Service Bus Usage Scenarios, Limits & Pricing

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ACTIVE SOLUTION

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Overview

Service Bus Usage Scenarios

- Global Azure Racing Game
- Asynchronous website content update

Demo: Global Azure Racing Game

Service Bus Limits

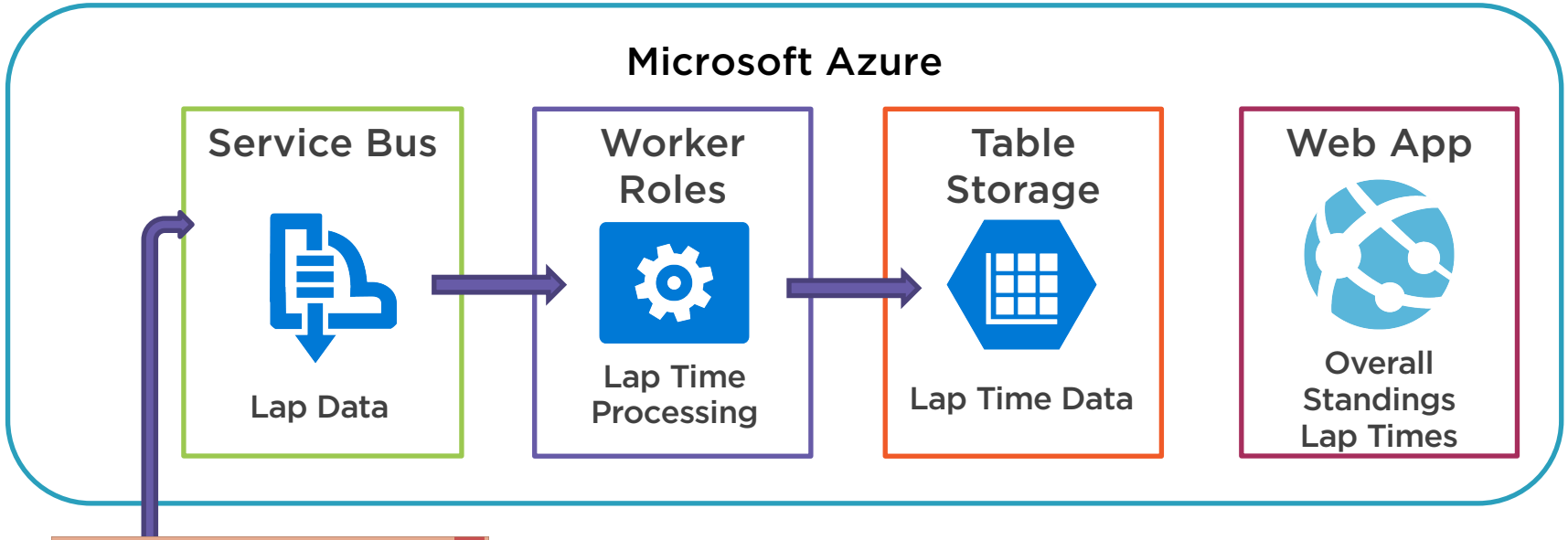
Service Bus Tiers & Pricing

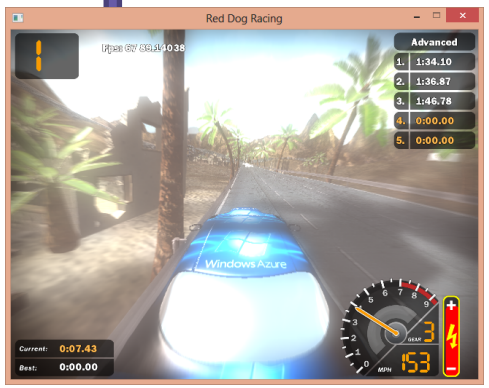
Service Bus Usage Scenarios

Global Azure Racing Game

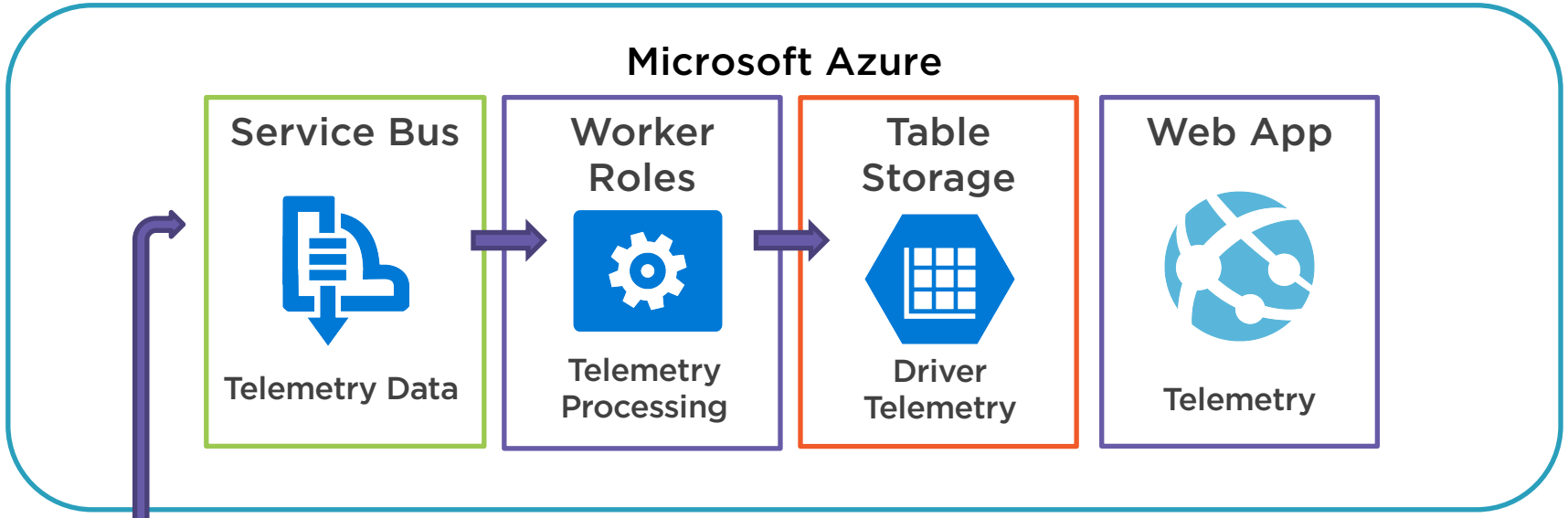
- Used as a Global Lab for the Global Azure Bootcamp events
- Microsoft XNA Racing Game integrated with Azure Services
- Azure Service Bus used for
  - Lap time data
  - Driver telemetry data
  - Push notification service

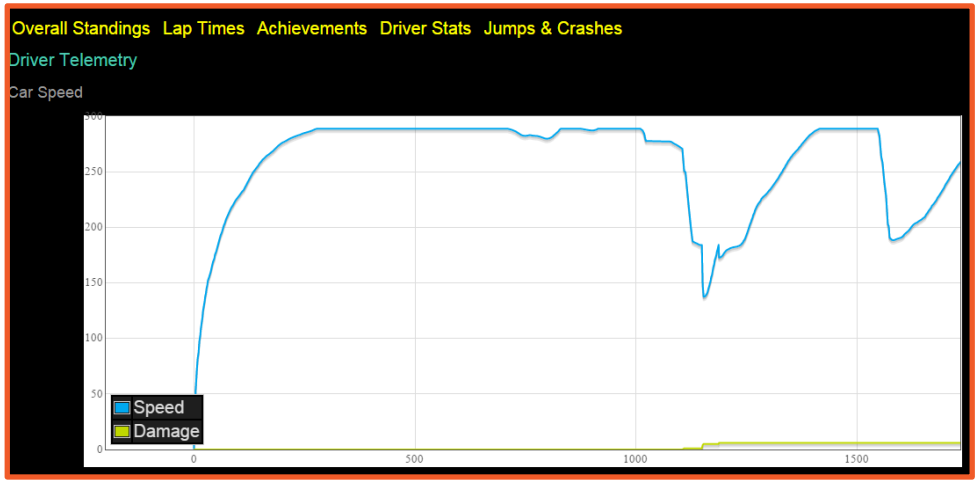
Lap Time Data



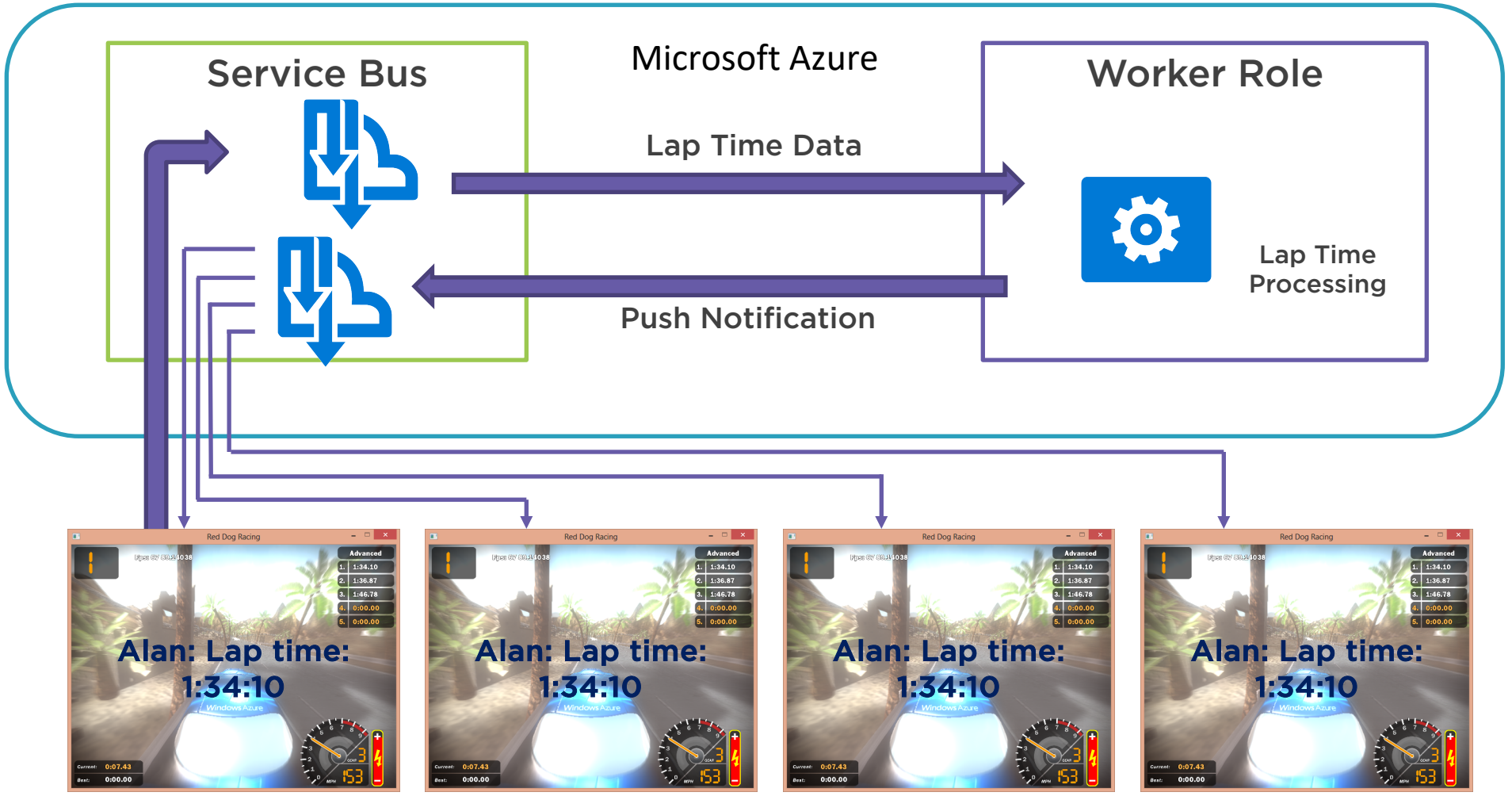


Telemetry Data





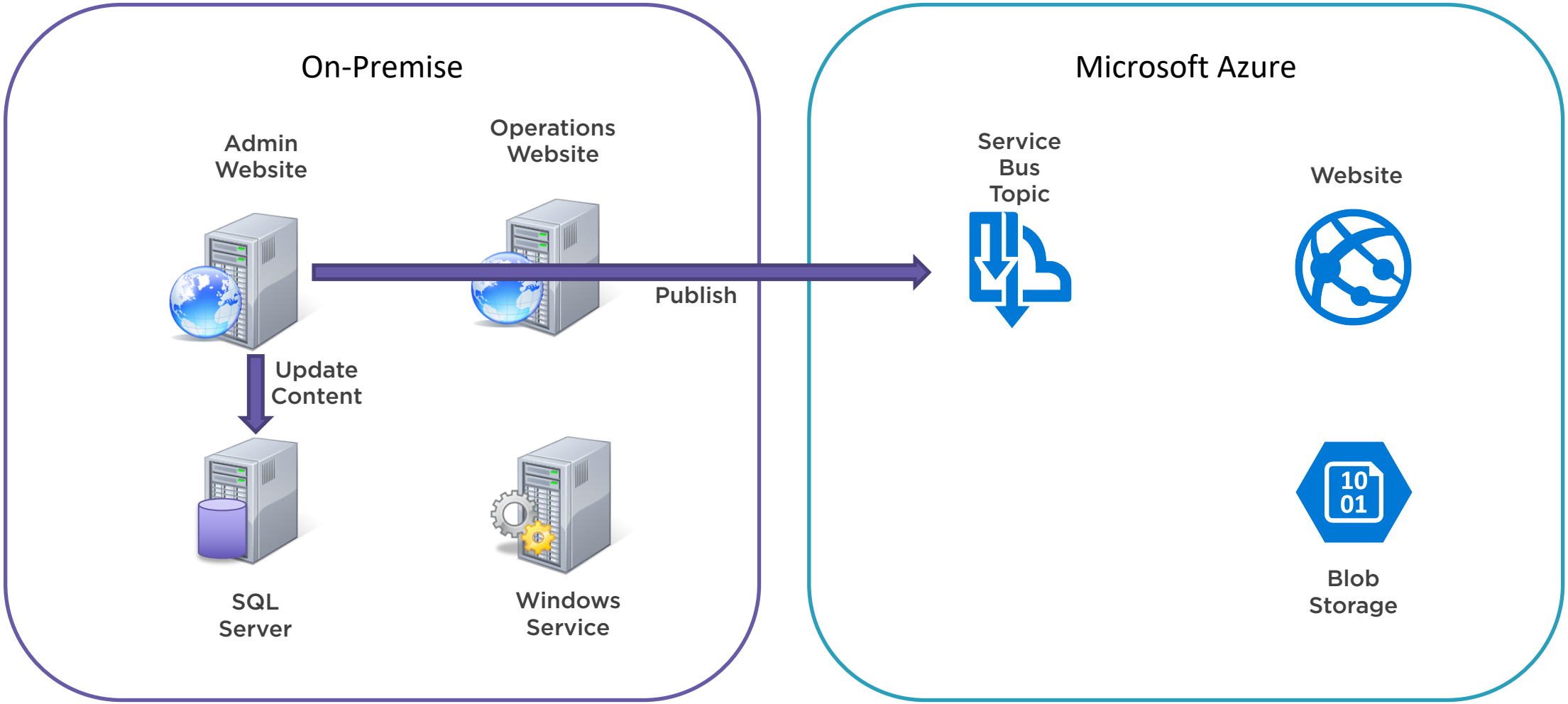
Push Notifications



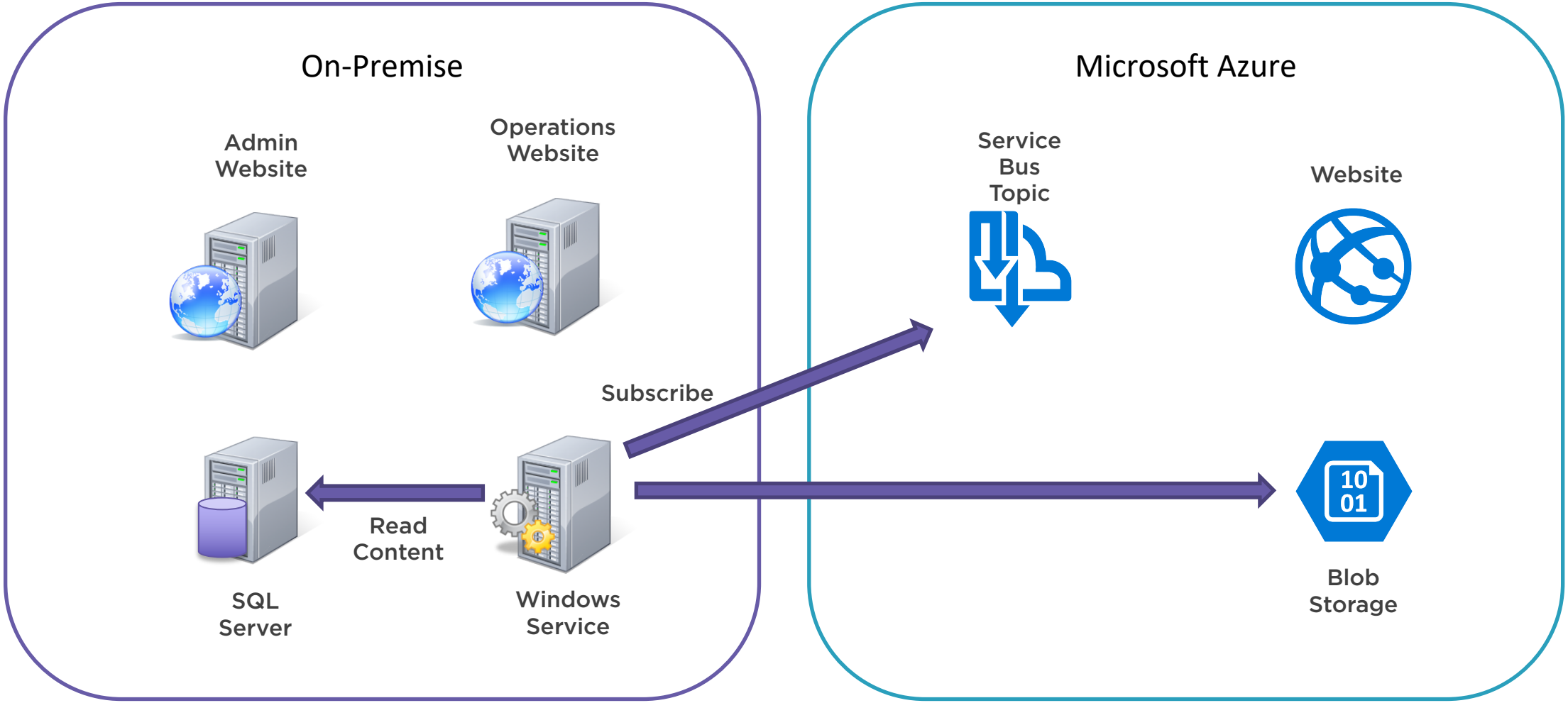
Web Site Read Model Implementation

- **Customer solution using Azure Service Bus**
- **Azure hosted website**
  - **Up to 250,000 concurrent users**
  - **Content stored as JSON in Azure blob storage**
- **On-premise SQL database and management website**
- **Content needs to be updated asynchronously for hundreds of thousands of users**

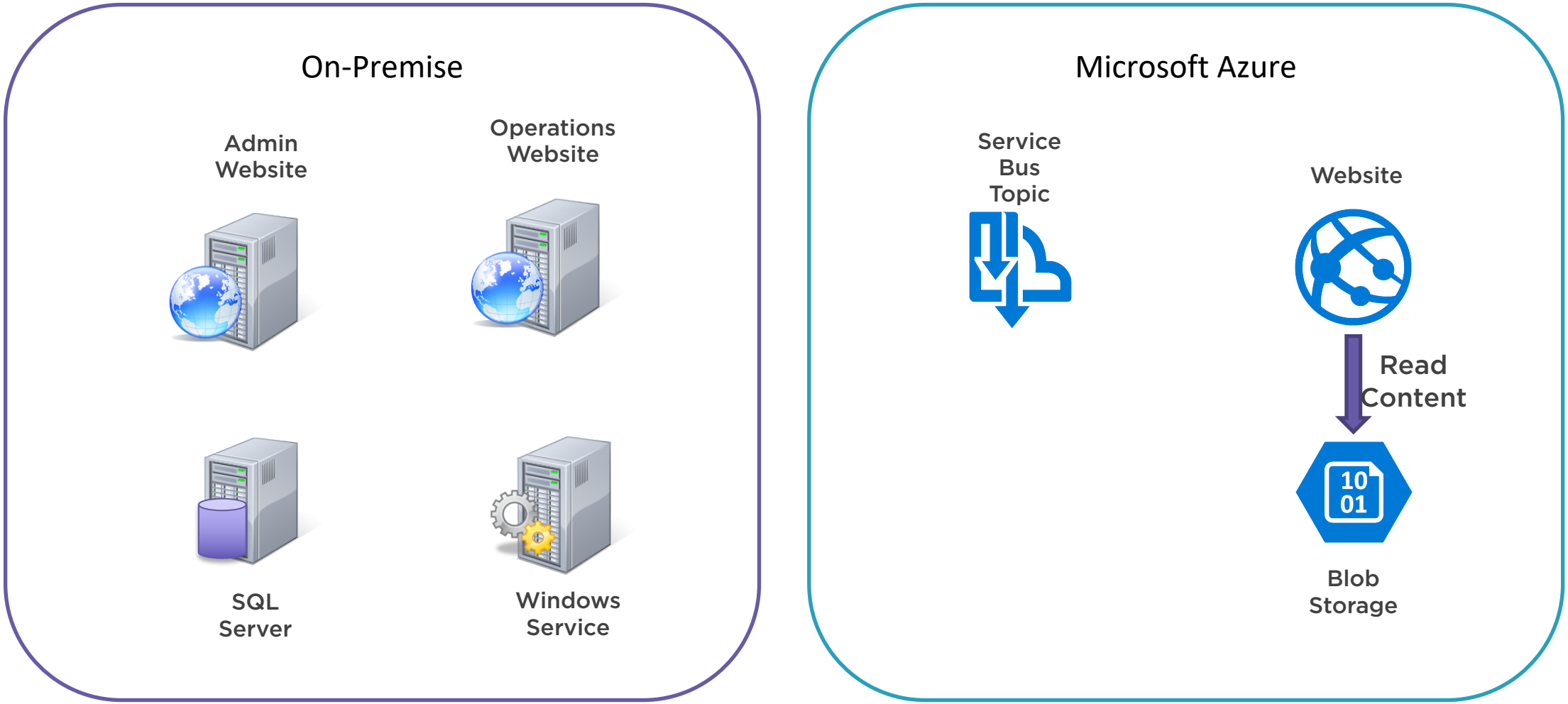
Web Site Read Model Content Update



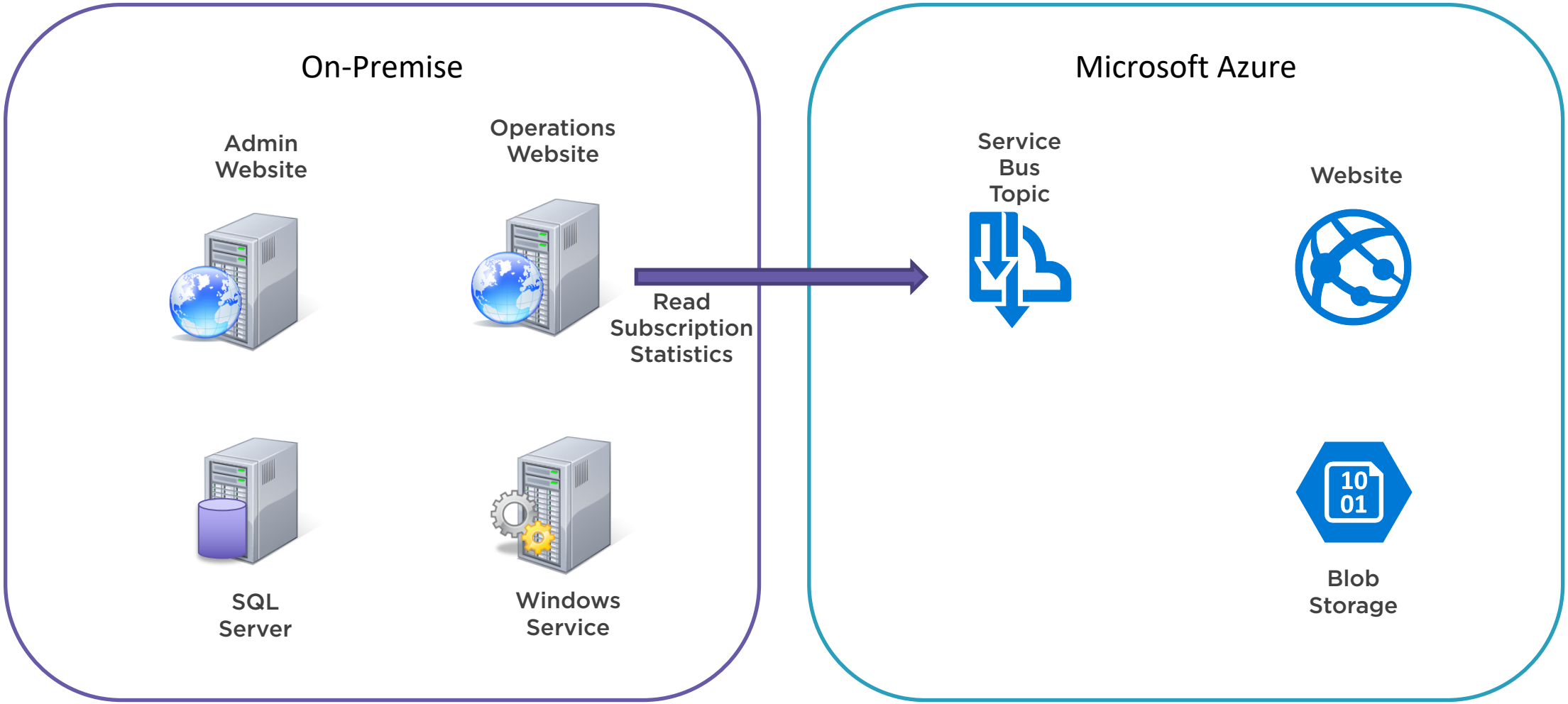
Web Site Read Model Content Publication



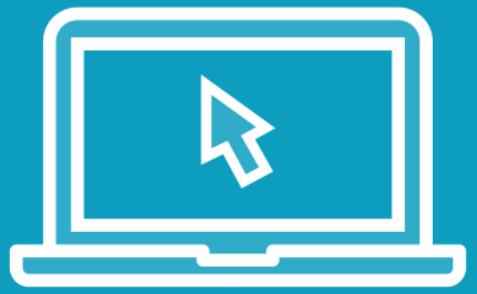
Web Site Read Model Browsing



Web Site Read Model Monitoring



Demo

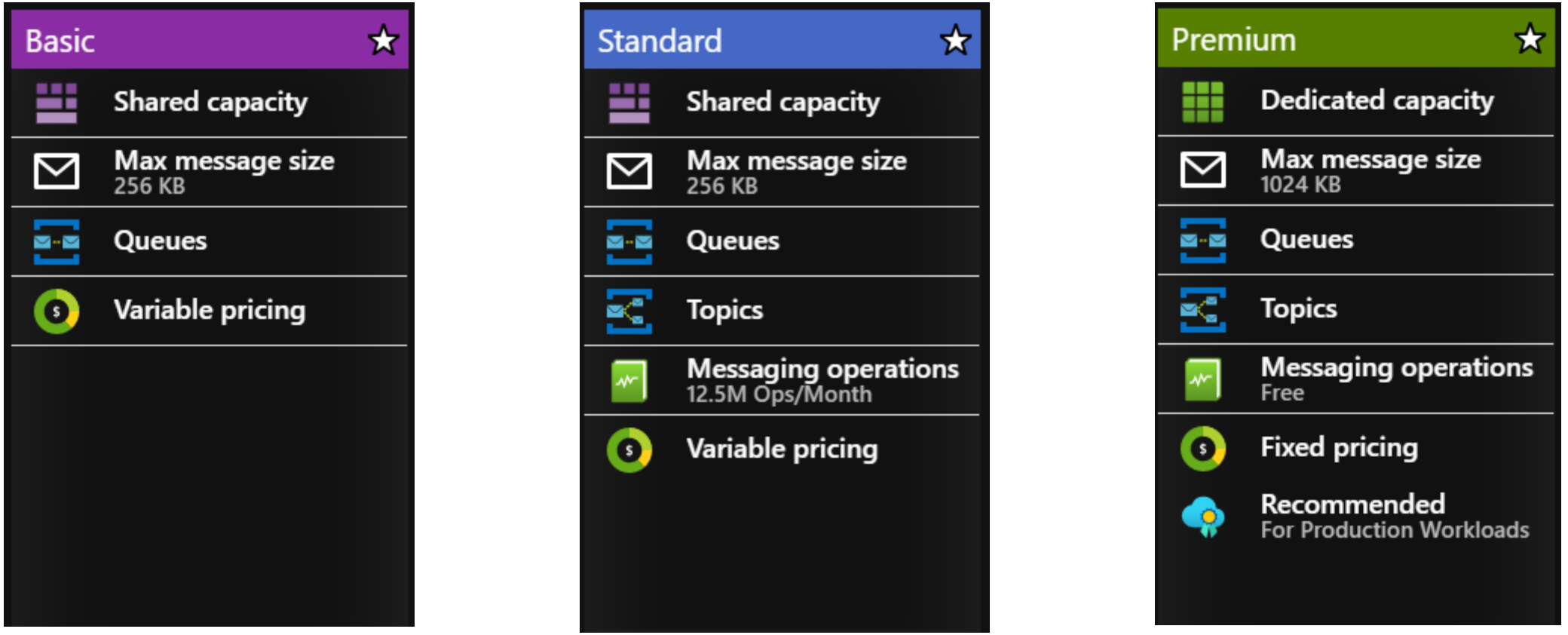


Global Azure Racing Game

- Use of Azure Service Bus for transmitting and processing lap time data

Service Bus Tiers & Pricing

Service Bus Tiers



Limitations

Description	Standard	Premium
Maximum number of namespaces per subscription	100	100
Maximum number of queues and topics per namespace	10,000	1,000 per MU, 4,000 max
Maximum message size	256 KB	1024 KB
Maximum message header size	64 KB	64 KB
Maximum Queue or Topic Size	5 / 80 GB	5 / 80 GB
Maximum number of subscriptions on a topic	2000	2000

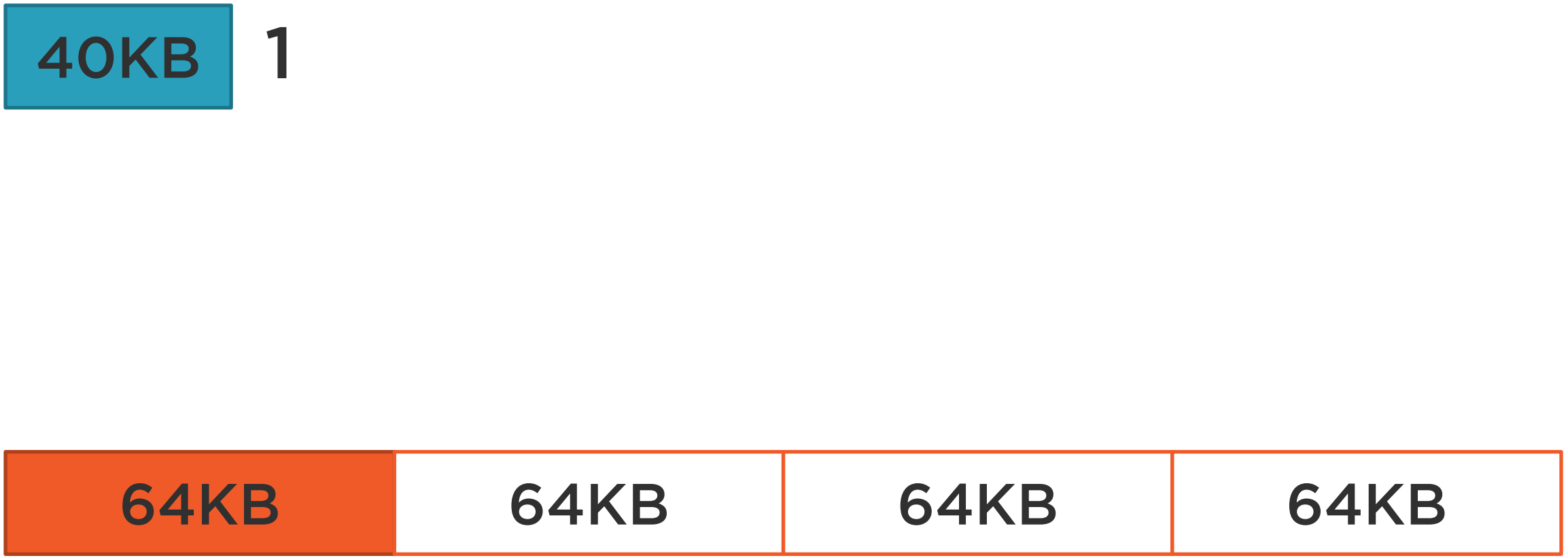
Scalability Targets

Description	Limitation
Message throughput	2000 message operations / second

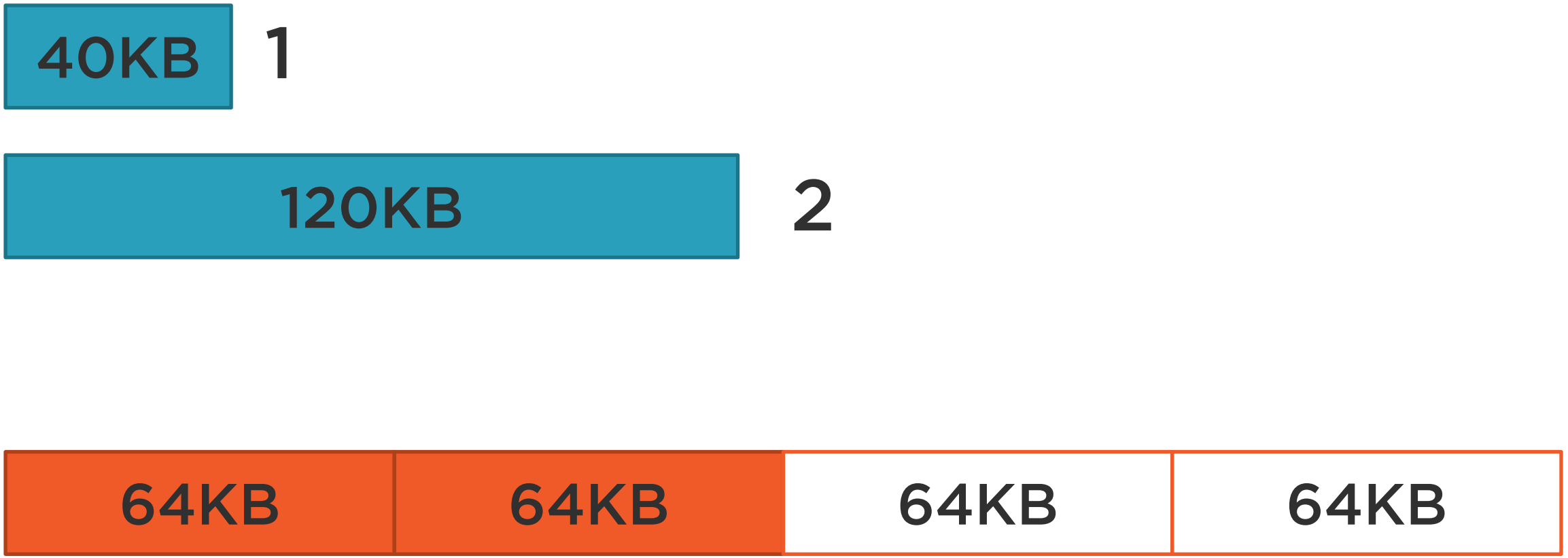
Usage Quotas (Not Used)

Description	Limitation
Message throughput	5 billion per month
Relay hours	2 million per month

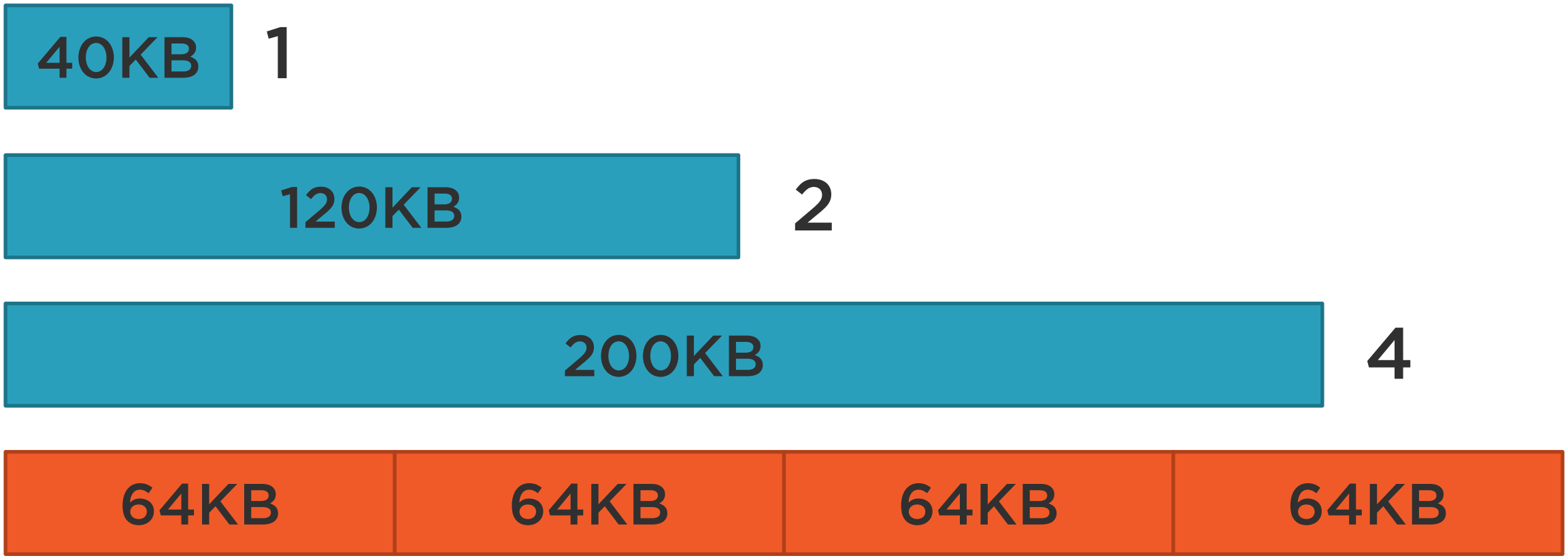
Messaging Operations



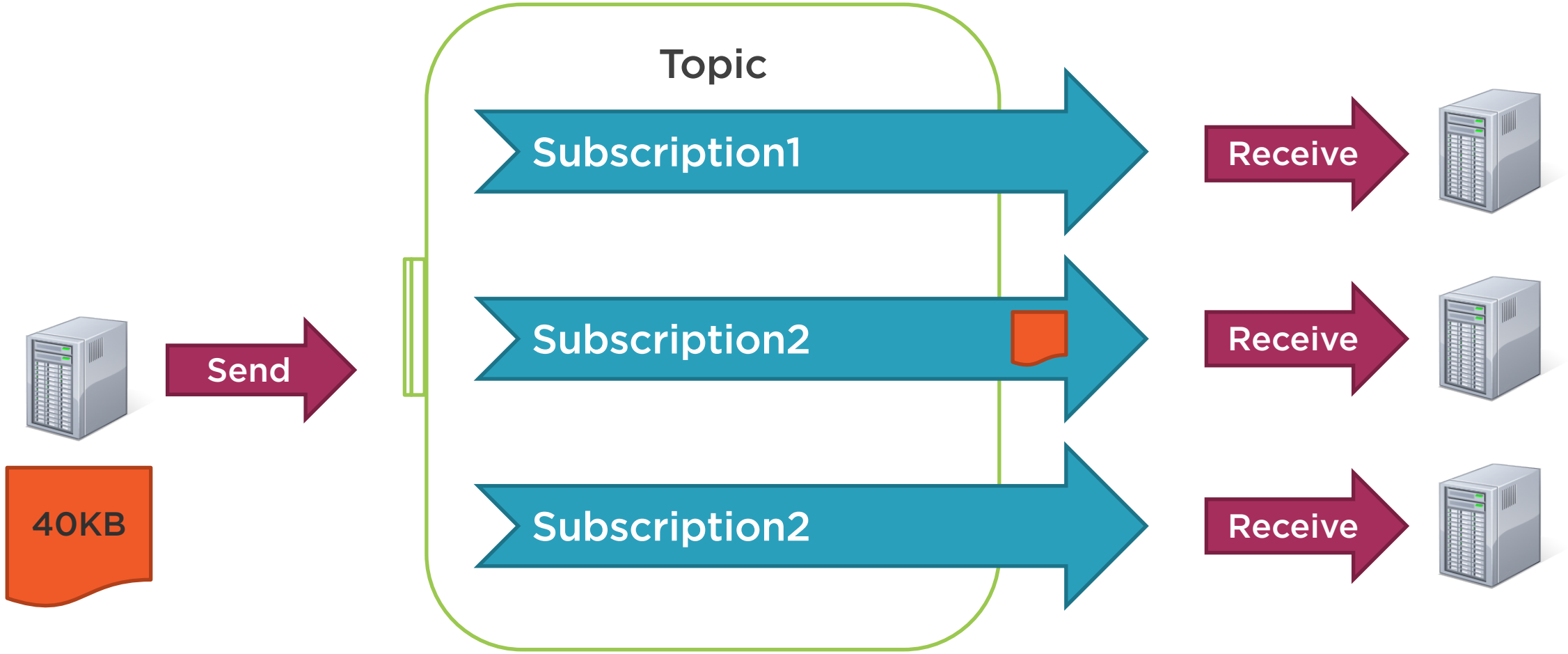
Messaging Operations



Messaging Operations

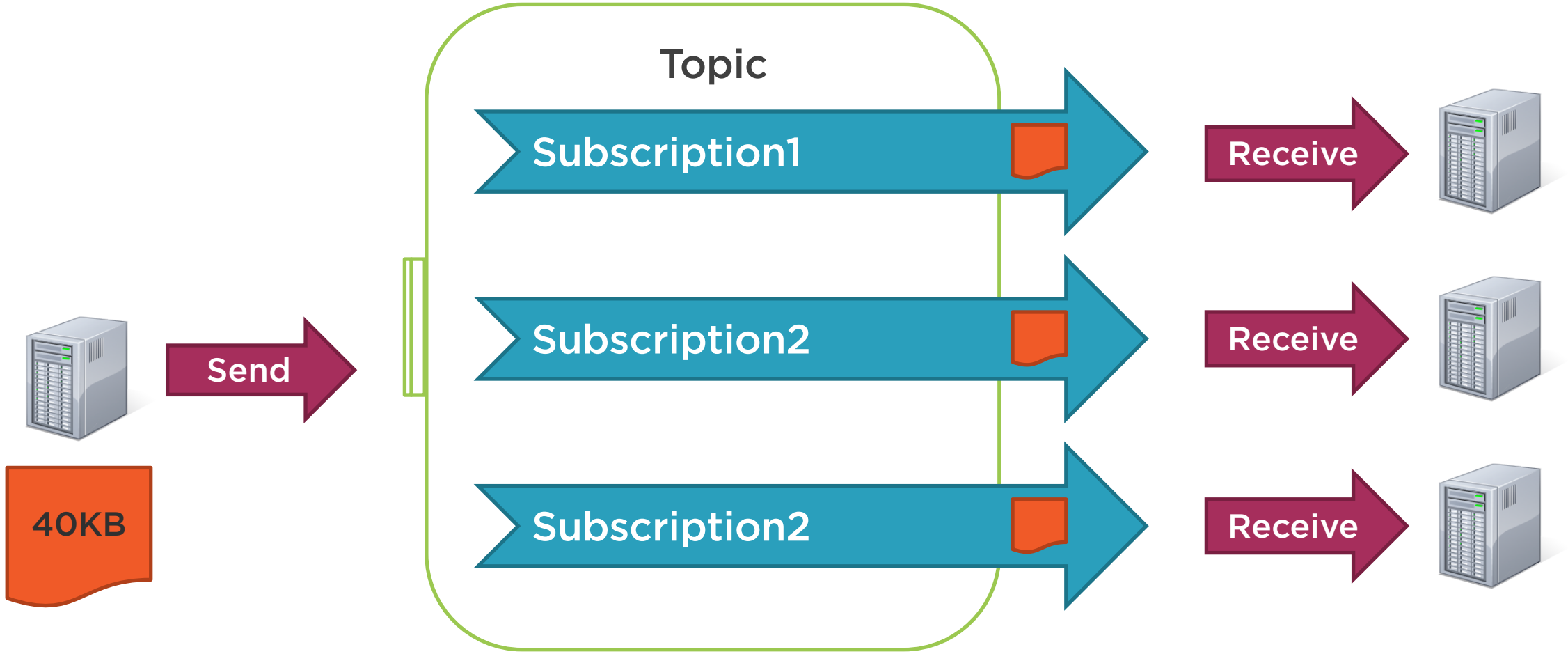


Messaging Operations



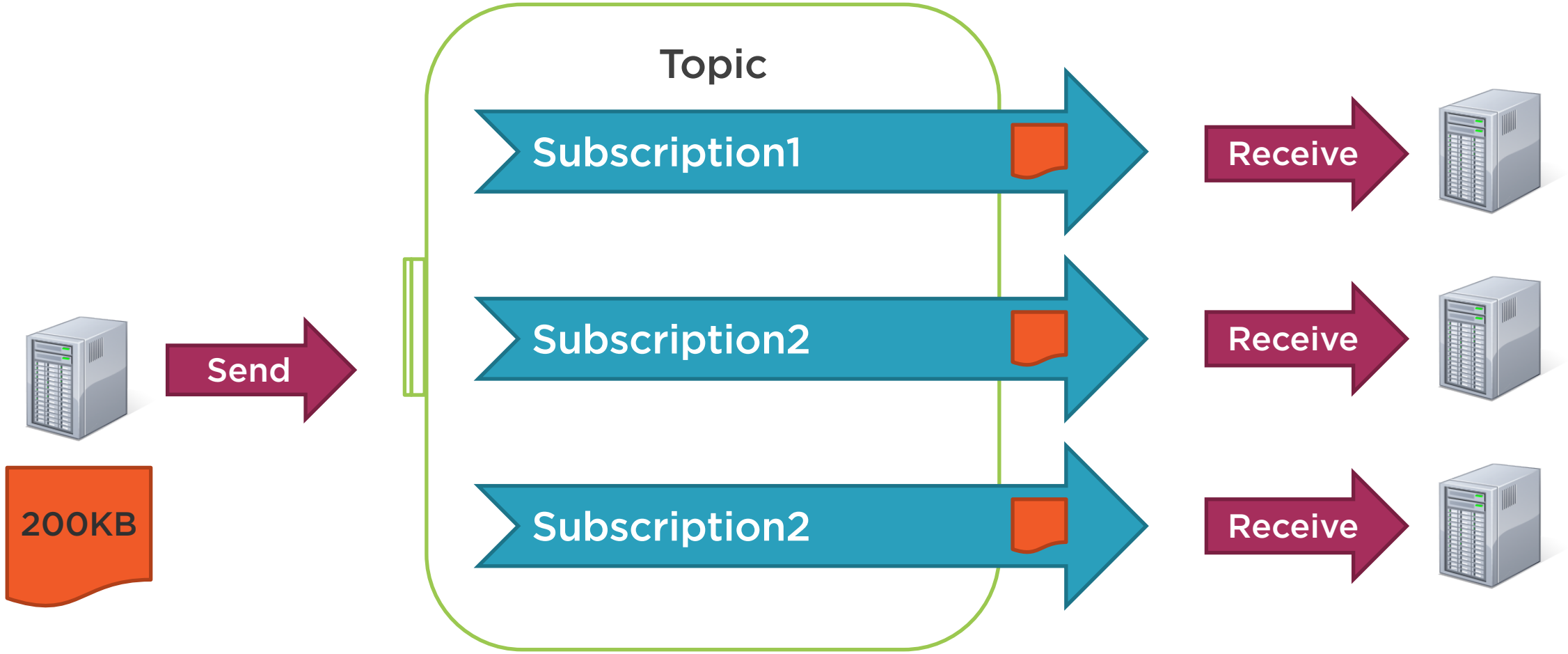
1 Message Operation

Messaging Operations



3 Message Operations

Messaging Operations



12 Message Operation

Global Azure Racing Game Pricing

Service	Cost
Data transfer out (GB)	$4.44
Storage transactions (in 10,000s)	$0.03
Compute hours	$2.95
Standard read-access geo redundant	$0.01
Basic small app service hours	$2.81
Connections - standard messaging	$0.05
Operations (in 1,000,000s) - standard messaging	$0.37

Global Azure Racing Game Pricing

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Operations (in 1,000,000s) - standard messaging	$0.37

Description	Cost
Total billing for Azure services consumed in 24 hours	$10.66
Total cost for Azure Service Bus usage	$0.42

Summary

- Azure Service Bus is use in a wide range of production scenarios
- Standard pricing tier is inexpensive
- Basic pricing tier should not be used
- Standard pricing tier is used for most scenarios
- Premium pricing should be used when performance guarantee is critical
- Be aware of quotas and limitations
- Consider Event Hub for very high throughput scenarios