

Introduction to CloudEvents and Azure Event Grid

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Agenda

- ▶ Events
- ▶ CloudEvents
- ▶ Azure Event Grid
- ▶ Summary

Events

Why are Events becoming more Important?

Events

Why are Events becoming more Important?

Serverless

Events

- ▶ Responding to something happening, instead of polling
 - ▶ Azure Logic App - you set polling interval for storage & queue
 - ▶ You pay for 1 action every polling interval even if no data found
 - ▶ Poll every 5 minutes (288 per day) x \$0.000036 = \$0.010368 per day x 30 = \$0.311404 per month
- ▶ Message
 - ▶ Information about the event
 - ▶ Payload specifically related to type of event
- ▶ On-premises, Private Cloud and Public Cloud

CloudEvents

- ▶ Cloud Native Computing Foundation - <https://cloudevents.io>
 - ▶ Serverless Working Group
 - ▶ CloudEvents GitHub Repo - <https://github.com/cloudevents/spec>
 - ▶ Latest Release V0.1

```
{
  "cloudEventsVersion" : "0.1",
  "eventType" : "com.example.someevent",
  "source" : "/mycontext",
  "eventID" : "C234-1234-1234",
  "eventTime" : "2018-04-05T17:31:00Z",
  "extensions" : {
    "comExampleExtension" : "value"
  },
  "contentType" : "application/json",
  "data" : {
    "appinfoA" : "abc",
    "appinfoB" : 123,
    "appinfoC" : true
  }
}
```

```
{
  "cloudEventsVersion" : "0.1",
  "eventType" : "com.example.someevent",
  "source" : "/mycontext",
  "eventID" : "A234-1234-1234",
  "eventTime" : "2018-04-05T17:31:00Z",
  "extensions" : {
    "comExampleExtension" : "value"
  },
  "contentType" : "text/xml",
  "data" : "<much wow=\"xml\"/>"
}
```

```
{
  "cloudEventsVersion" : "0.1",
  "eventType" : "com.example.someevent",
  "source" : "/mycontext",
  "eventID" : "B234-1234-1234",
  "eventTime" : "2018-04-05T17:31:00Z",
  "extensions" : {
    "comExampleExtension" : "value"
  },
  "contentType" : "application/vnd.apache.thrift.binary",
  "data" : "... base64 encoded string ..."
}
```

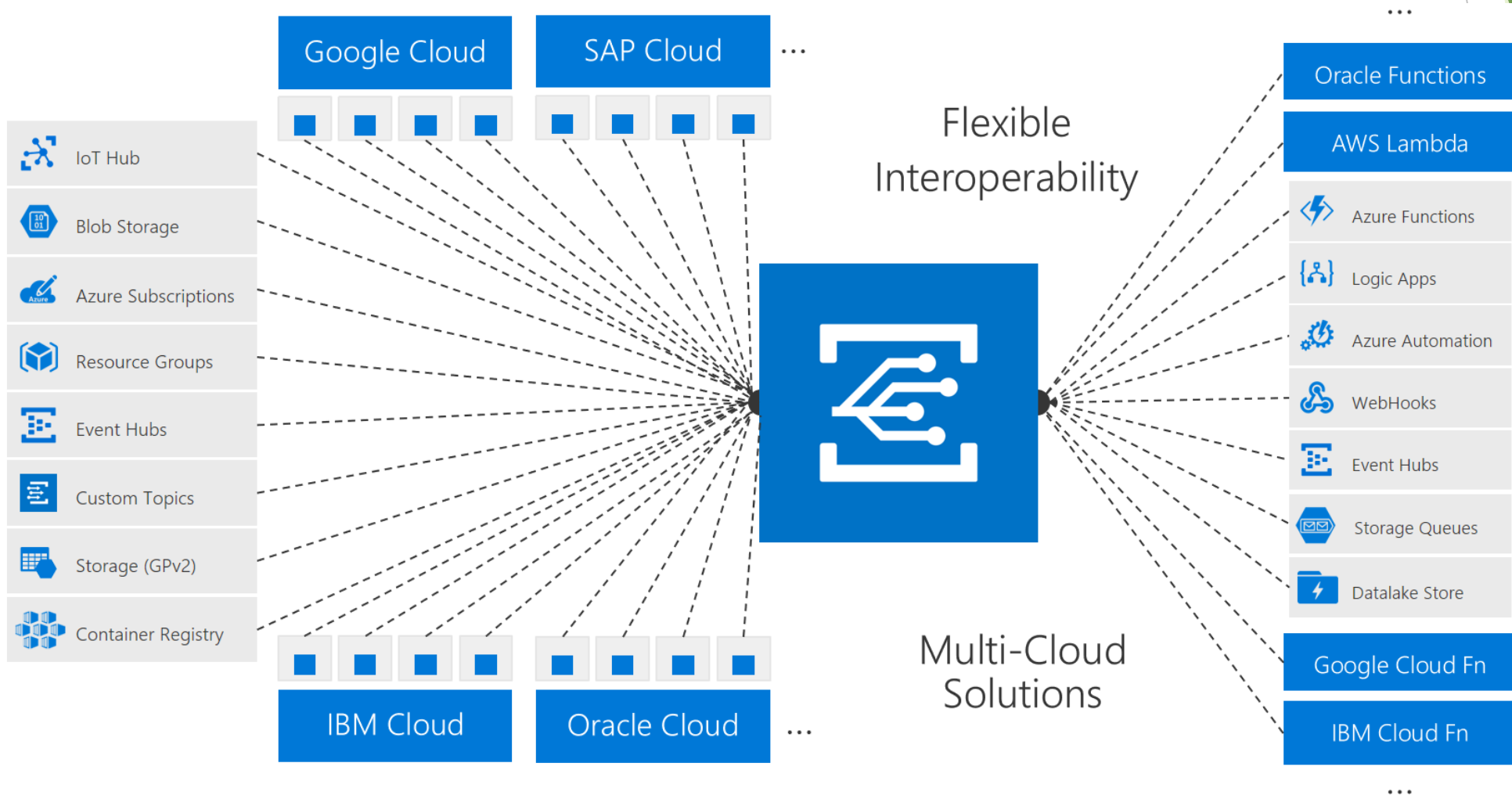
Azure Event Grid

Comparison of services

Service	Purpose	Type	When to use
Event Grid	Reactive programming	Event distribution (discrete)	React to status changes
Event Hubs	Big data pipeline	Event streaming (series)	Telemetry and distributed data streaming
Service Bus	High-value enterprise messaging	Message	Order processing and financial transactions

```
{
  "topic": "/subscriptions/{subscription-id}/resourceGroups/gridGroup/providers/Microsoft.Storage/storageAccounts/tfstore0524demo",
  "subject": "/blobServices/default/containers/testcontainer/blobs/testfile.txt",
  "eventType": "Microsoft.Storage.BlobCreated",
  "eventTime": "2018-05-24T19:31:26.4482862Z",
  "id": "274133e6-801e-0010-0795-f352e606b022",
  "data": {
    }
  },
  "dataVersion": "",
  "metadataVersion": "1"
}
```

Azure Event Grid + CloudEvents



CloudEvents & Azure Event Grid

Demo

Summary

- ▶ Events
- ▶ CloudEvents
- ▶ Azure Event Grid
- ▶ Next Steps

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Thank You

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the frame, creating a modern, layered effect against the white background.