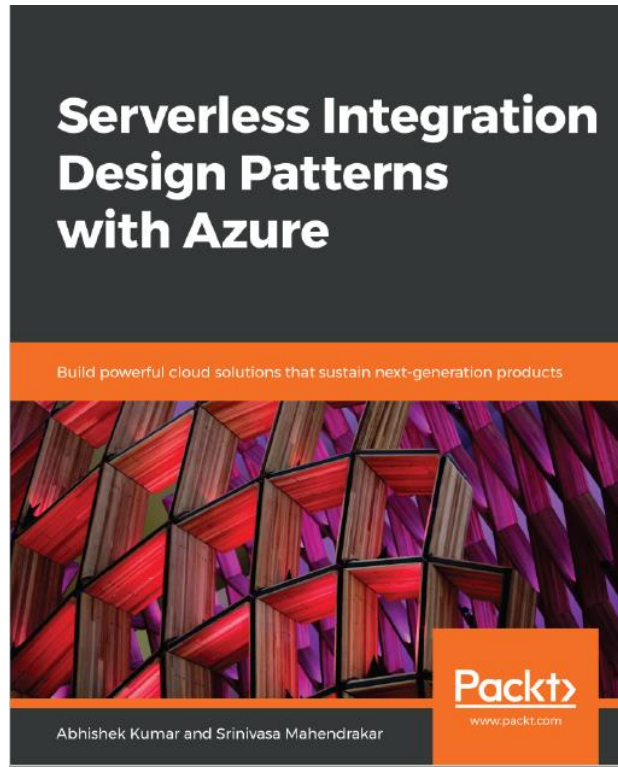


Hybrid Integration

- Combination of BizTalk and Azure



References



THANK YOU

QUESTIONS