Setting up an Event Hub in Azure

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Module Outline

Set up an Event Hub in the Azure portal

Understand throughput units and partitions

Calculate the costs

Demo

Create an Event Hub in Azure

Understand Throughput Units

Event Hub Namespace

`Throughput unit`

Event Hub

Event Hub

Event Hub

Event Hub

Event Hub

Event Hub

Event Hub

Event Hub

Event Hub

Event Hub

Throughput unit
1 MB/s or 1000 events/s ingress
2 MB/s or 2000 events/s egress

You have to pay for throughput units

On a standard Event Hub a throughput unit costs $0.03 per hour

Understand Throughput Units

Event Hub Namespace

Throughput unit
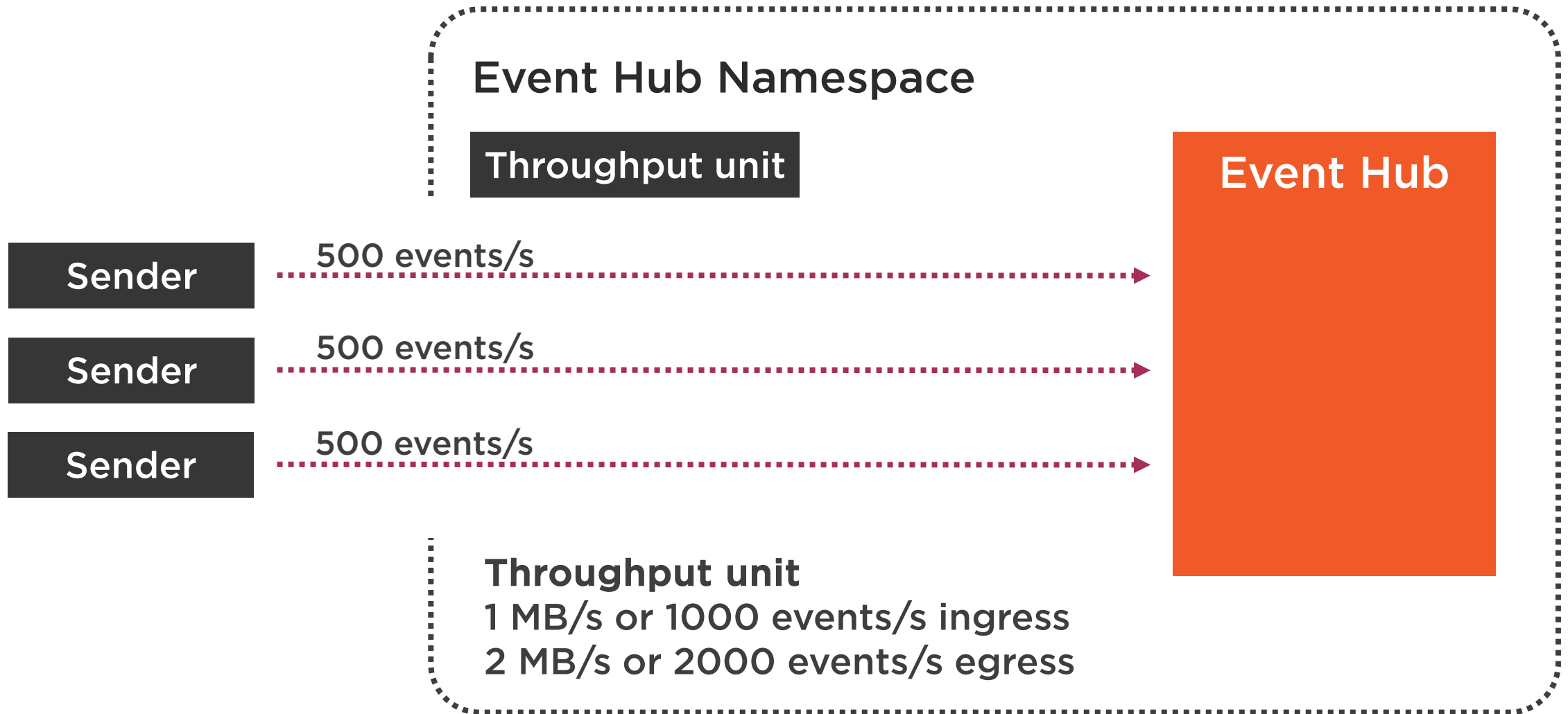
Event Hub

Throughput unit
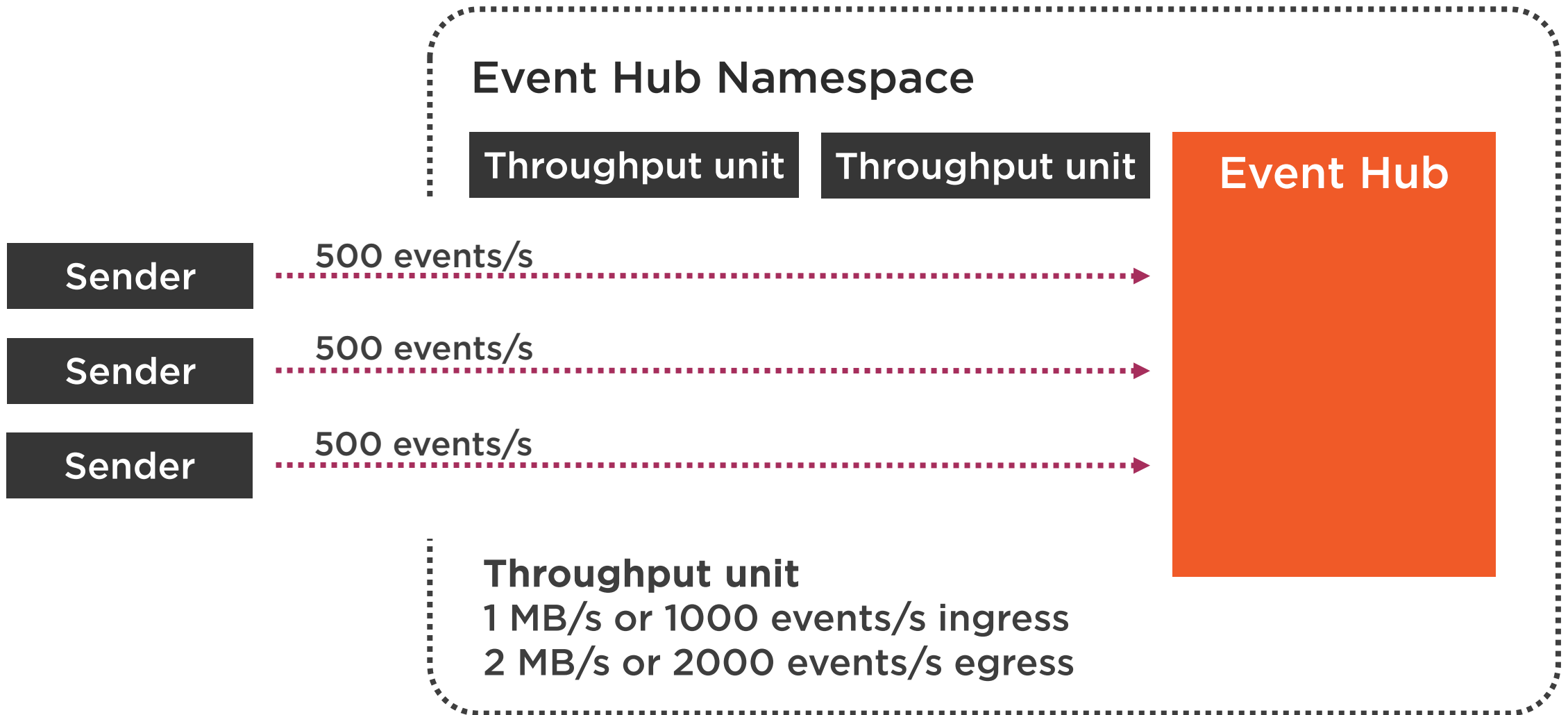1 MB/s or 1000 events/s ingress
2 MB/s or 2000 events/s egress

Throttling and Auto Inflate

Event Hub Namespace

Throughput unit

Event Hub

Sender — 500 events/s →

Sender — 500 events/s →

Sender — 500 events/s →

Throughput unit
1 MB/s or 1000 events/s ingress
2 MB/s or 2000 events/s egress

Senders will be throttled

Throttling and Auto Inflate

Event Hub Namespace

| Throughput unit | Throughput unit | Event Hub |

Sender ⸱⸱⸱⸱⸱ 500 events/s ⸱⸱⸱⸱⸱▶

Sender ⸱⸱⸱⸱⸱ 500 events/s ⸱⸱⸱⸱⸱▶

Sender ⸱⸱⸱⸱⸱ 500 events/s ⸱⸱⸱⸱⸱▶

Throughput unit
1 MB/s or 1000 events/s ingress
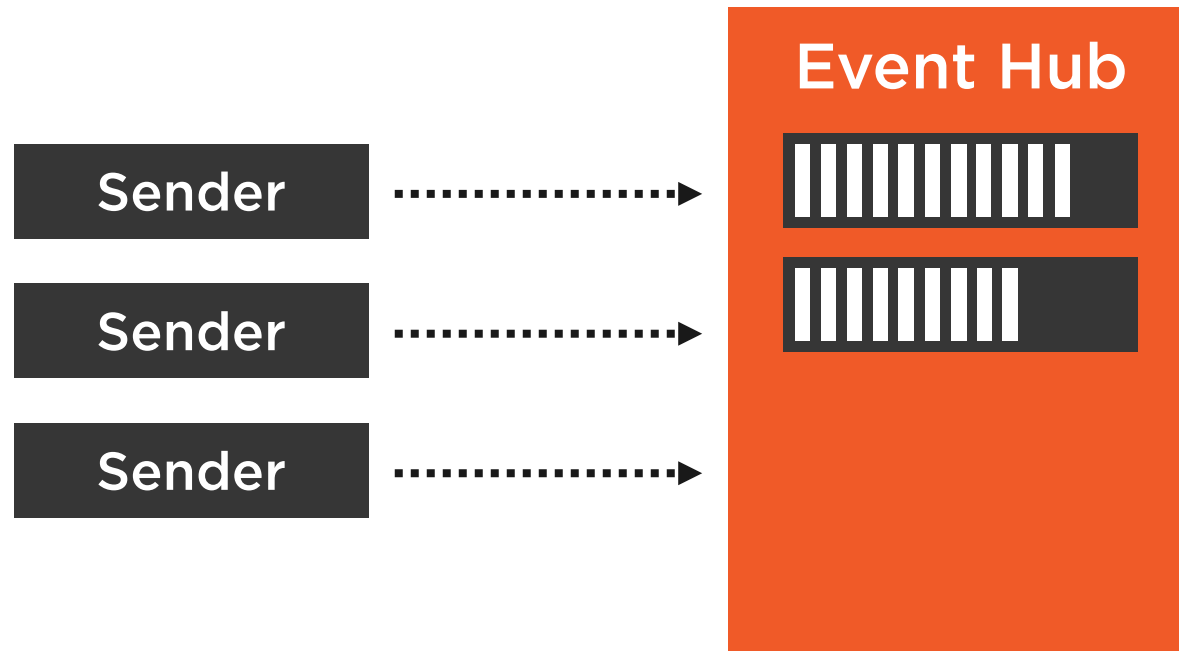2 MB/s or 2000 events/s egress

Demo

Increase throughput units automatically

Increase throughput units manually

Plan the Partitions

You pay for throughput units, but not for partitions

Beside 1 MB/s ingress and 2 MB/s egress, a single throughput unit includes 84GB storage per day
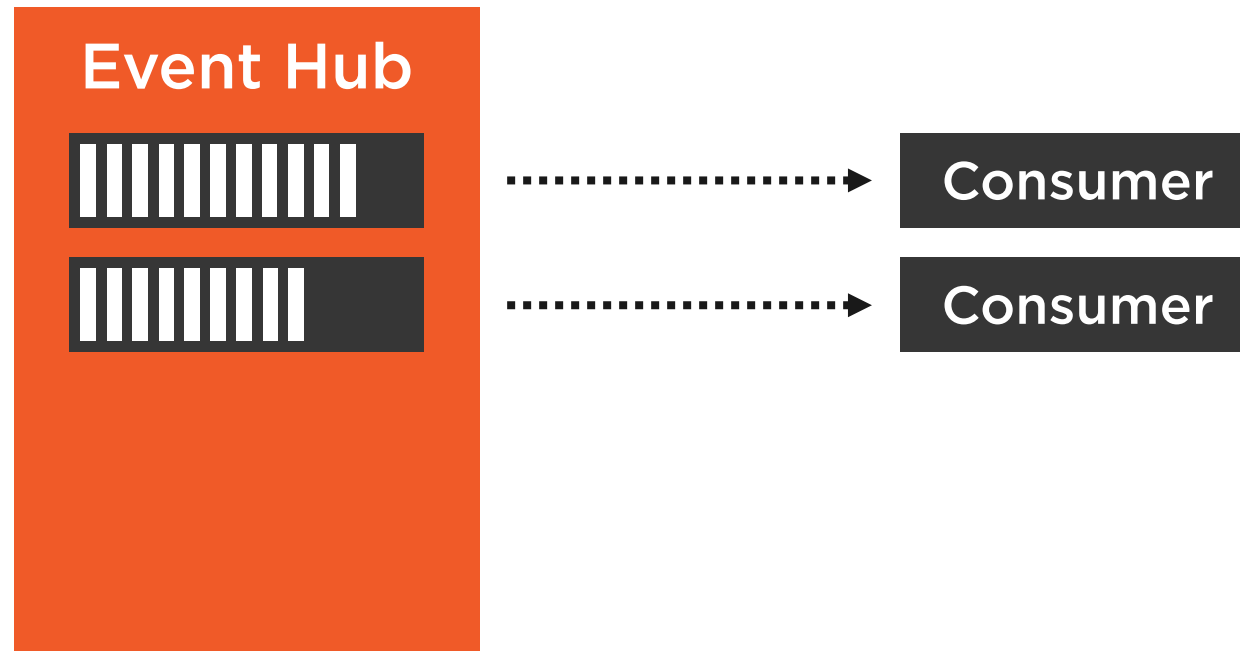
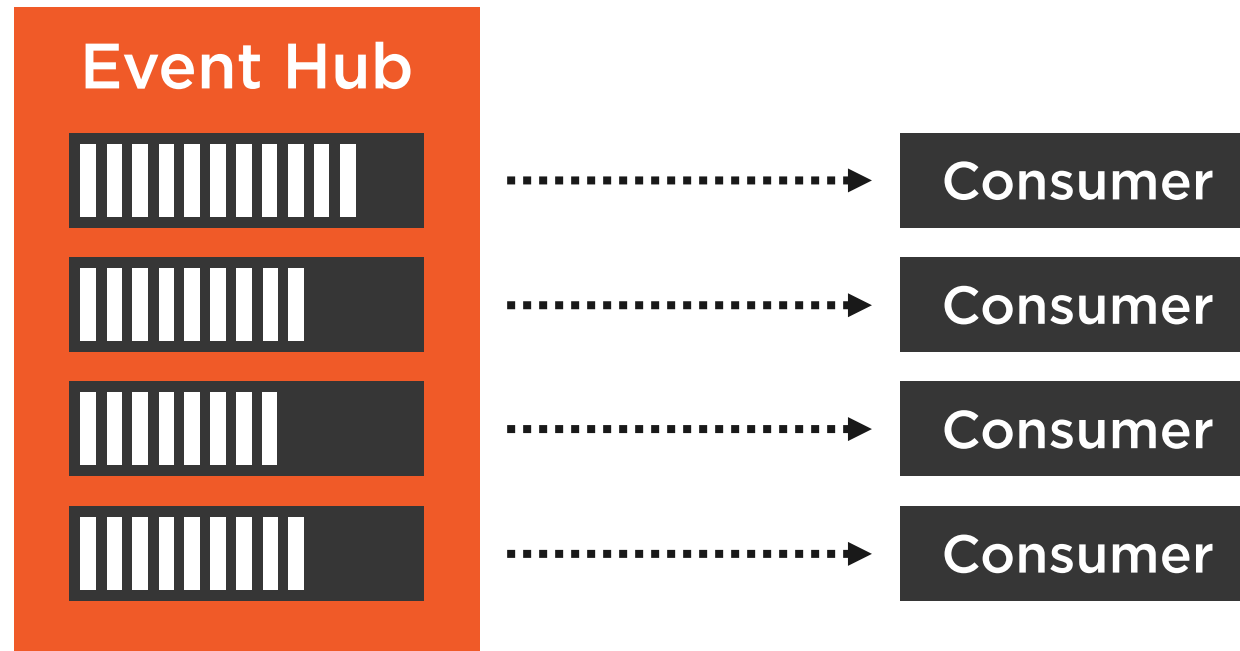"The number of partitions in an Event Hub directly relates to the number of concurrent readers you expect to have"

Tooltip for partition count in the Azure portal

Plan the Partitions

Plan the Partitions

After your Event Hub was created, you can't change the number of partitions anymore

Plan the Partitions

Event Hub

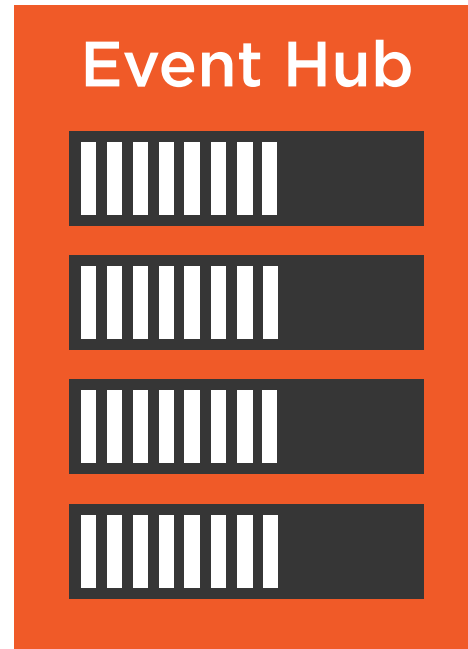| Partition	Partition	Partition	Partition
Partition	Partition	Partition	Partition
Partition	Partition	Partition	Partition
Partition	Partition	Partition	Partition
Partition	Partition	Partition	Partition
Partition	Partition	Partition	Partition
Partition	Partition	Partition	Partition
Partition	Partition	Partition	Partition

Plan the Partitions

Event Hub

Plan the Partitions

Set the number of your partitions to the anticipated number of concurrent consumers

Calculate the Costs

Basic

Standard

Dedicated

Demo

Switch between basic and standard

Calculate the costs for your event hub

Summary

Event Hub is part of a namespace

Namespace has throughput units
- 1TU = 1MB/s ingress, 2MB/s egress

Event Hub has partitions
- Set the number to the expected number of concurrent readers