Implement Azure Event Hubs Solutions

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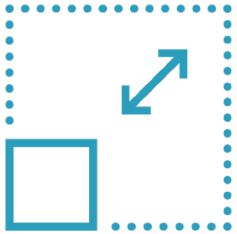
Azure Event Hubs

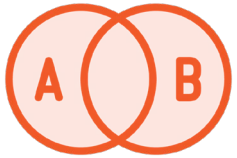


Scalable event processing service

Big data scenarios

Millions of events / second

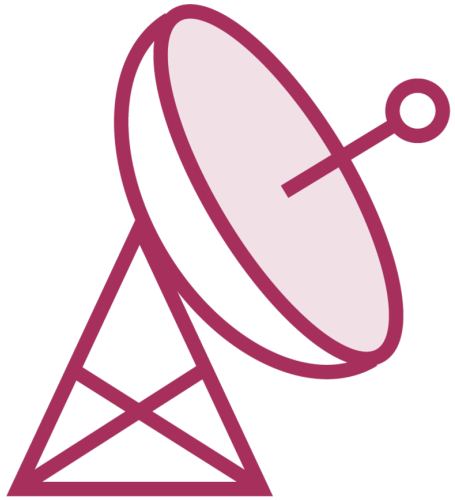
Decouples sending and receiving data



Integration with Azure and non-Azure services

Capture events to Azure blob storage or data lake

Scenarios



Telemetry

Data archival

Transaction processing

Anomaly detection

Components

Namespace

Container for Event Hubs

Event producers

Send data to Event Hubs

Partitions

Bucket of messages

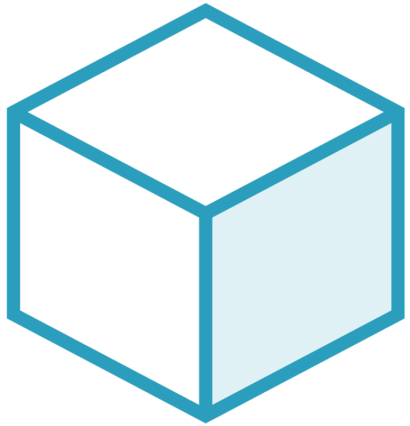
Consumer groups

View of an Event Hub

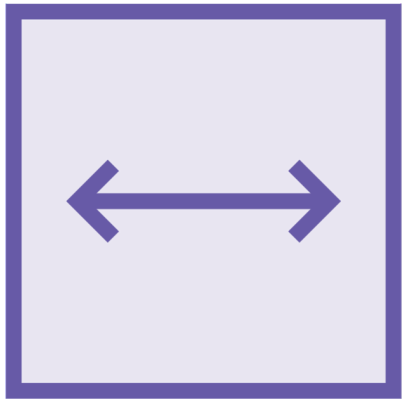
Subscribers

Reads data from Event Hubs

Event Hubs Namespace



Scoping container



Contains one or more Event Hubs

Options apply to all

Throughput units

```
az eventhubs namespace create --resource-group <GROUP NAME> --location <LOCATION> /
    --name <NAMESPACE NAME> /
    --sku Standard
```

Event Hubs Namespace Creation

Azure Command Line Interface (CLI)

SKU can be Standard or Basic

```
az eventhubs eventhub create --name <EVENT HUB NAME> /
    --namespace <NAMESPACE NAME> /
    --message-retention 3
    --partition-count 4
    -g <GROUP NAME>
```

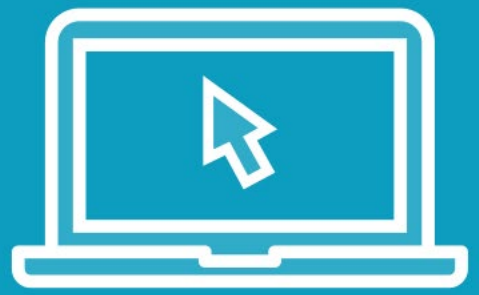
Event Hubs Creation

Namespace must be created before

Message retention 1 - 7 days

Partition count 2 - 32

Demo

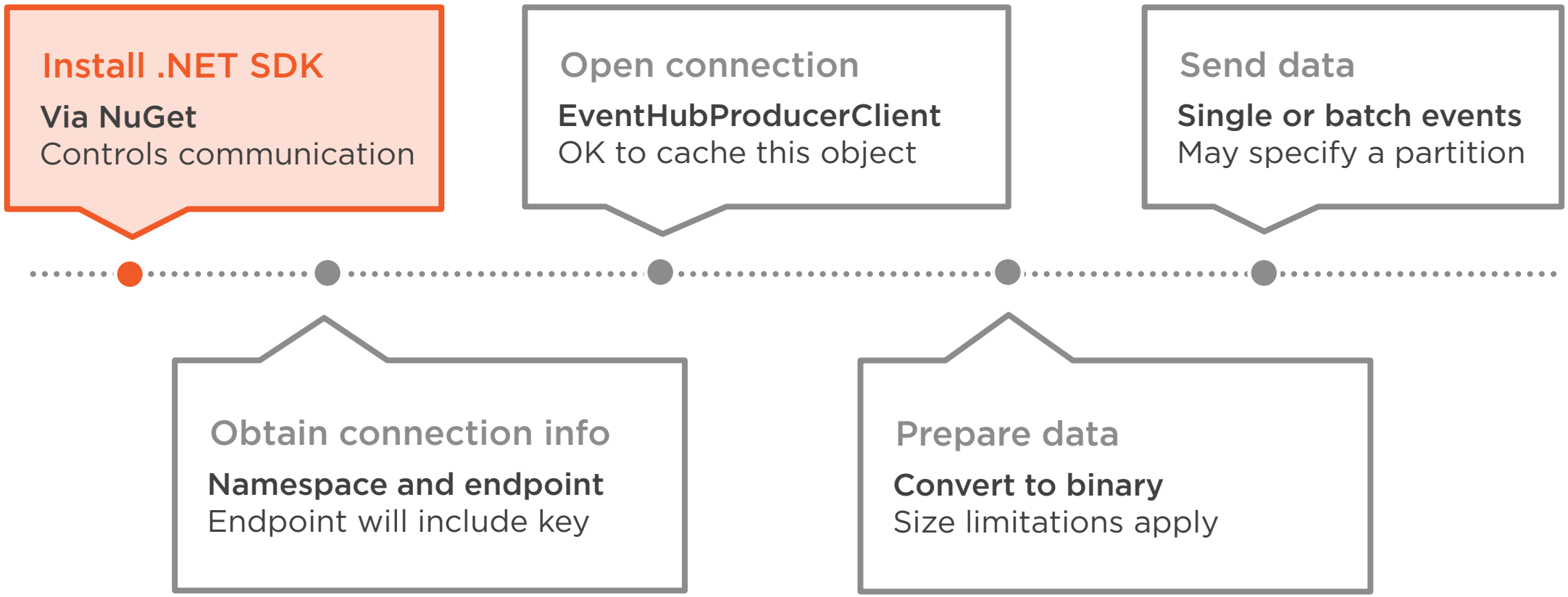


Create an Azure Event Hub

- Namespace
- Event Hub

Explore namespace and hub in portal

Send Events to Event Hub



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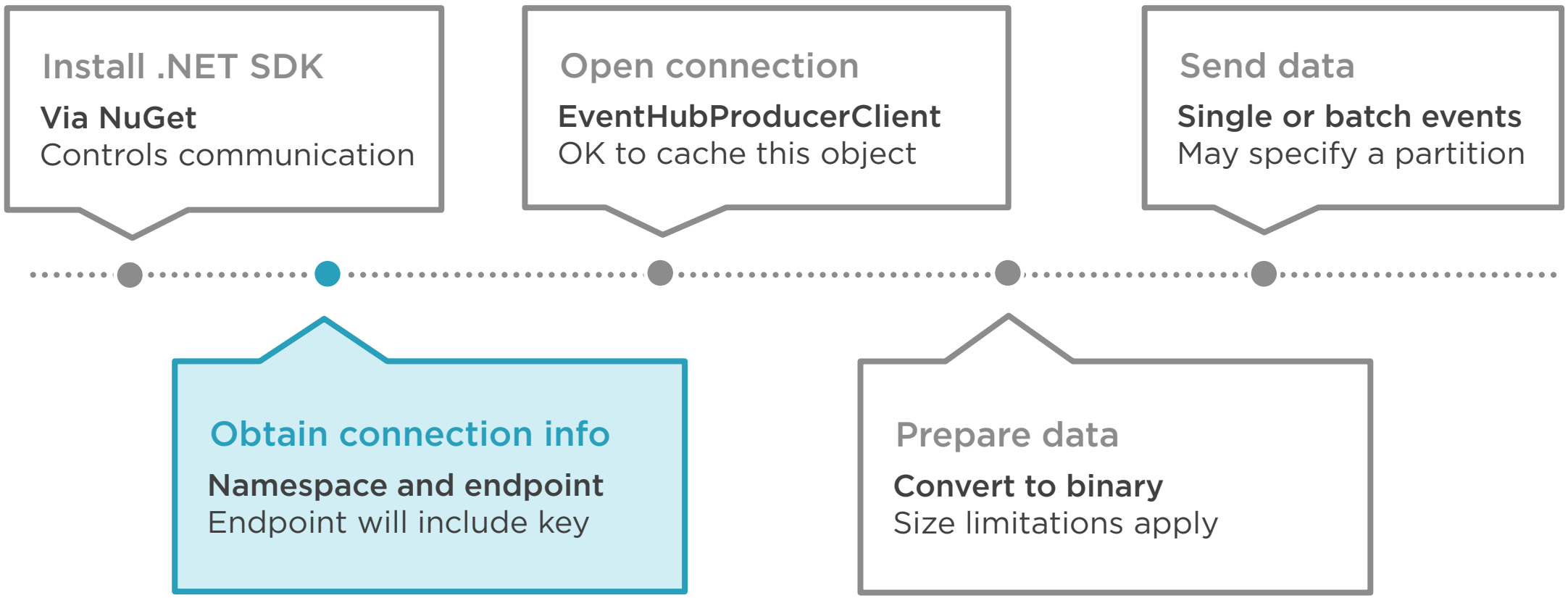

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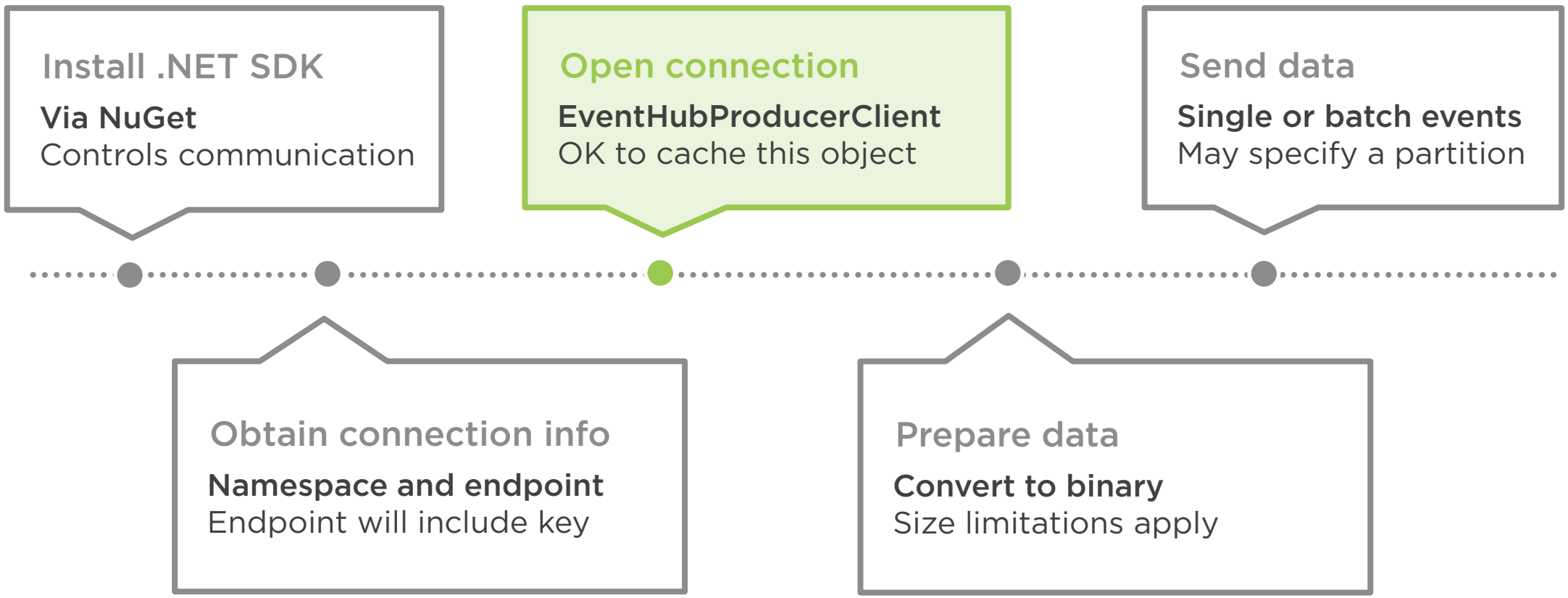

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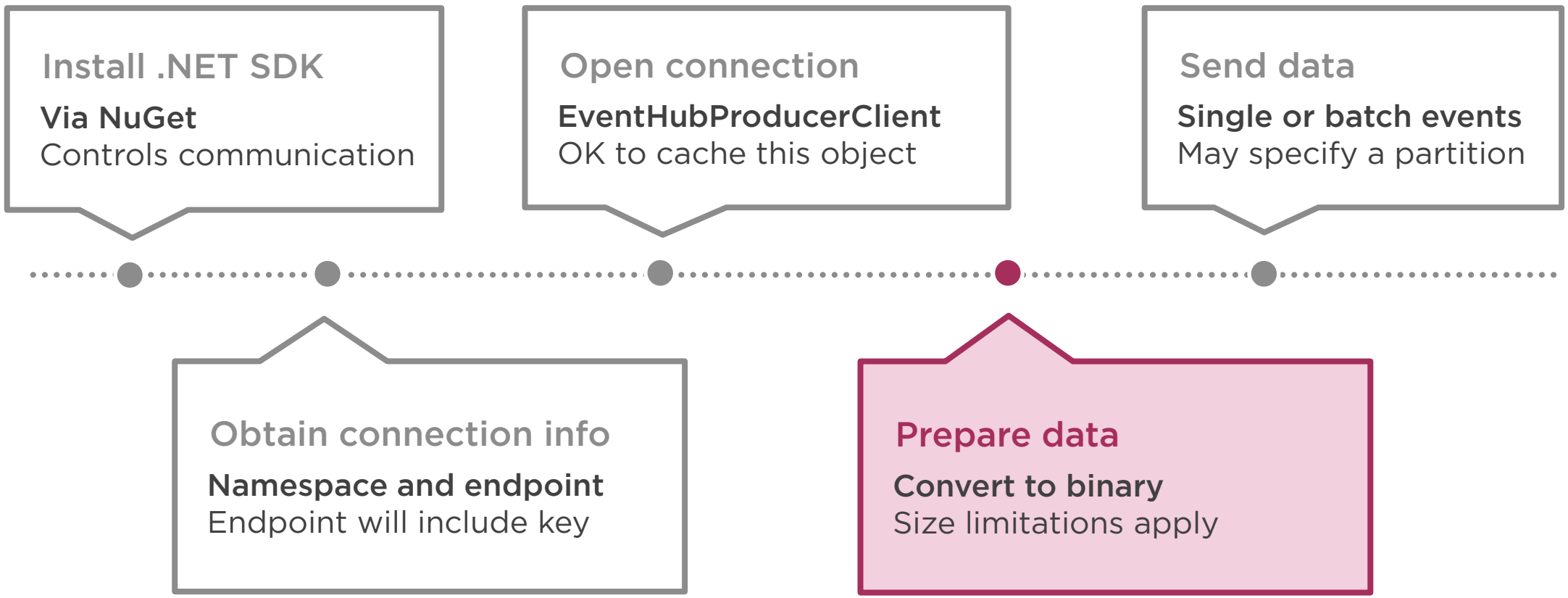

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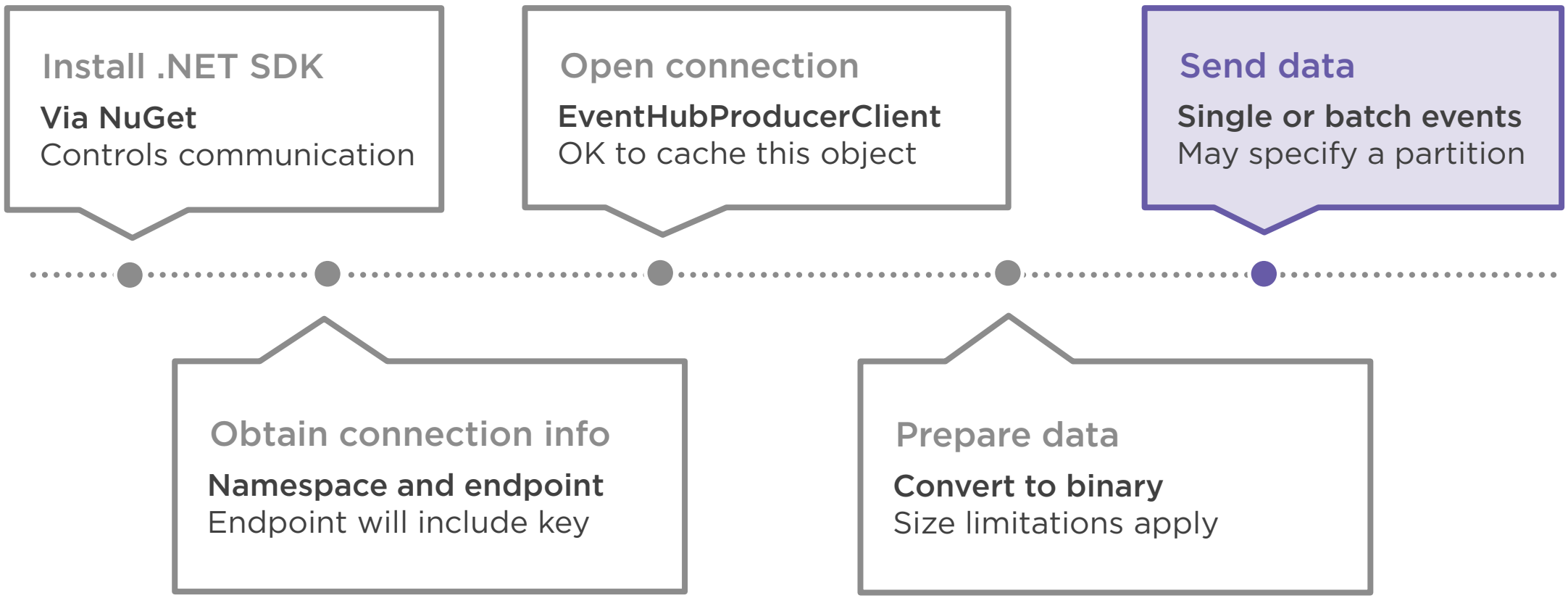
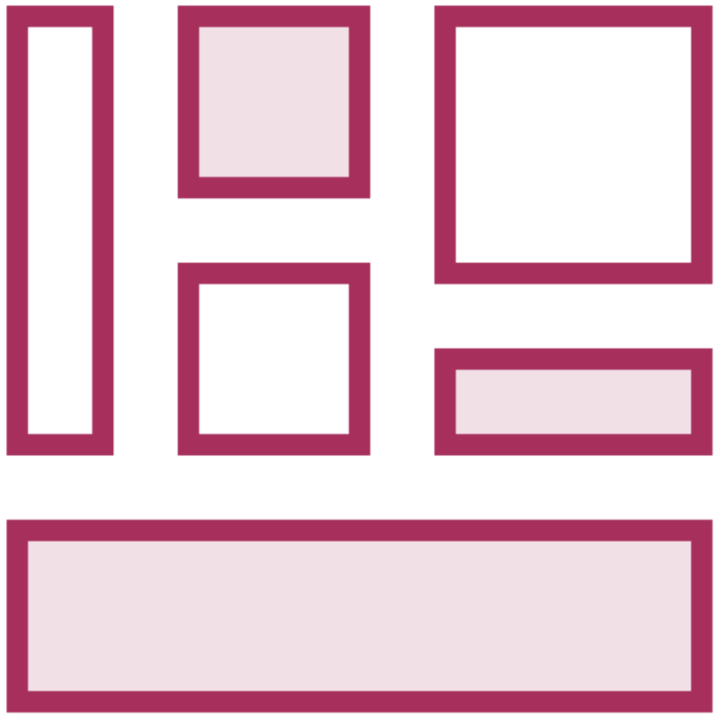


Partitions



Like a bucket for event messages

Hold events time-ordered as they arrive

Events not deleted once read

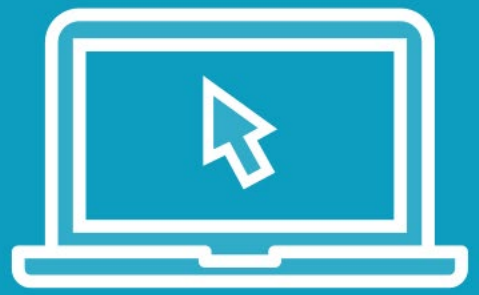
Event Hubs decides which partition events are sent to

- Can specify partition with partition key

Maximum 32 partitions

Create as many as expected concurrent subscribers

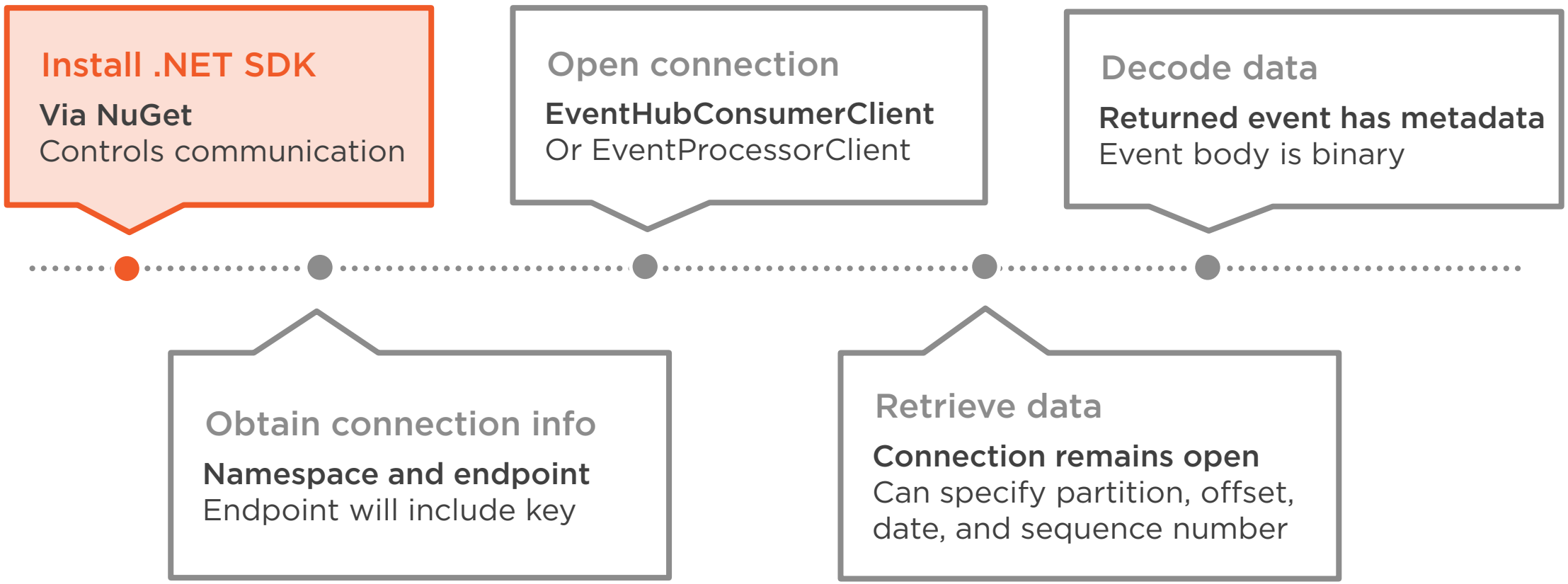
Demo



Send events to Event Hubs

- .NET SDK
- Preparing data
- Random partitions
- Single partition

Read Events from Event Hub



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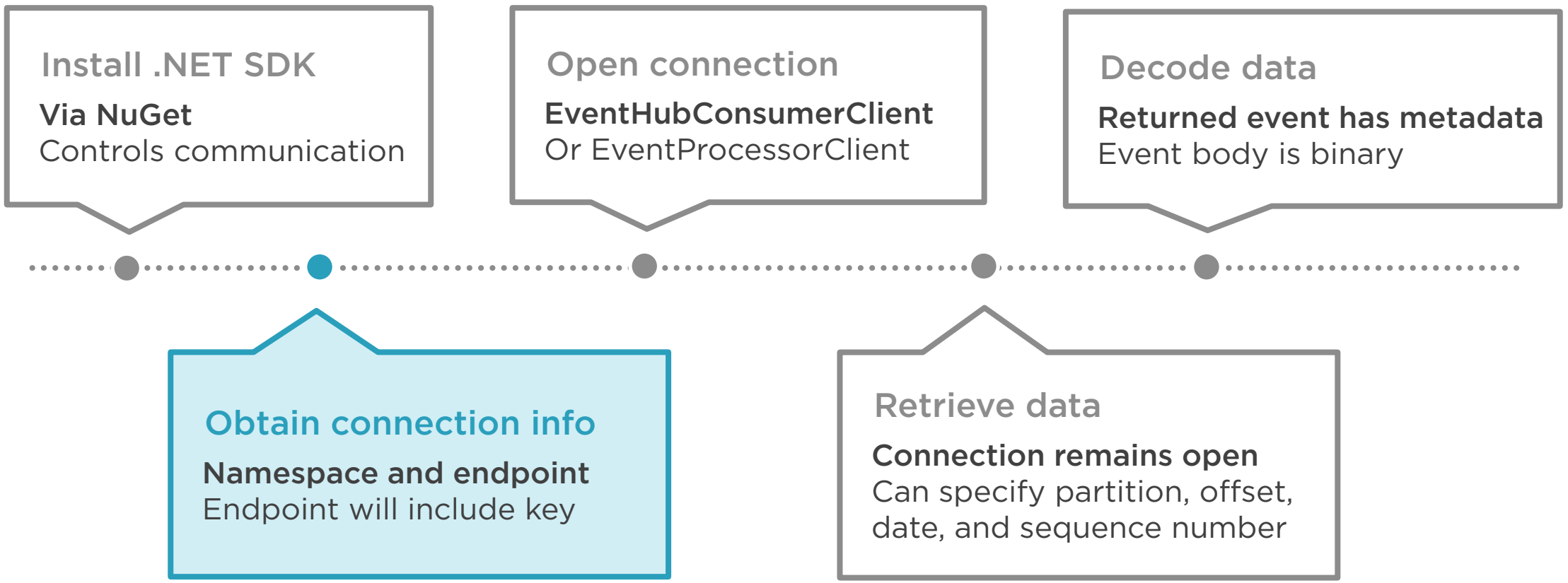

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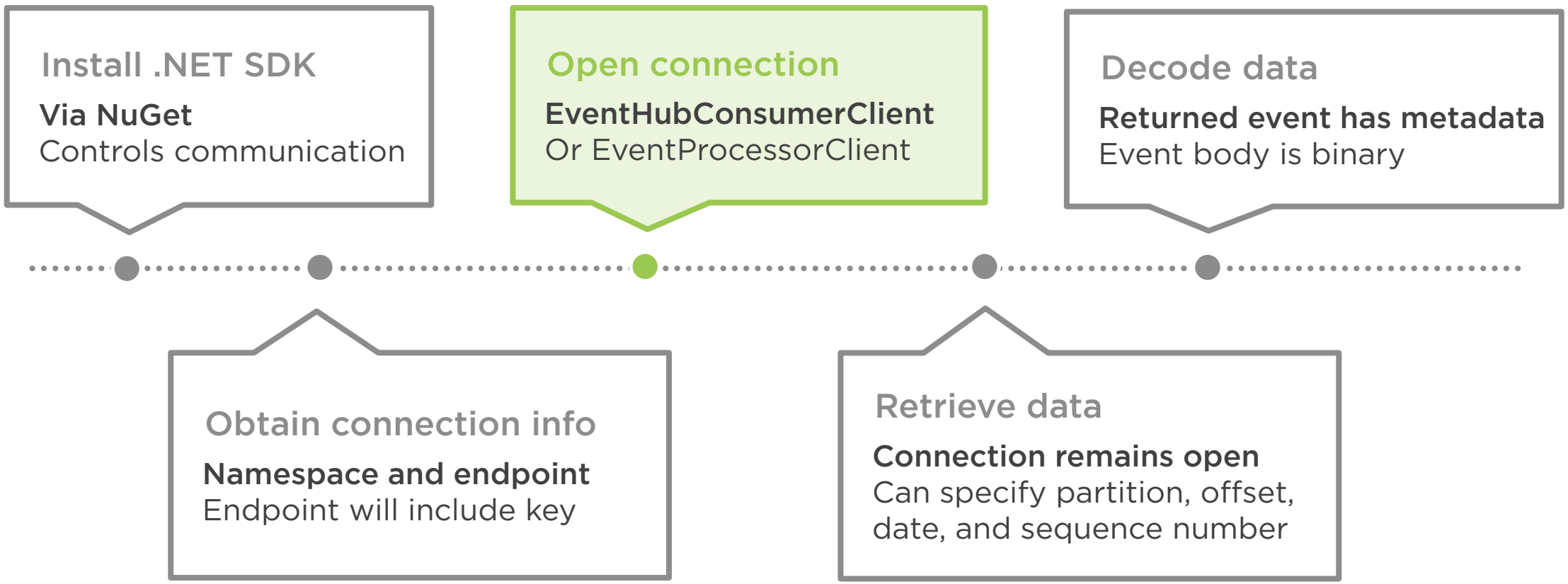

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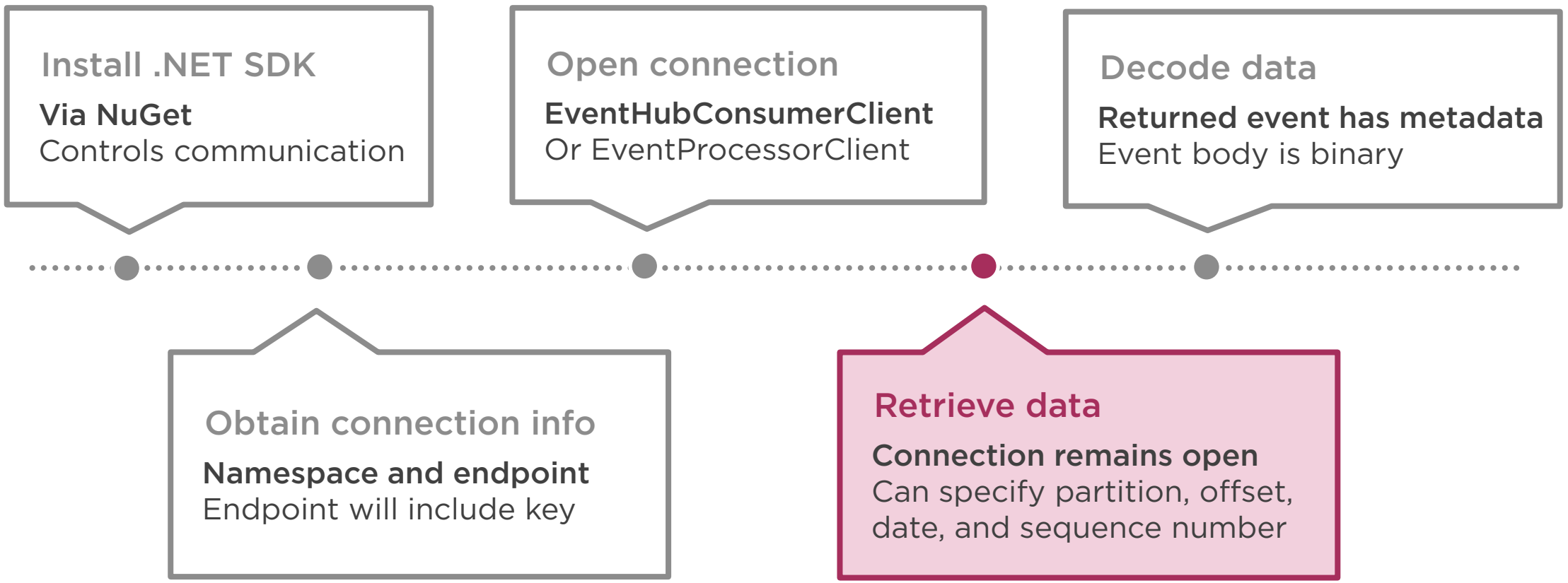

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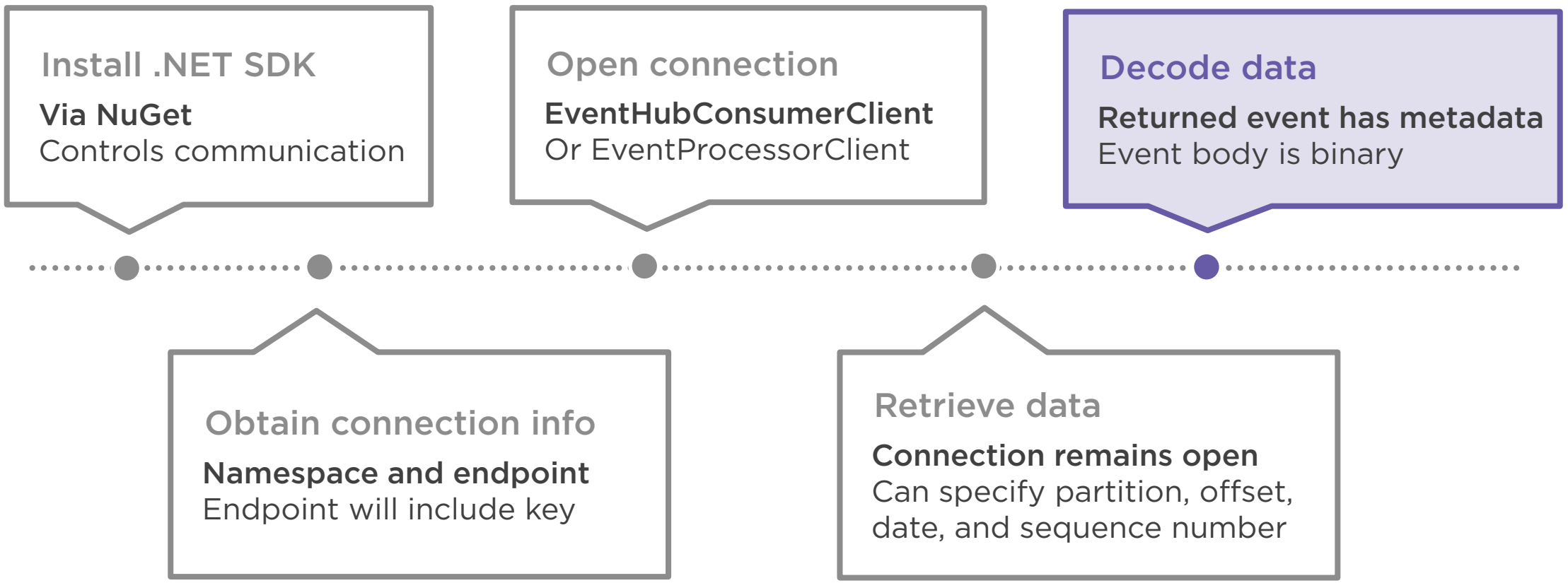

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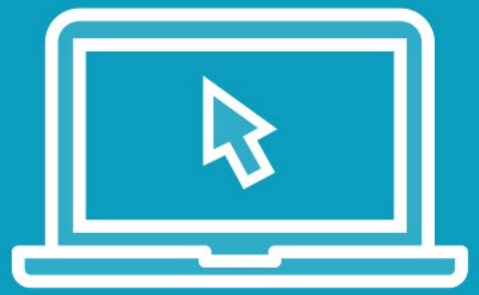

Read events from Event Hub

- .NET SDK
- Read all events
- Read partition info
- Read specific events

Summary

Azure Event Hubs meant for big data

Decouples sending and receiving data

Namespaces hold multiple Event Hubs

Events go into a partition

- Can specify a the same one

Use the .NET SDK to help

Up Next:
Implement Azure Notification Hubs Solutions