Amazon EventBridge Deep Dive

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NEW!

Amazon EventBridge

A serverless event bus service for AWS services, your own applications, and SaaS providers.

- Removes friction of writing “point-to-point” integrations
- Works across dozens of AWS and SaaS applications
- Easily build Event Driven Applications
- Fully managed; pay-as-you-go

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Deep Dive Agenda

1. Overview of EventBridge.
2. Building a Simple Event Driven Application.
3. Handling Webhooks: API Gateway + EventBridge
4. Partner Event Source: Support Tickets from Zendesk

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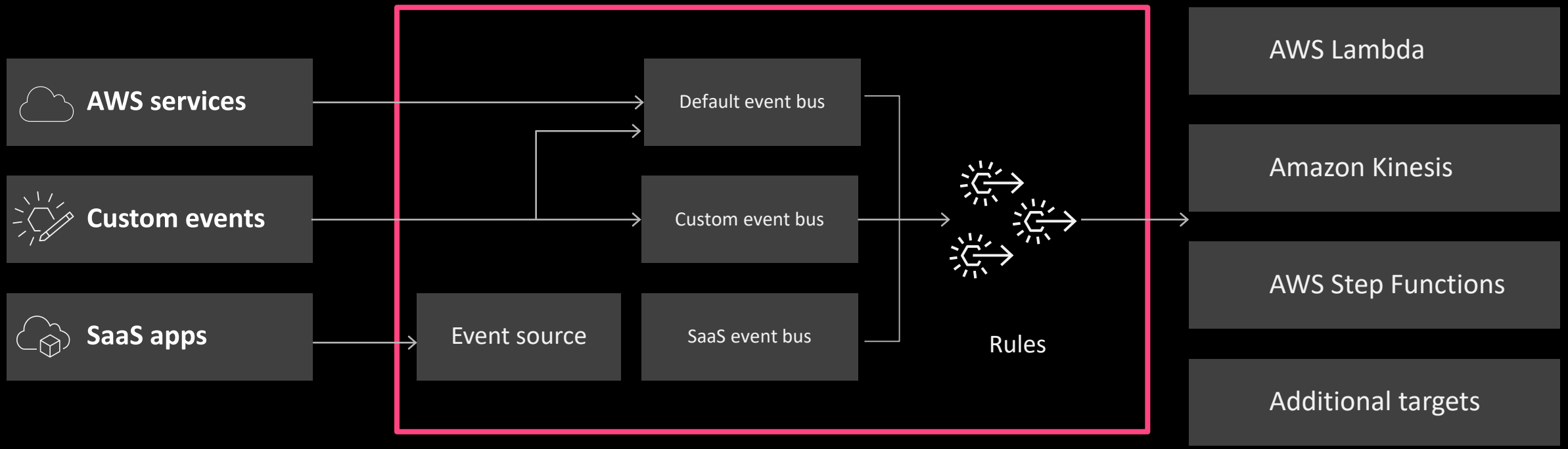
Amazon EventBridge



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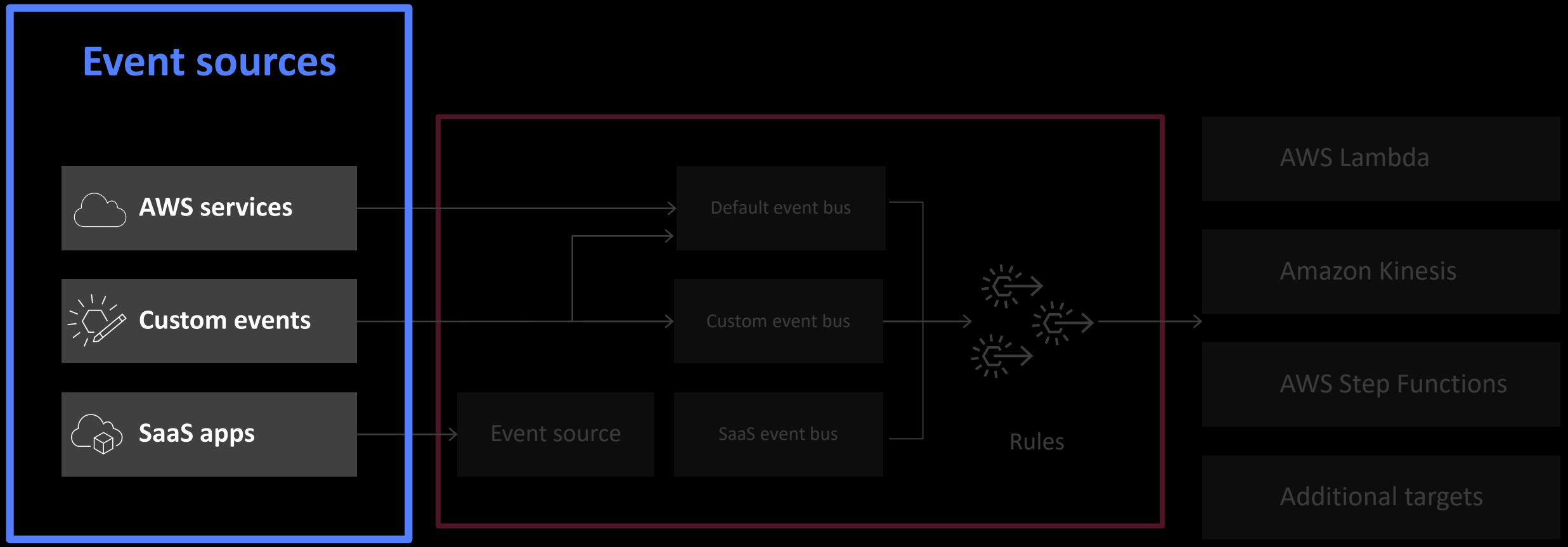
Amazon EventBridge



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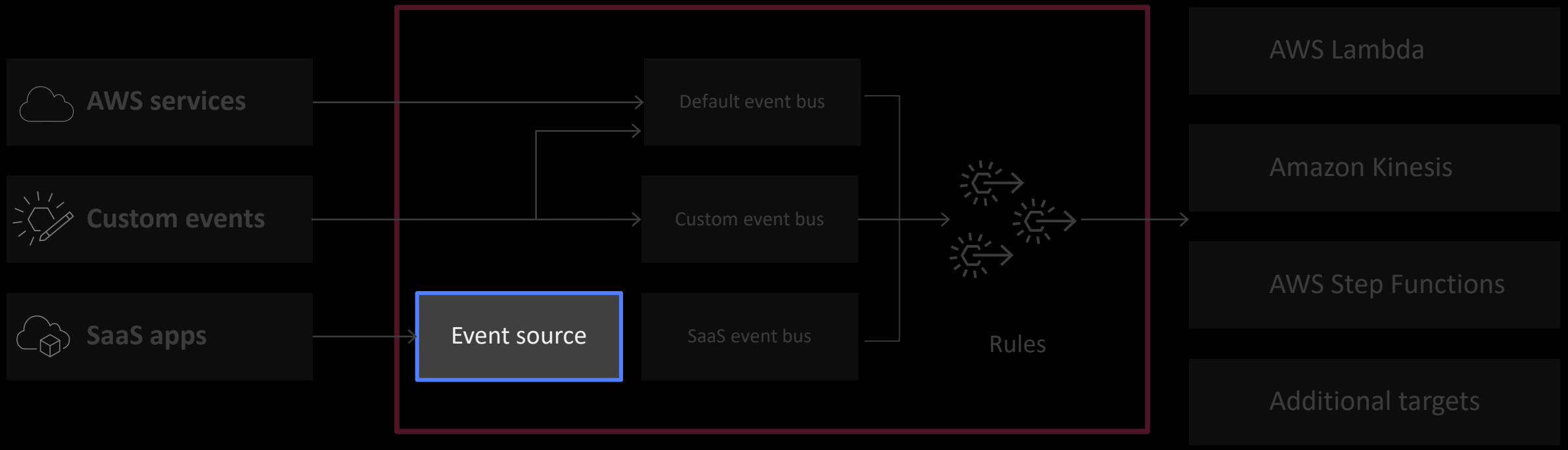
Amazon EventBridge



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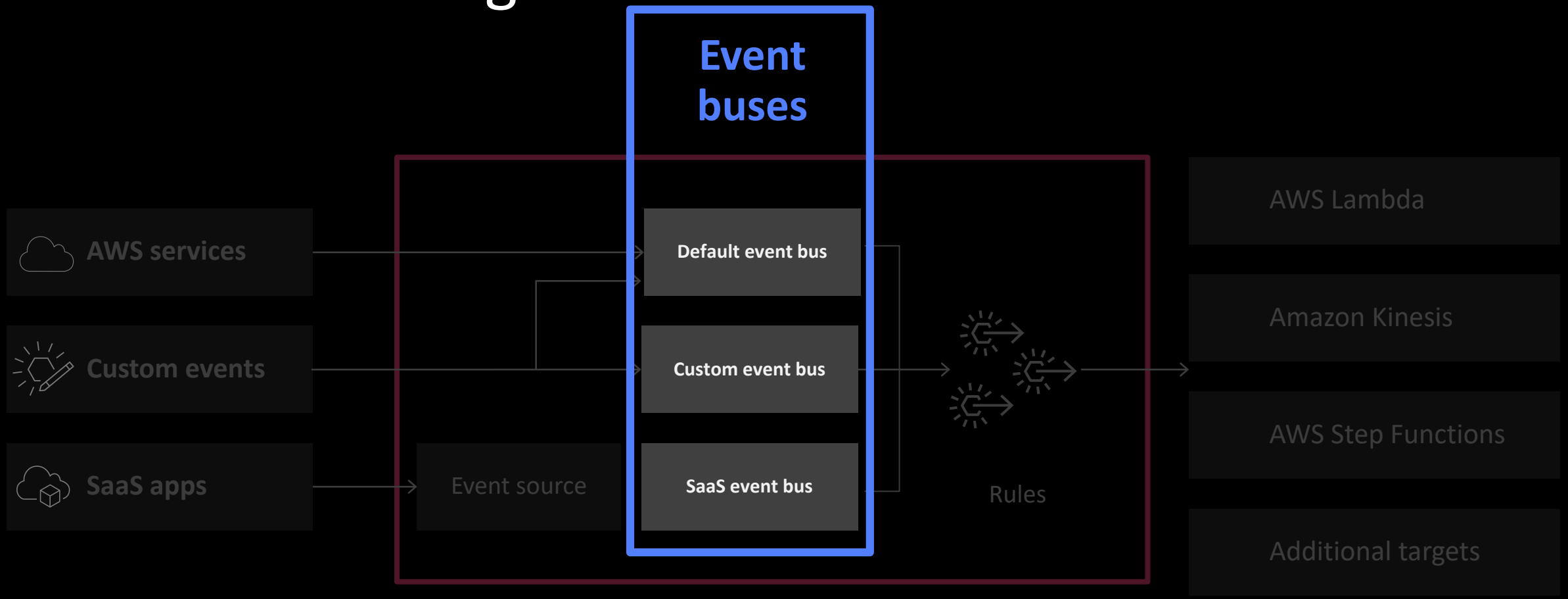
Amazon EventBridge



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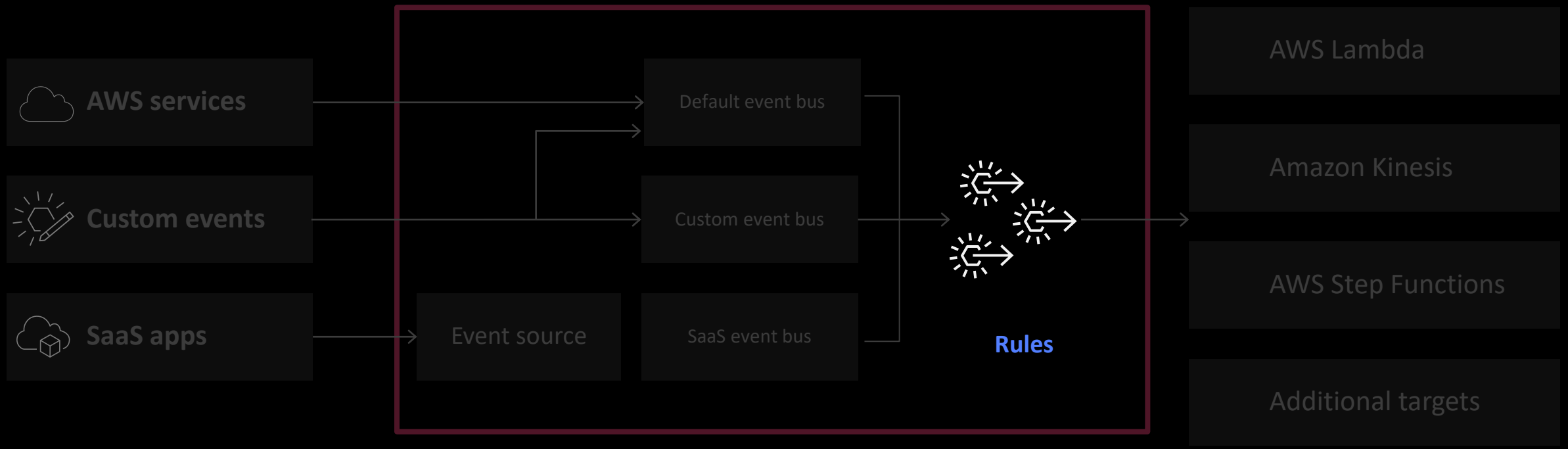
Amazon EventBridge



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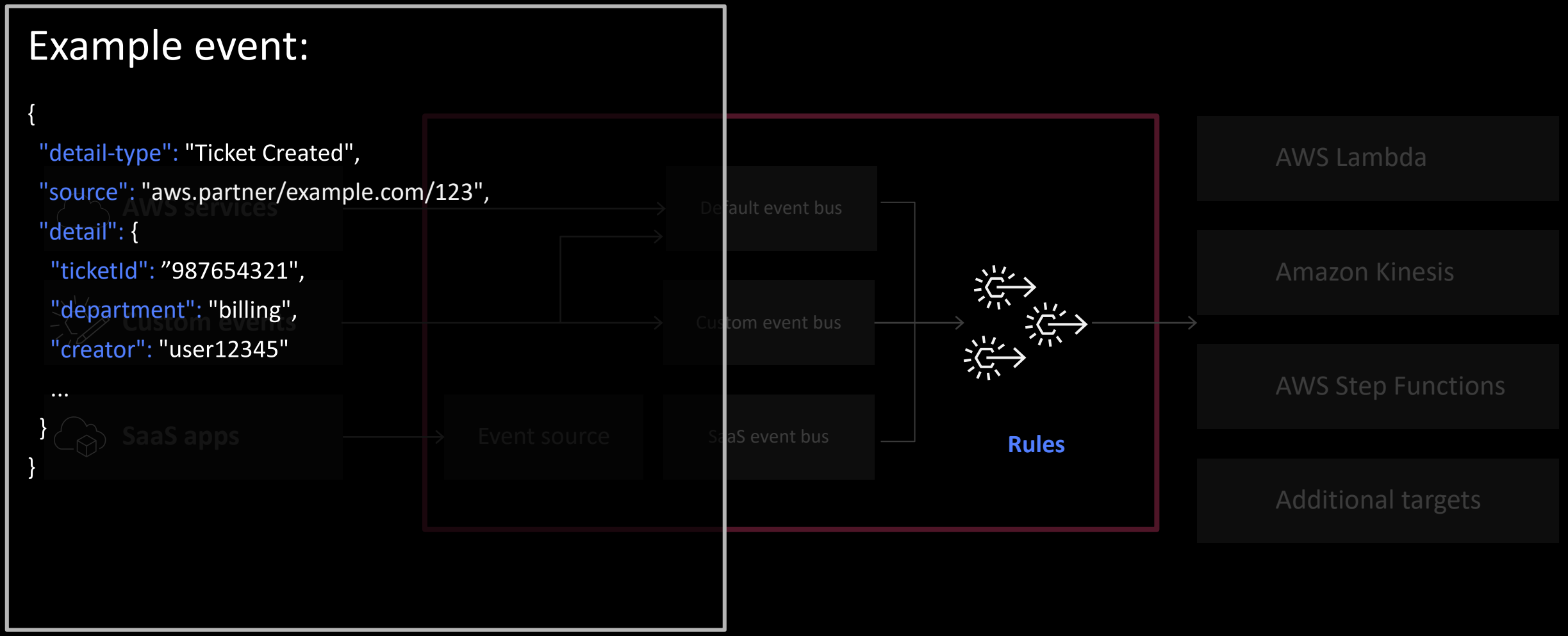
Amazon EventBridge

Example event:

```
{
 "detail-type": "Ticket Created",
 "source": "aws.partner/example.com/123",
 "detail": {
  "ticketId": ”987654321",
  "department": "billing",
  "creator": "user12345"
  ...
 }
}
```



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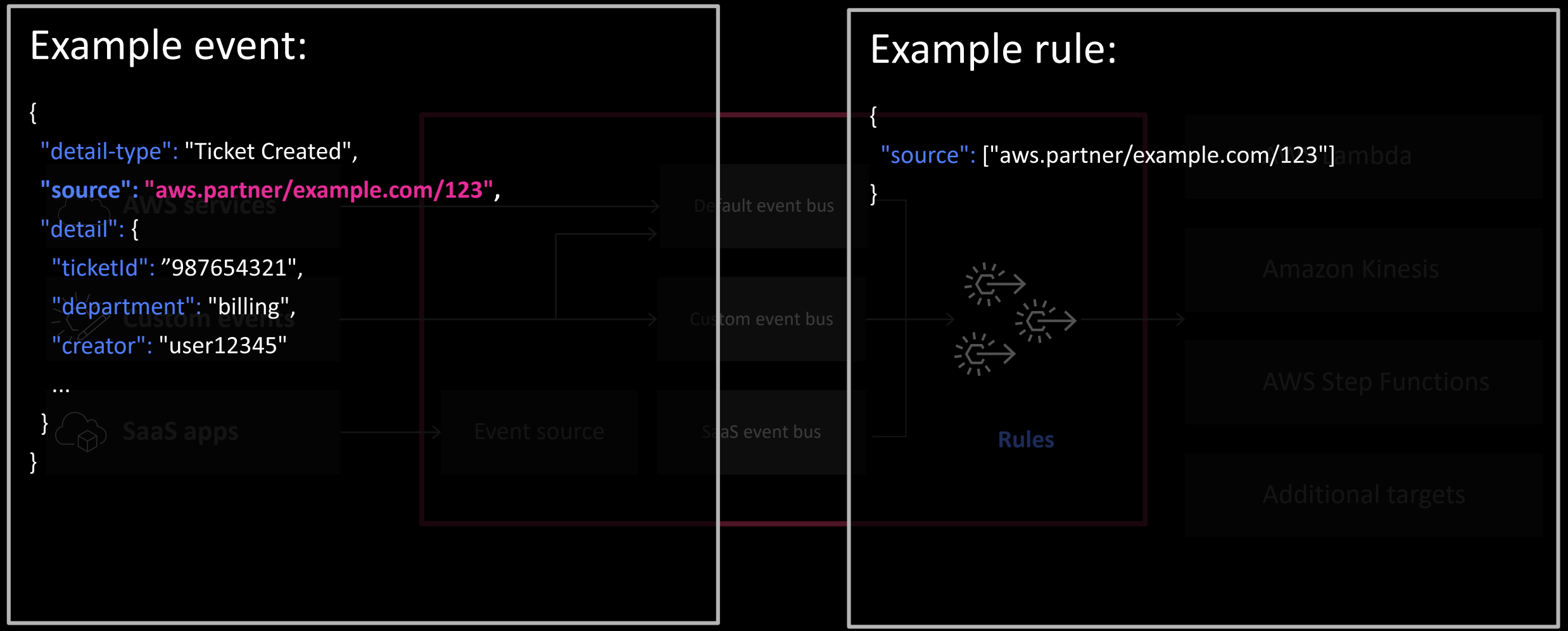

Example rule:

```
{
 "source": ["aws.partner/example.com/123"]
}
```

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Amazon EventBridge

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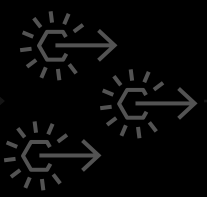
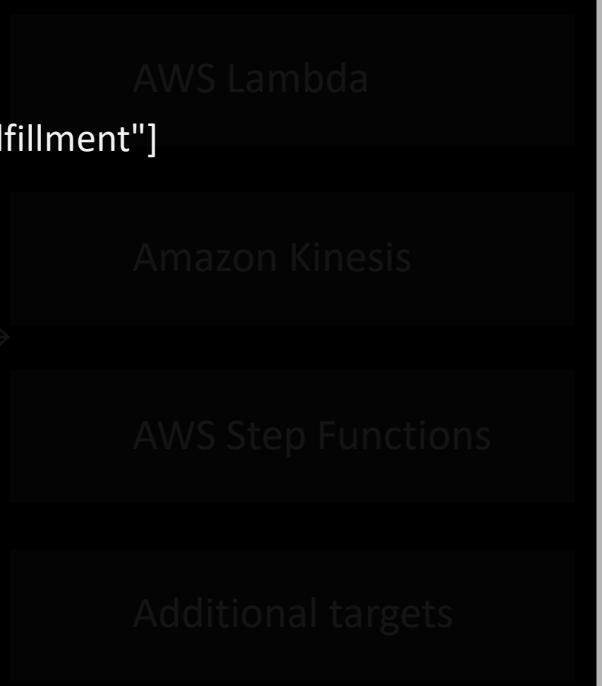
}
```

Example rule:

```
{
 "detail": {
  "department": ["billing", "fulfillment"]
 }
}
```



Rules



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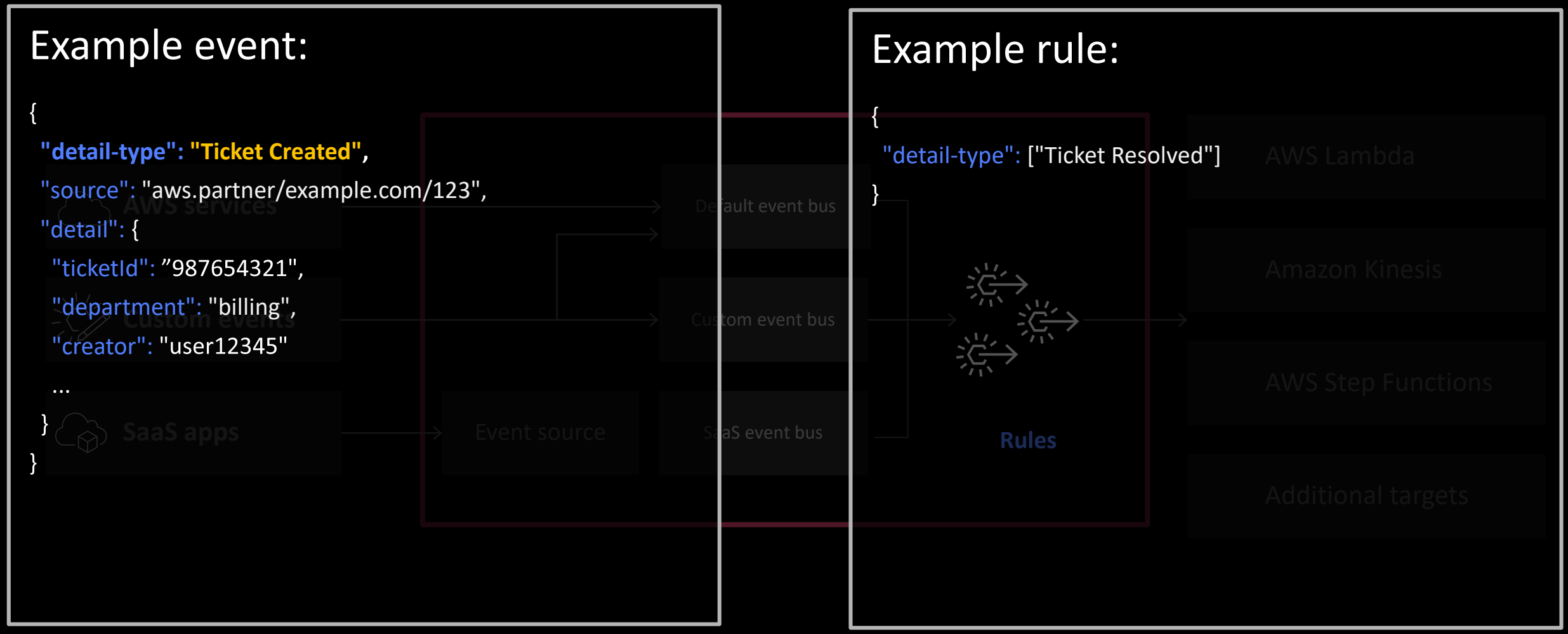

Example rule:

```
{
 "detail-type": ["Ticket Resolved"]
}
```

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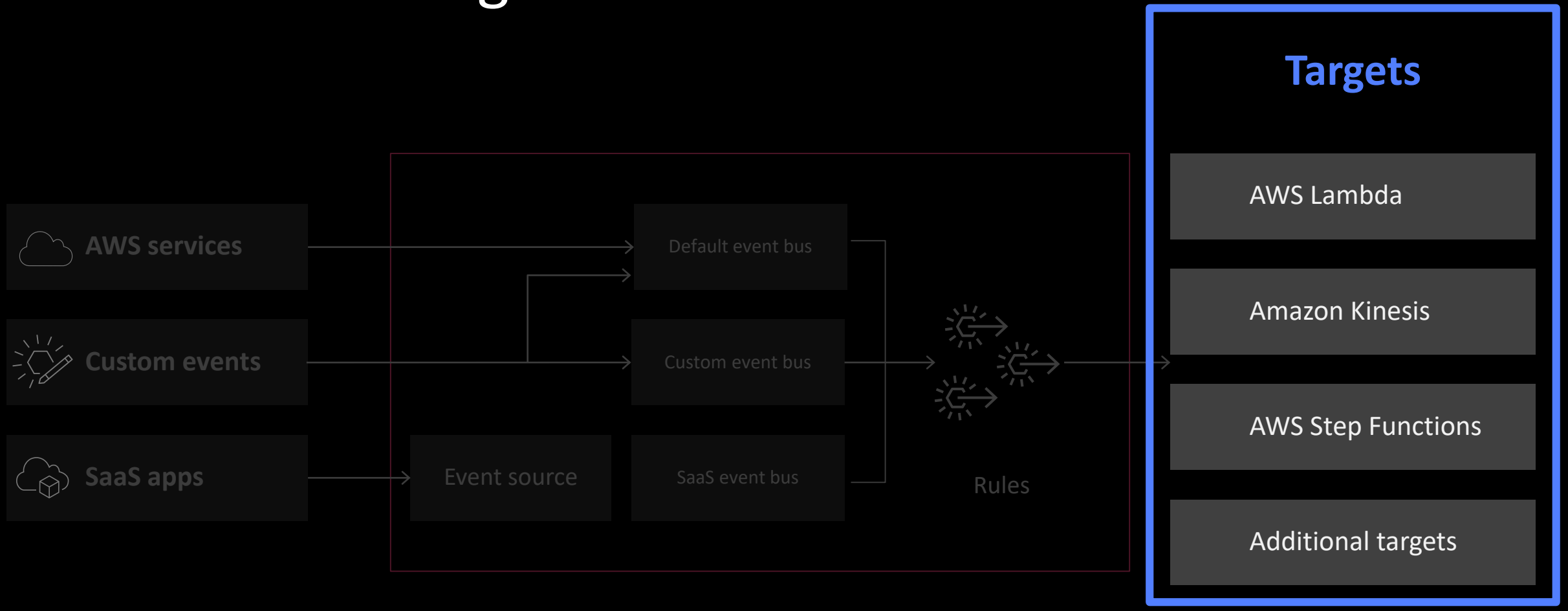
Amazon EventBridge



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Limits

Resource	Default Limit
Invocations	750 per second (after 750 invocations, the invocations are throttled
Rules	100 per Region per account
PutEvents	400 requests per second with 10 entries per request. Each request can be up to 256 KB in size.
Event Buses	100 per region per account

All limits can be increased on request.

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Amazon EventBridge vs. SNS

	Amazon EventBridge	SNS
Sources	95 AWS services (no configuration needed) 10 SaaS applications Custom applications	30 AWS services (a topic must be created and source service configured to publish to the topic) Custom applications
Targets	17 AWS services	2 AWS services + 4 web & mobile endpoints
Fan Out	5 targets per rule	Supports millions of subscribers per topic
Filtering	Rules apply to entire event body (up to 256KB)	Filters apply only to message attributes (up to 256 KB)
Latency	Median of 560 msec	Median of 25 msec
Price	AWS event sources are free $1.00/million custom or SaaS events Free to deliver events to any AWS target	$0.50/million messages to a topic Deliveries to AWS services (SQS, Lambda) are free. $0.50/million for mobile push, $0.60/million for HTTP/S, $20/million for email, SMS deliveries vary by region

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Building a Simple Event Driven Application

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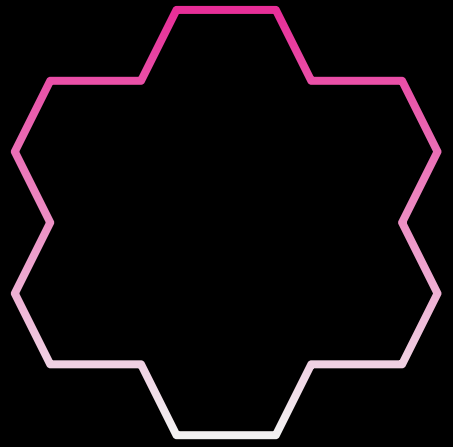
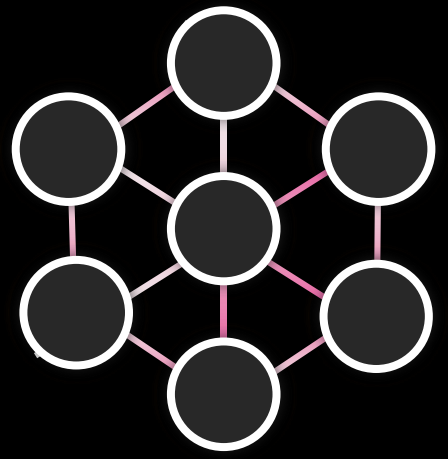
Monoliths and microservices



Monolith

Does everything



Microservices

Does one thing

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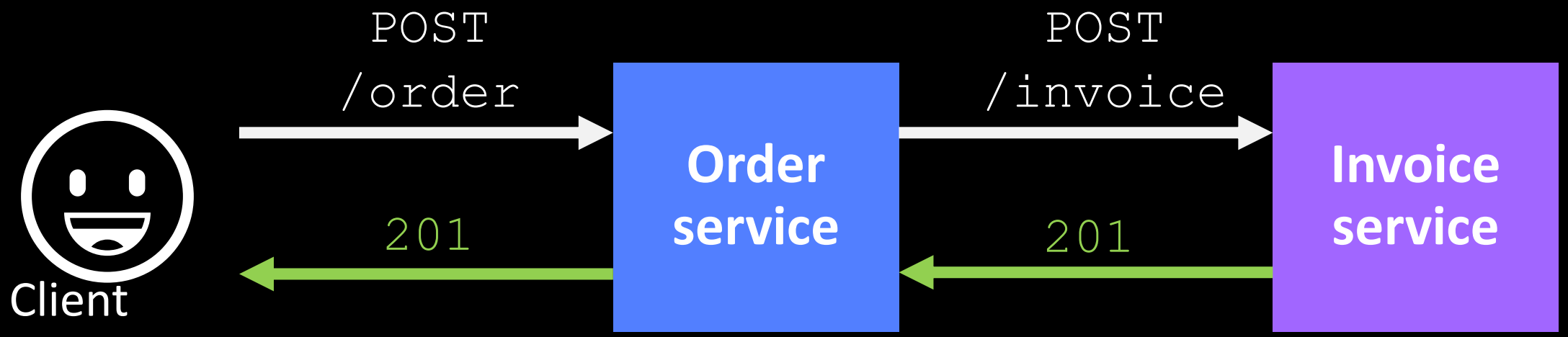
Synchronous APIs



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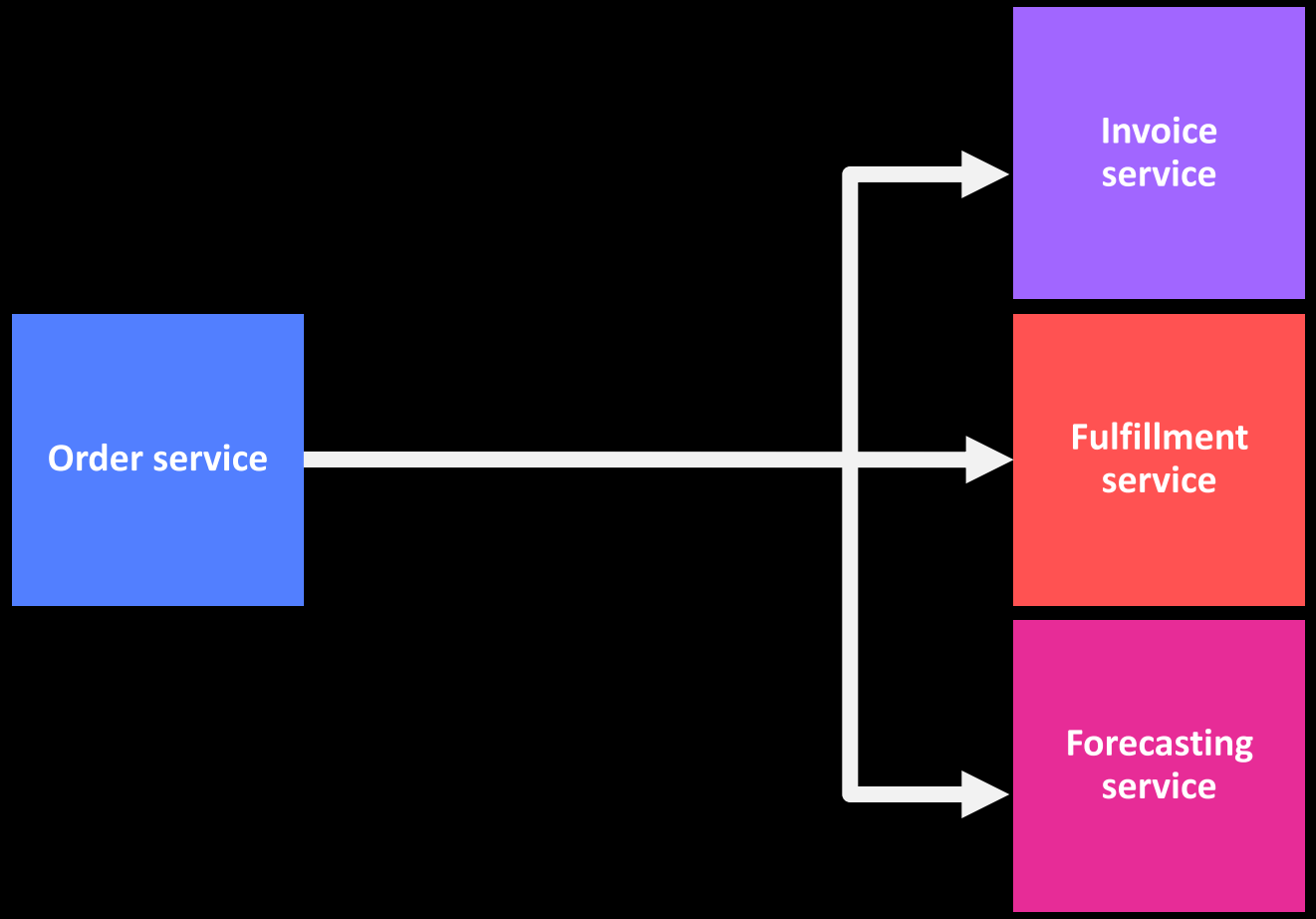
Architecture v2



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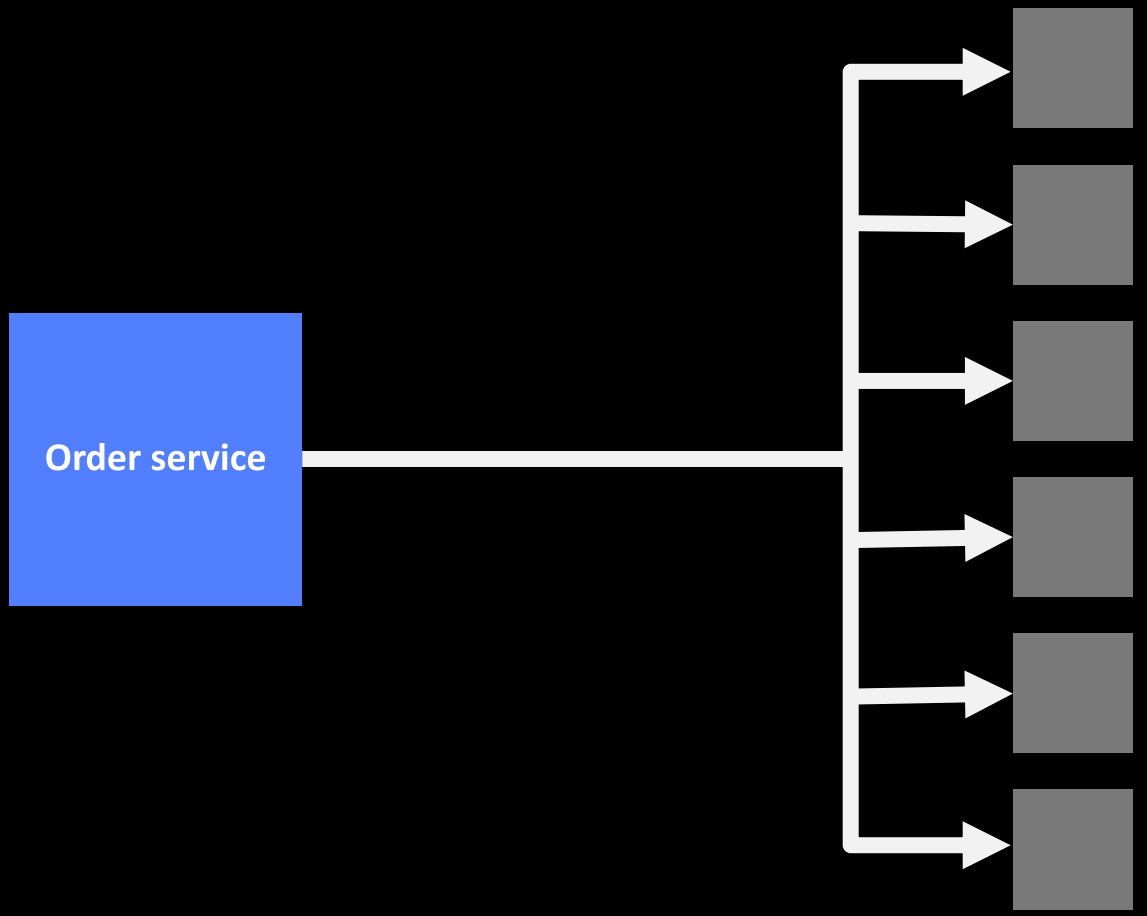
Long-term architecture



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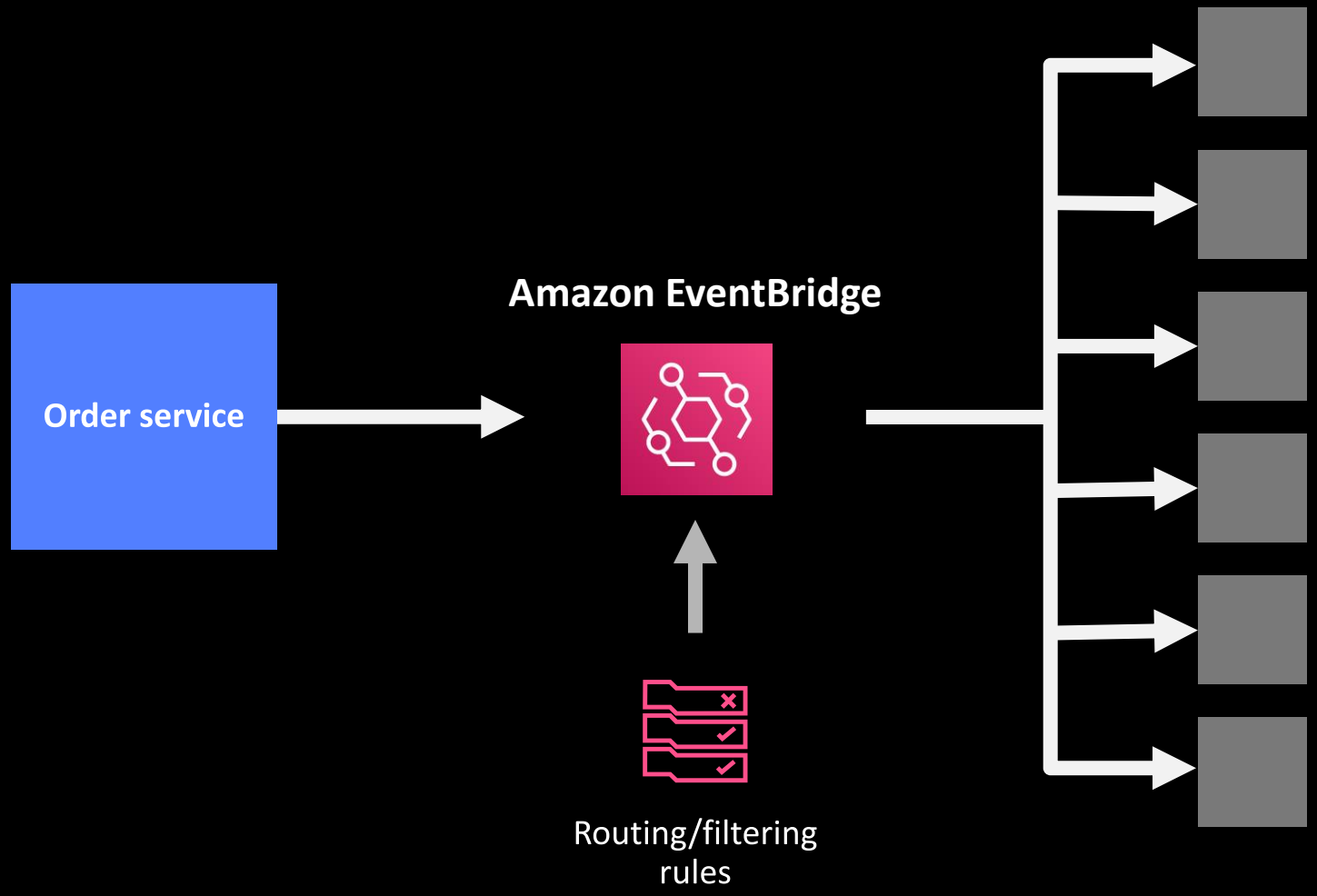
Event routers for fan out



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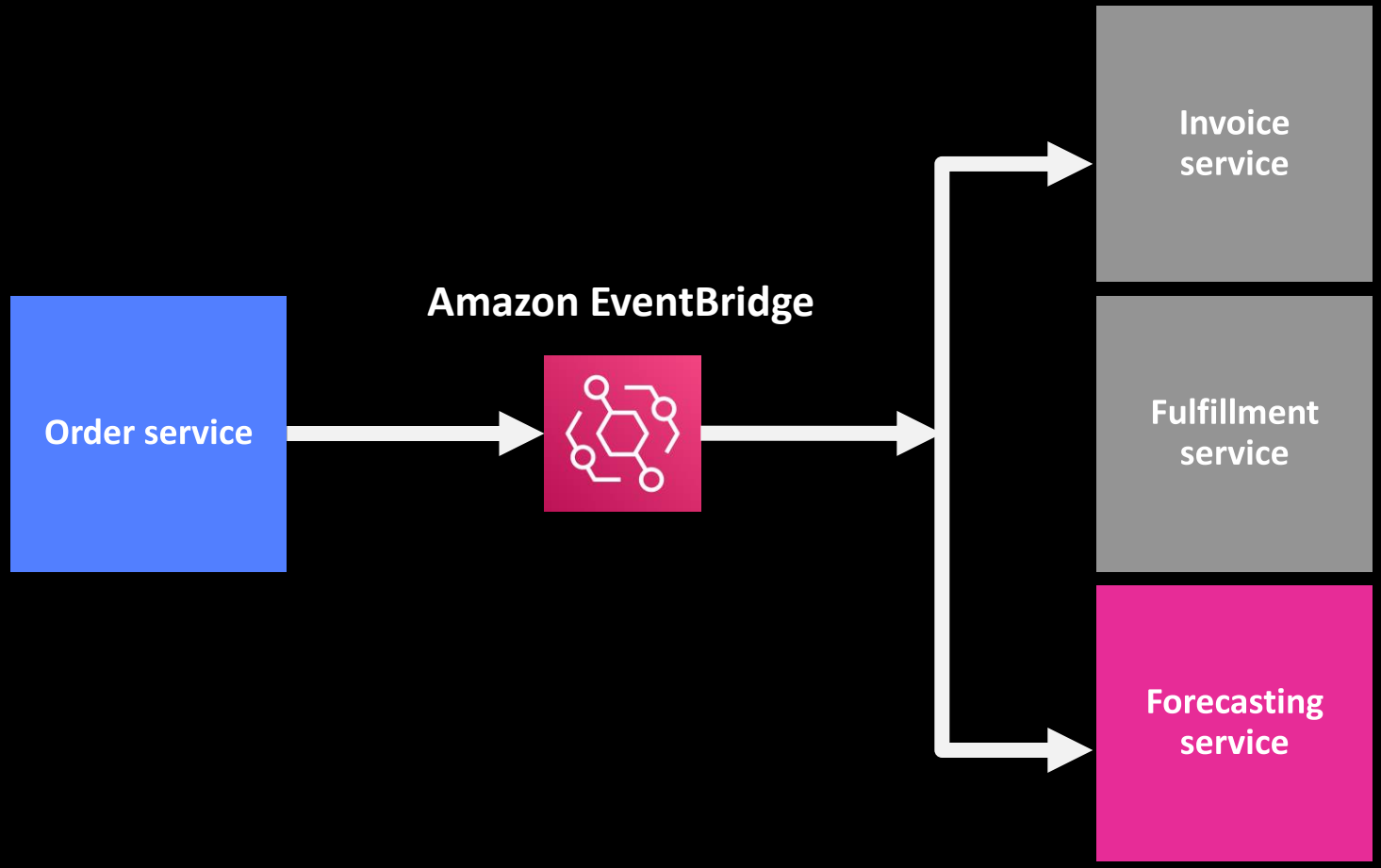

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Handling Webhooks

API Gateway + EventBridge

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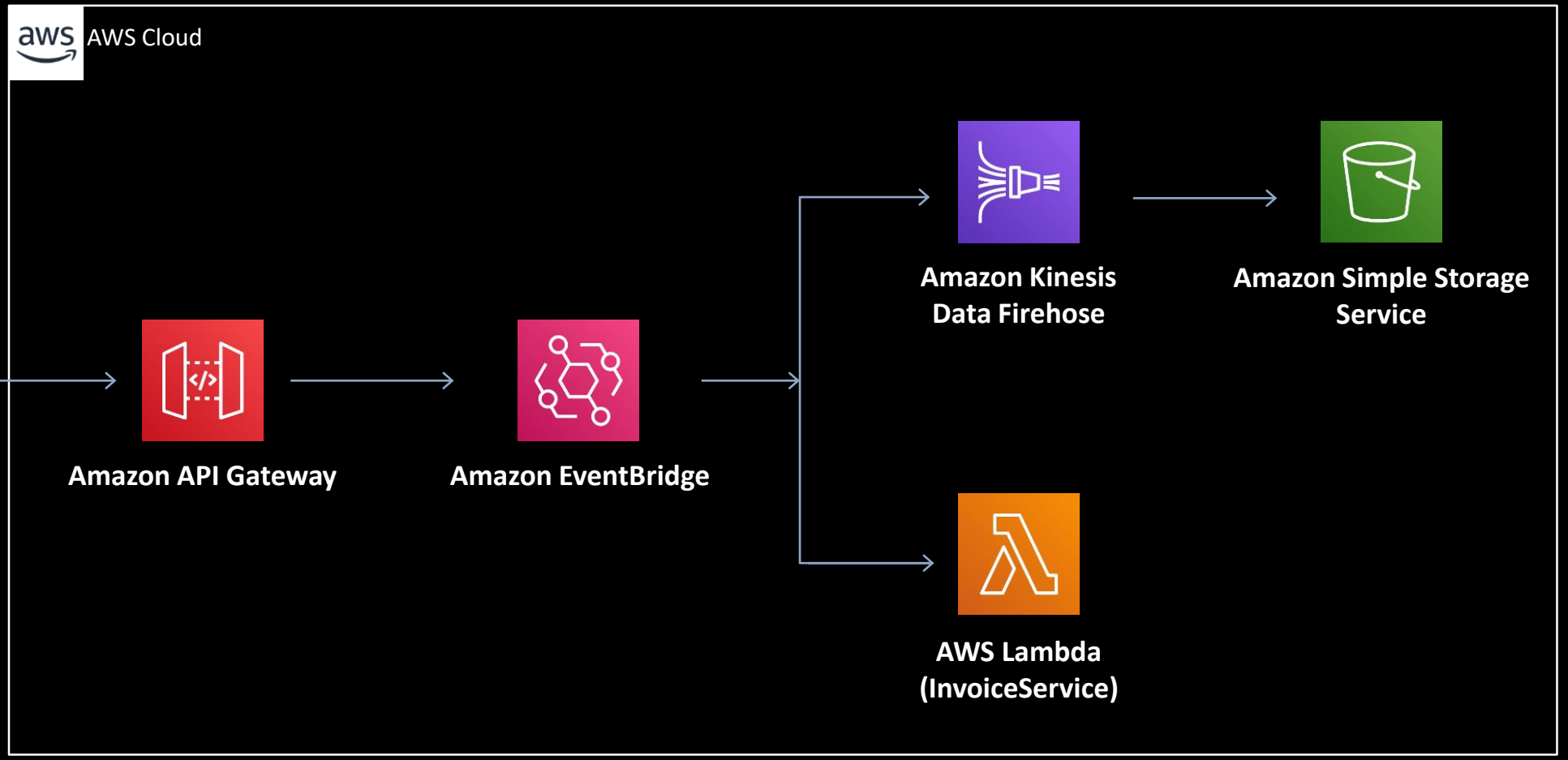
stripe


```
{
 "detail-type": ”invoice.created",
 "source": ”stripe",
 "detail": {
  "listingId": "evt_364bSdCa5Z",
  ”amount_due": 10,
  ”quantity": 1,
  ”customer”: "cus_FSdxj123",
  ”plan": ”monthly",
  ...
 }
}
```

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Zendesk Tickets: Sentiment Analysis

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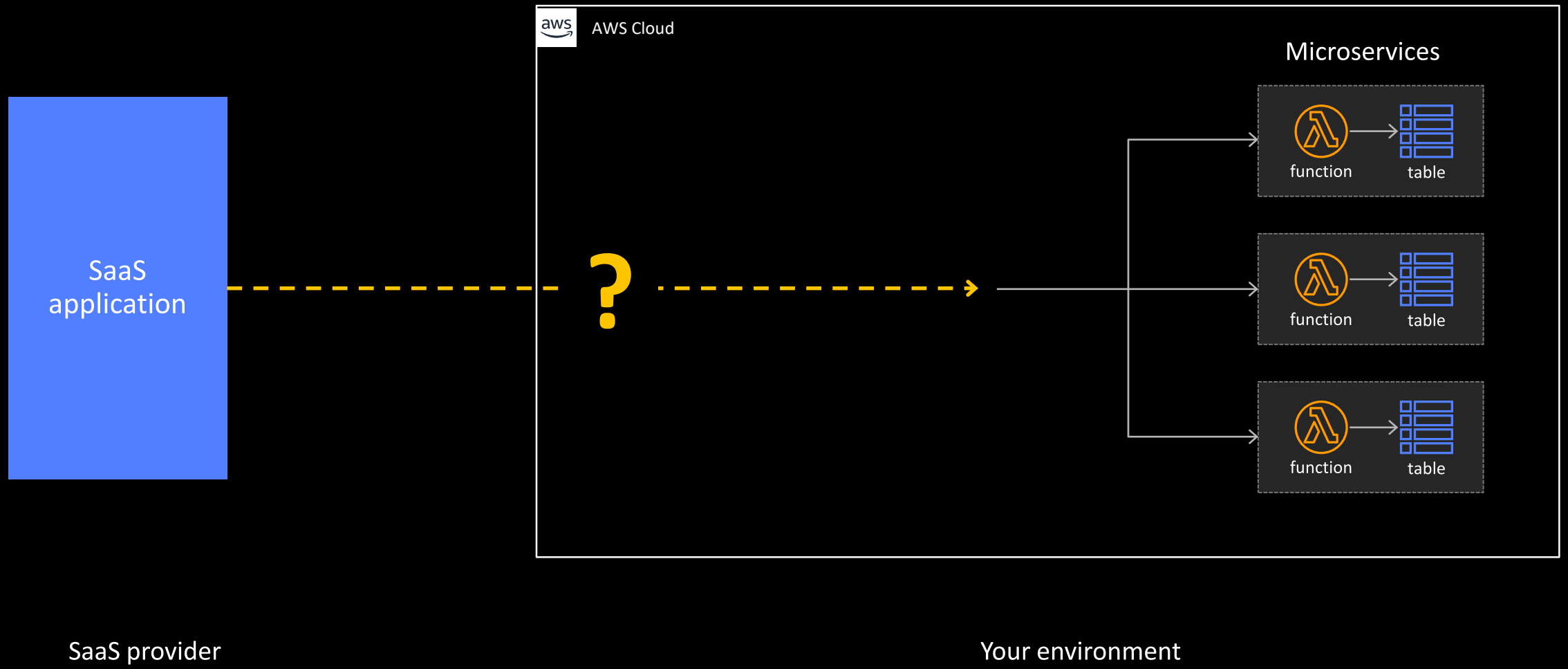
Bridging the gap



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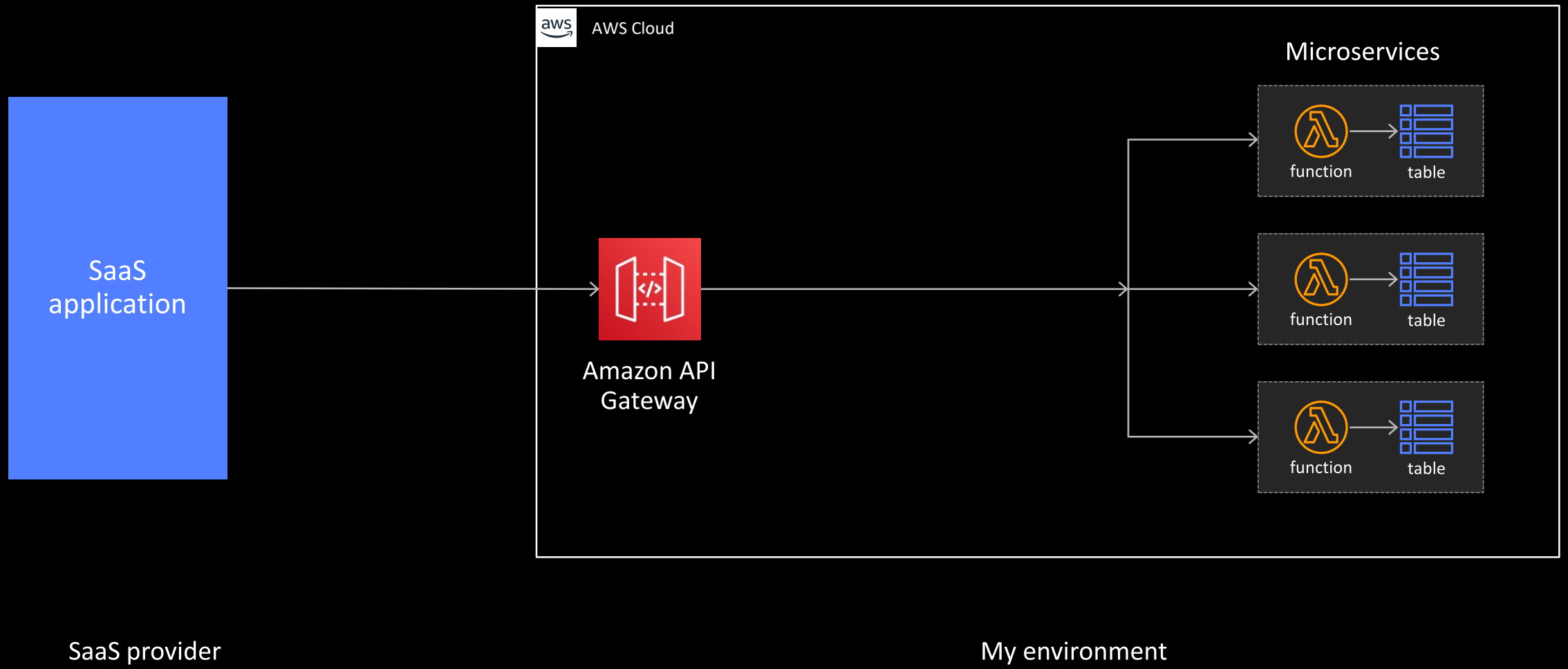
SaaS web hooks



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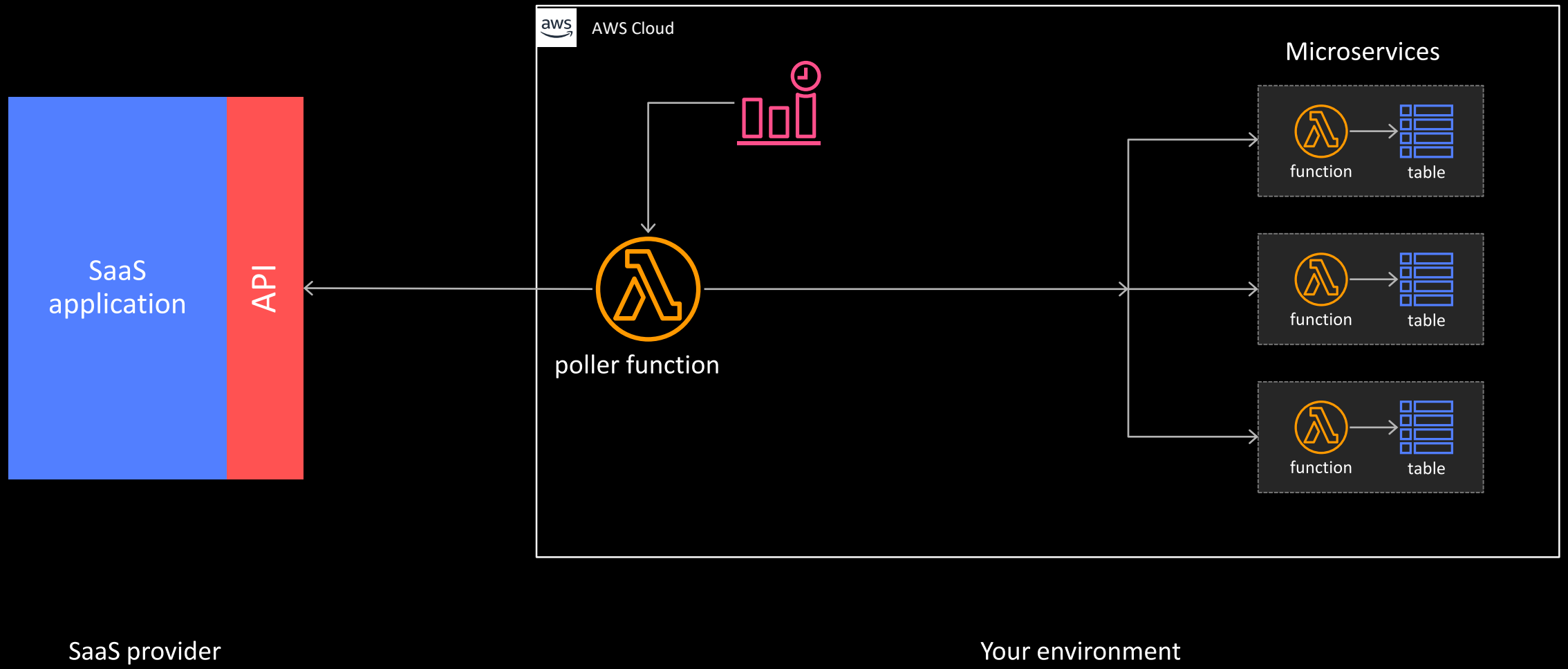
Polling



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Is there a better option?

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EventBridge Integration Partners

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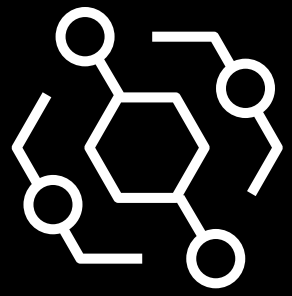

Resources

- Partners: eventbridge-partners@amazon.com
- https://aws.amazon.com/eventbridge/
- https://docs.aws.amazon.com/eventbridge/index.html

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Questions?

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