

Microsoft Azure Developer: Develop Event-based Solutions

IMPLEMENT AZURE EVENT GRID SOLUTIONS



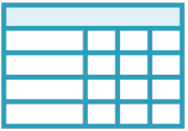
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PRINCIPAL

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Event Types



Discrete: report state changes and are actionable. (Event Grid)



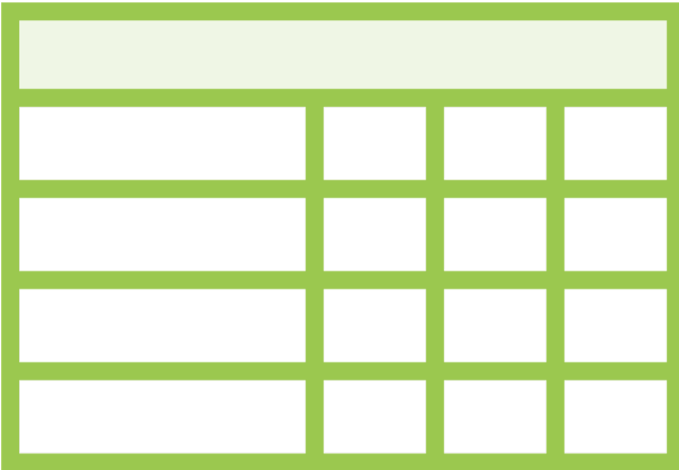
Series: report a condition, time-ordered, and analyzable. (Event Hub)



User notification: prompt user or their device for attention.
(Notification Hub)



Azure Event Grid



Event-based architectures (pub/sub)

Publishers emit and subscribers consume

- Azure and/or custom

Support many subscribers to one publisher

Filter events

Scalable up and down

Pay for what you use



```
az provider register --namespace Microsoft.EventGrid
```

```
az provider show --namespace Microsoft.EventGrid --query "registrationState"
```

Register Event Grid Provider

Need to enable provider for Azure subscription

Registration takes a while



Demo



Enable Azure Event Grid

- Azure CLI
- Azure portal



Pub/Sub Concepts

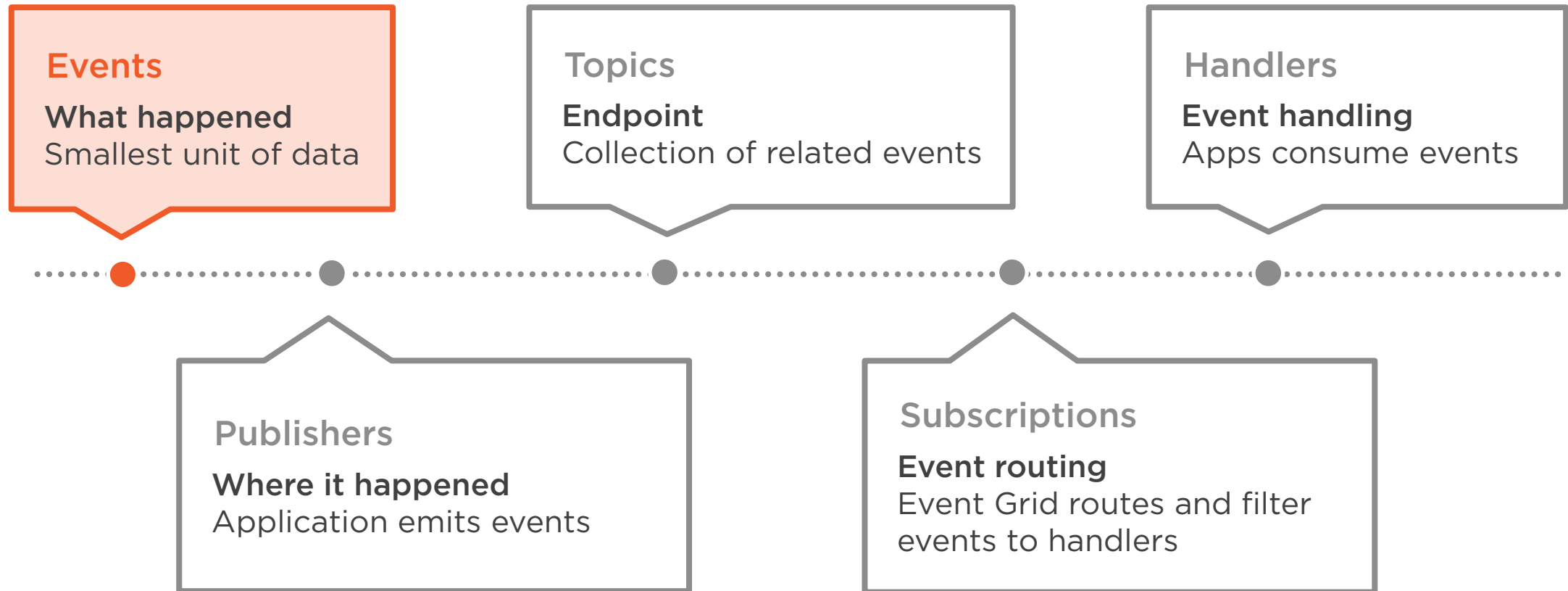
**Event signifies
something changed**

**Publisher has no
expectation of what
happens with event**

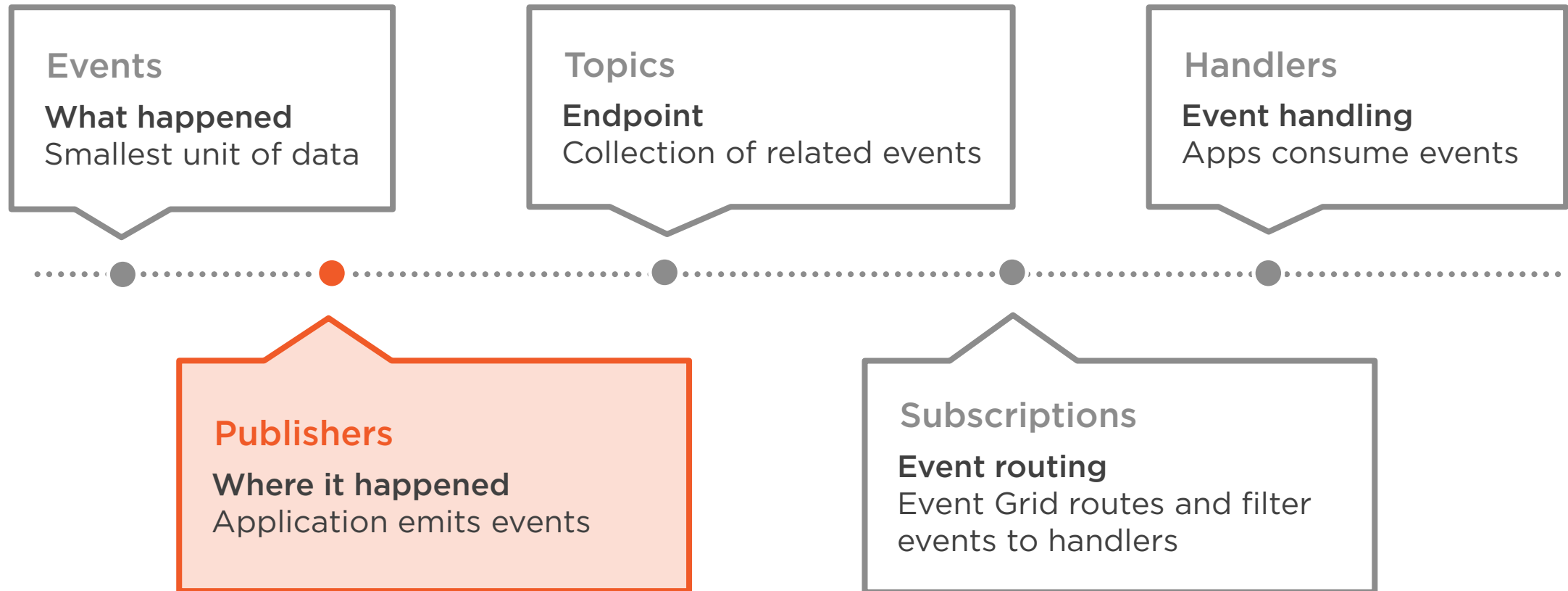
**Subscriber
determines what to
do with event**



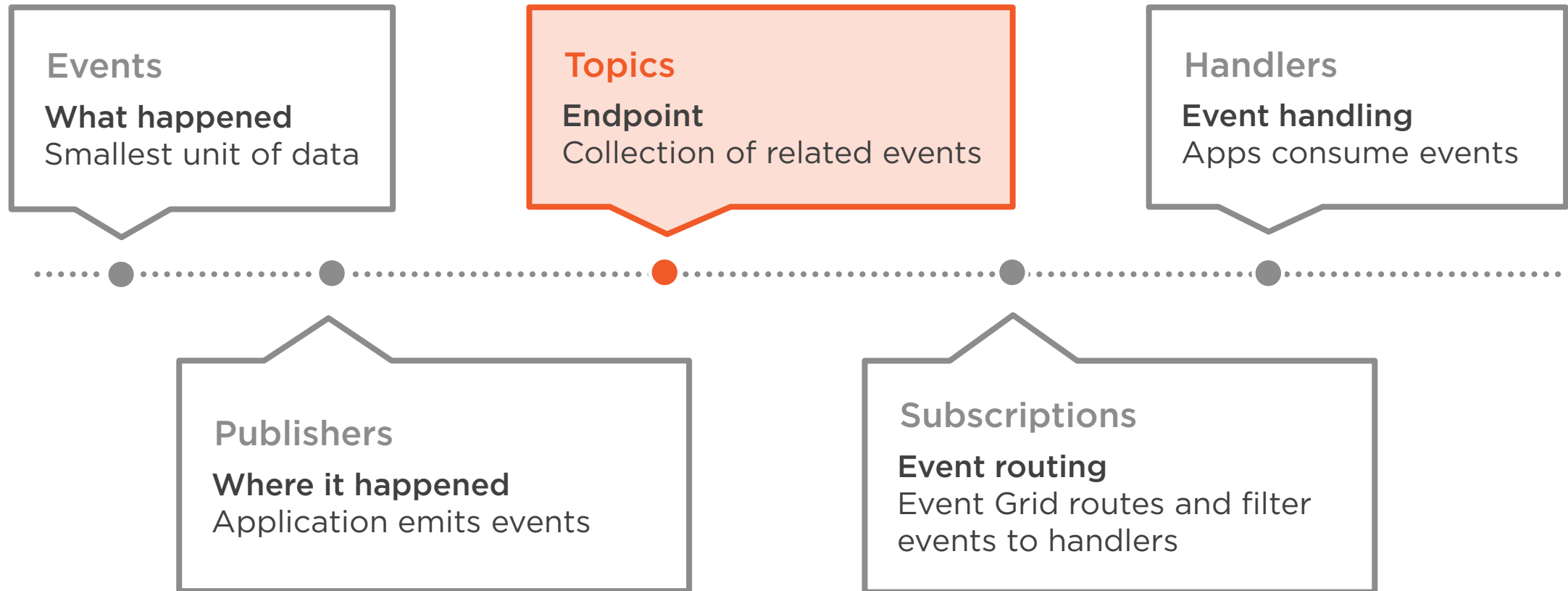
Event Grid Terminology



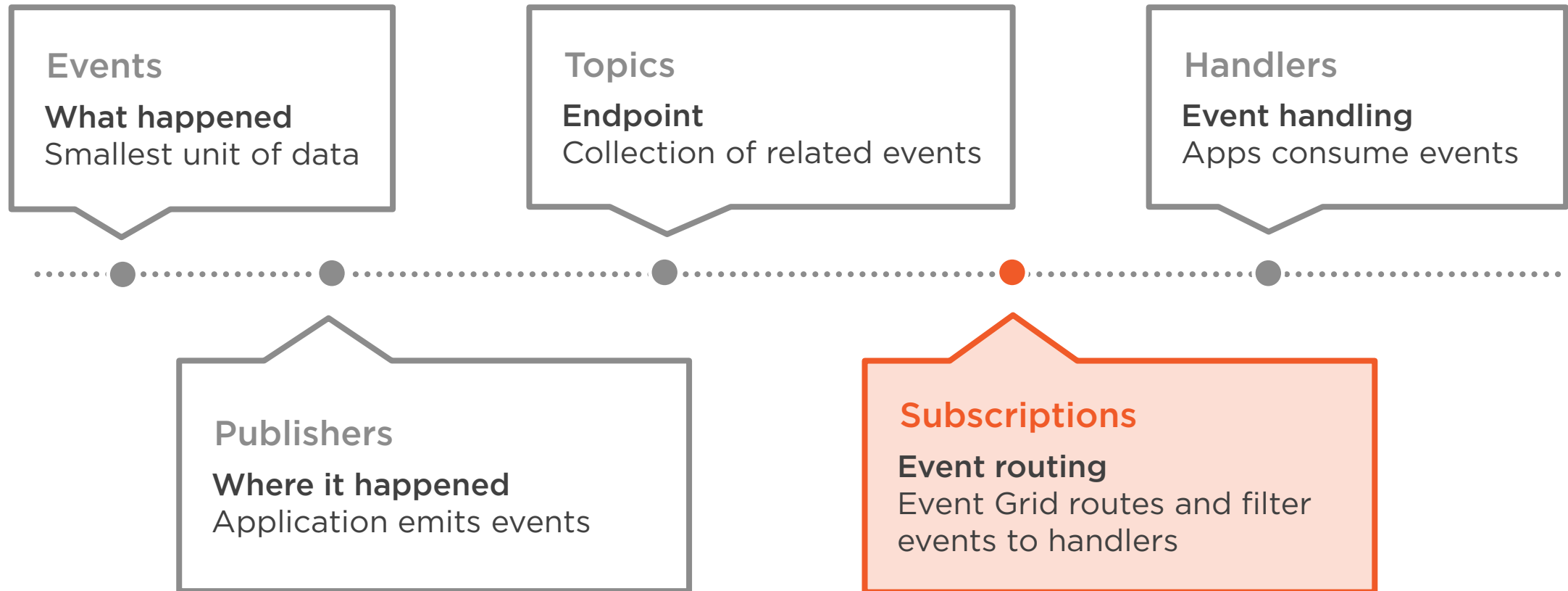
Event Grid Terminology



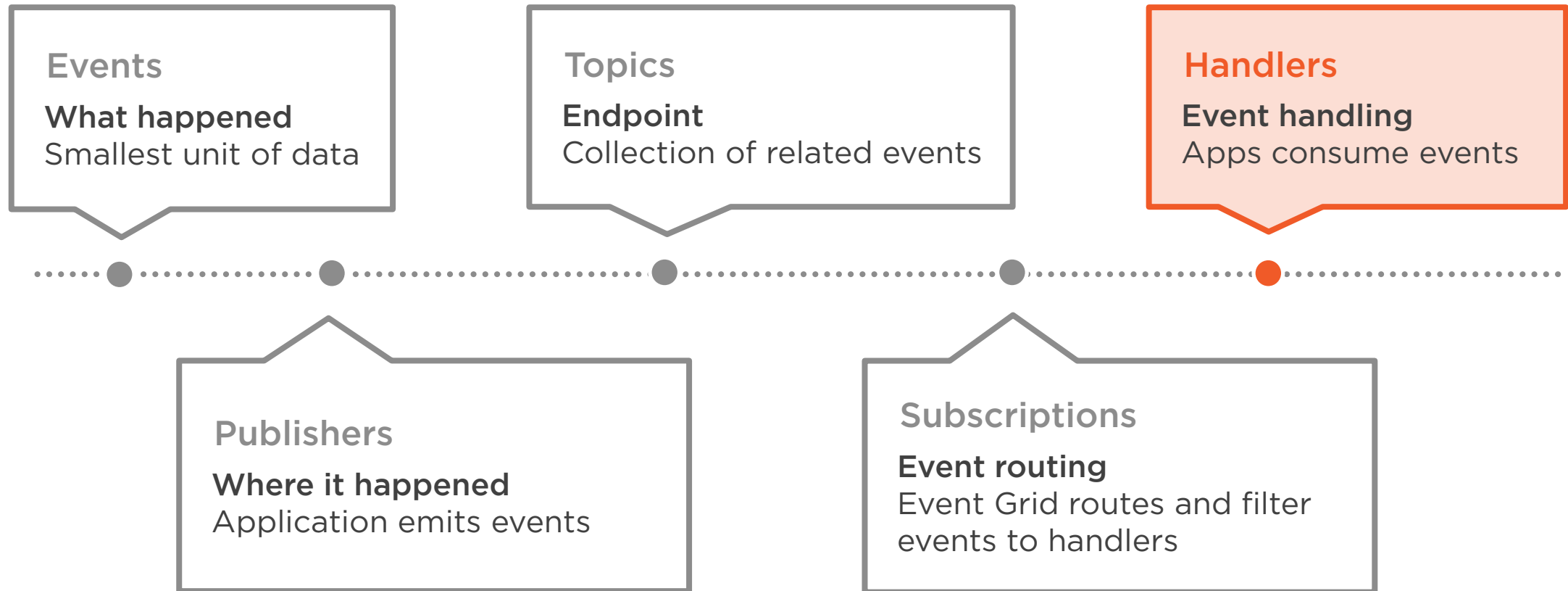
Event Grid Terminology



Event Grid Terminology



Event Grid Terminology



Azure Event Publishers



App Configuration

App Service

Blob Storage

Communication Services

Container Registry

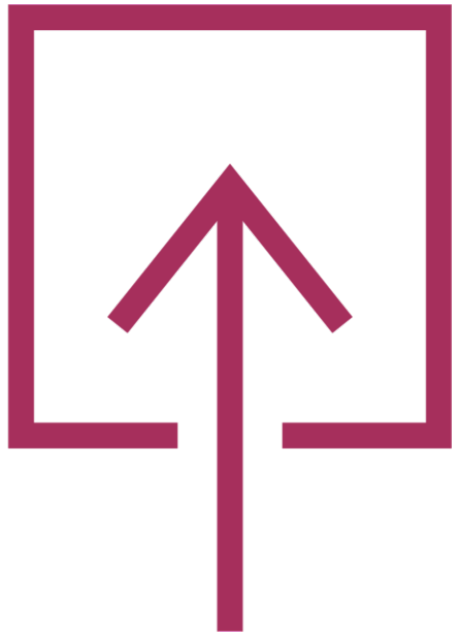
Event Hubs

IoT Hub

Key Vault



Azure Event Publishers



Machine Learning

Maps

Media Services

Resource groups

Service Bus

SignalR

Subscriptions



Custom Topics



User defined



Same message
schema as
Azure topics



Can send custom info
with message

Event Handlers

Azure Functions

Event Hubs

Service Bus

Storage Queues

Webhooks



Workflow



Create topic



Send publisher events

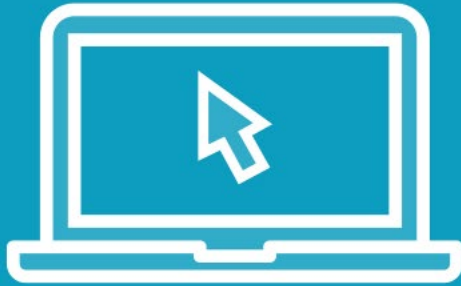


Add subscriber info with
filtering

Every event has same
metadata schema. The data
property contains event
specific information.



Demo



Built-in Azure events

- Create Azure storage topic
- Create subscription with filters
- Handle with Azure Function



Demo



Custom topics

- Create with portal
- Invoke and consume with .NET SDK



Summary



Event-based architectures

- Pub/sub

Event signifies something changed

- Publisher doesn't care what happens
- Up to subscriber to implement

Event Grid can filter, support multiple subscribers, and highly scalable

Need to enable per subscription

Many built-in Azure services support

Can create custom events and topics



Up Next:

Implement Azure Event Hub Solutions

