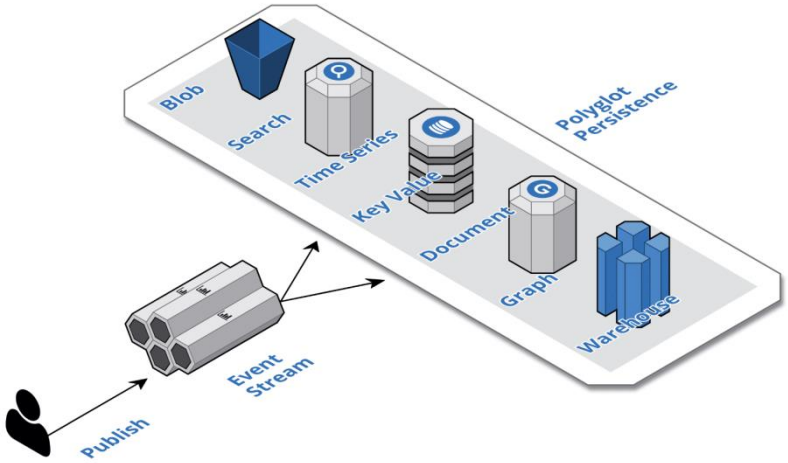
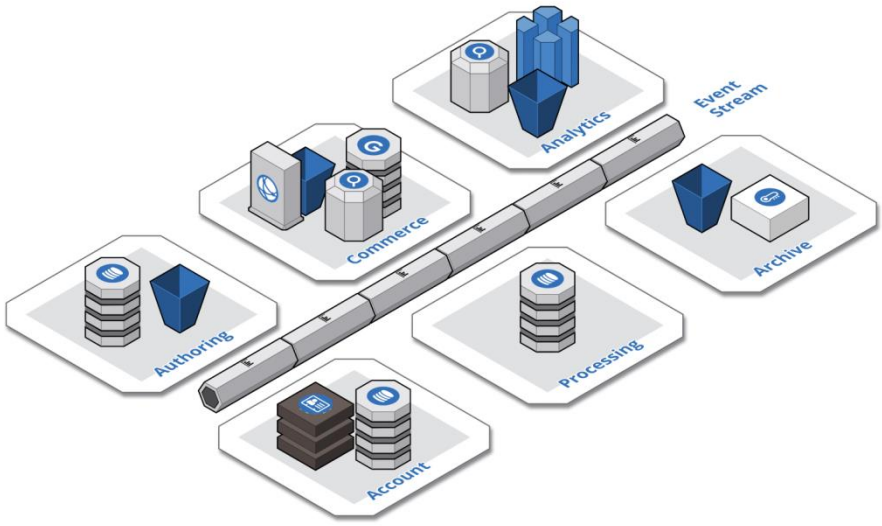
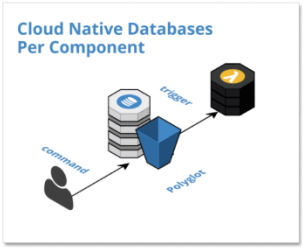
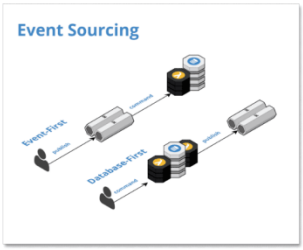
Chapter 2: The Anatomy of Cloud Native Systems



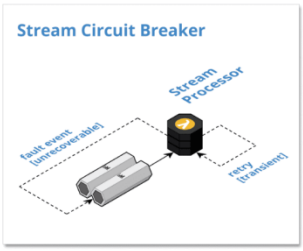


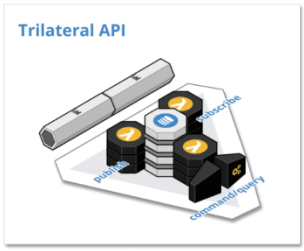

Cloud Native Databases
Per Component
trigger
command
Polyglot

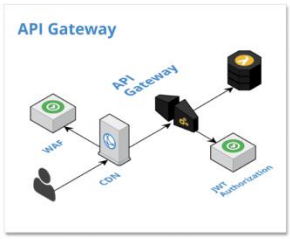
Event Streaming
subscribe
Consumer
publish
Event
Stream
Producer


Event Sourcing
Event-First
publish
command
Database-First
publish
command

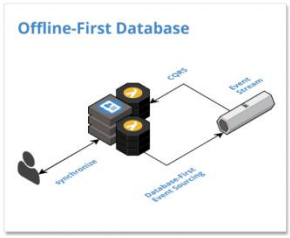
Data Lake
Data Lake
subscribe

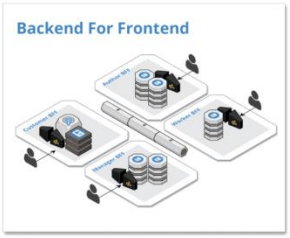

Stream Circuit Breaker
Stream
Processor
fault event
(unrecoverable)
retry
(transient)

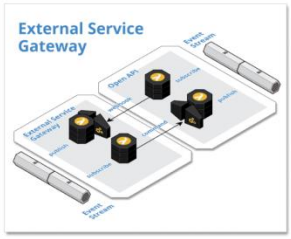

Trilateral API
subscribe
publish
command/query


API Gateway
API
Gateway
WAF
CDN
JWT
Authorization

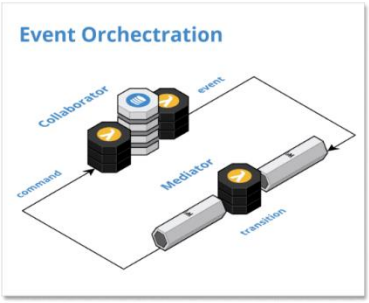
Command Query
Responsibility Segregation
(CQRS)
Materialized
View
query
consume
Event
Stream

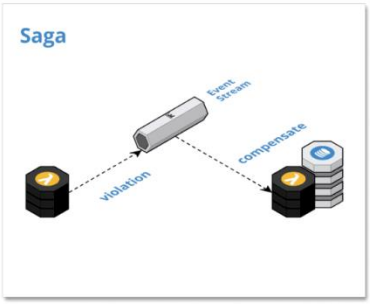

Offline-First Database
CQRS
Event
Stream
synchronize
Database-First
Event Sourcing

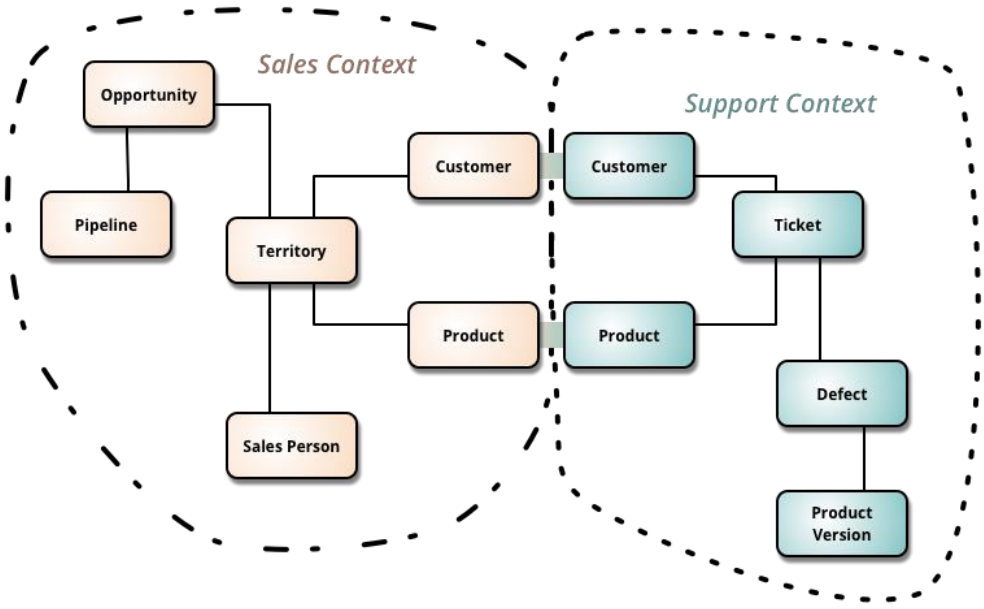

Backend For Frontend

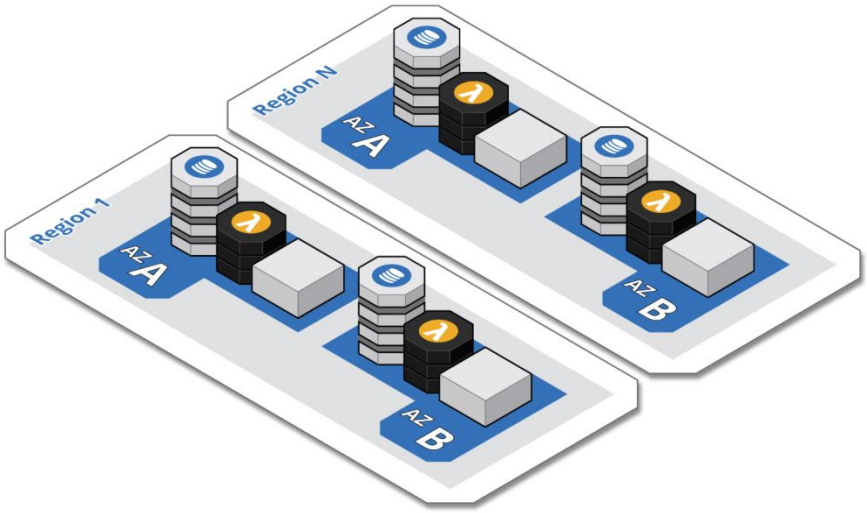

External Service
Gateway
Event
Stream
Open API
subscribe
publish
External Service
Gateway
publish
subscribe
Event
Stream

Event Collaboration
Collaborator
event
command
publish
Event Stream
consume

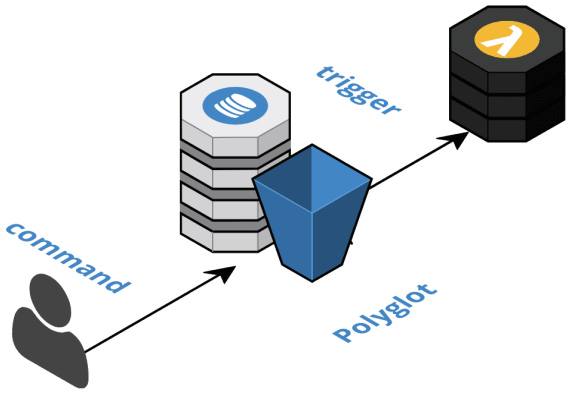

Event Orchectration
Collaborator
event
command
Mediator
transition

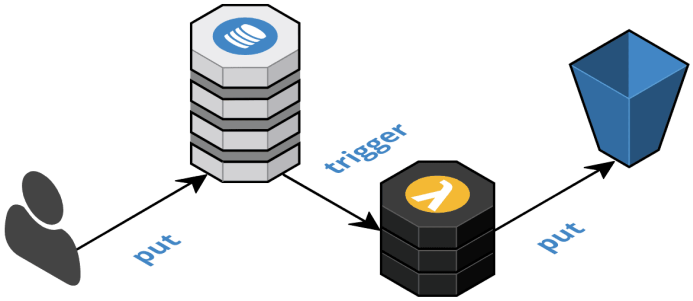

Saga
Event Stream
compensate
violation

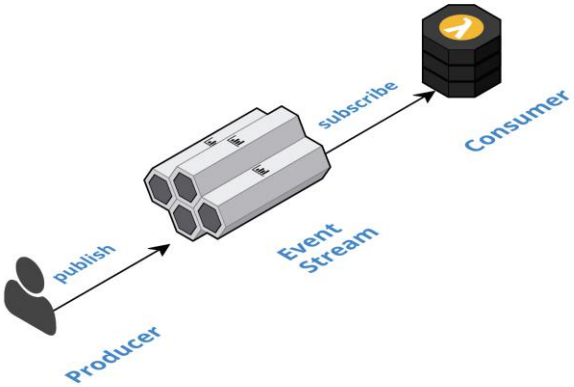

Sales Context
Support Context
Opportunity
Pipeline
Territory
Customer
Product
Sales Person
Customer
Ticket
Product
Defect
Product Version

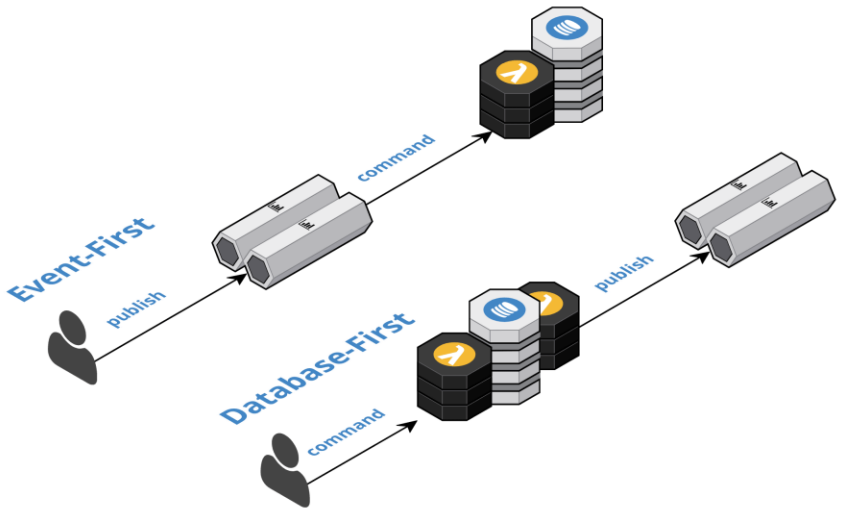

Region N
AZ A
AZ B
Region 1
AZ A
AZ B

Chapter 3: Foundation Patterns

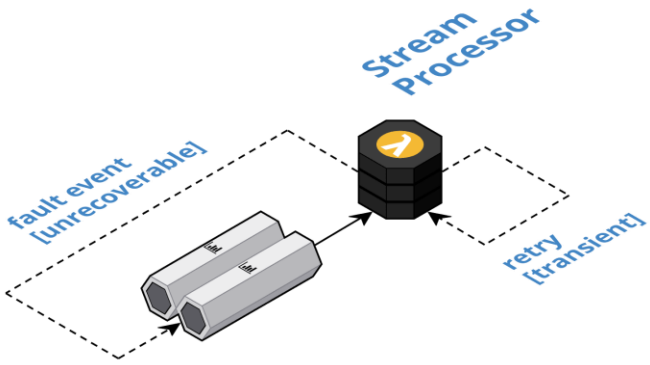


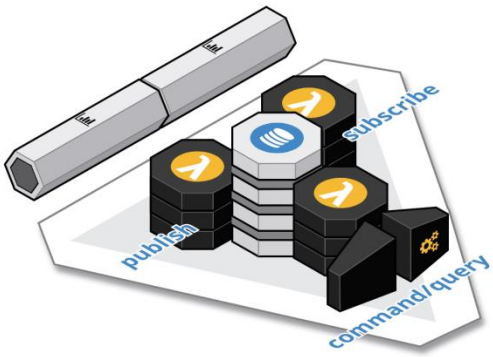




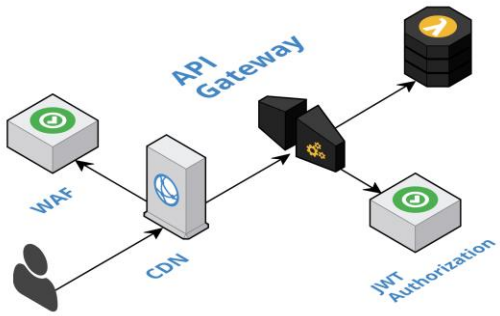

Event-First
publish
command
Database-First
command
publish

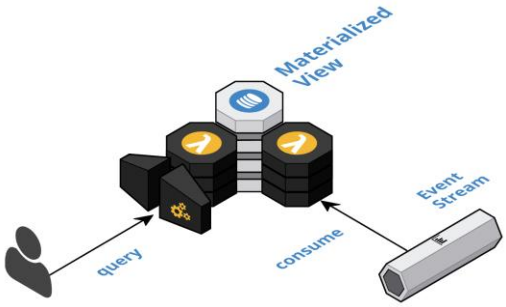
Data Lake
subscribe

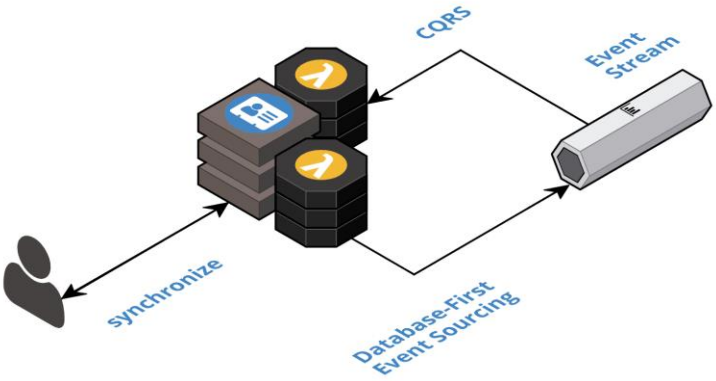

Stream Processor
fault event [unrecoverable]
retry [transient]

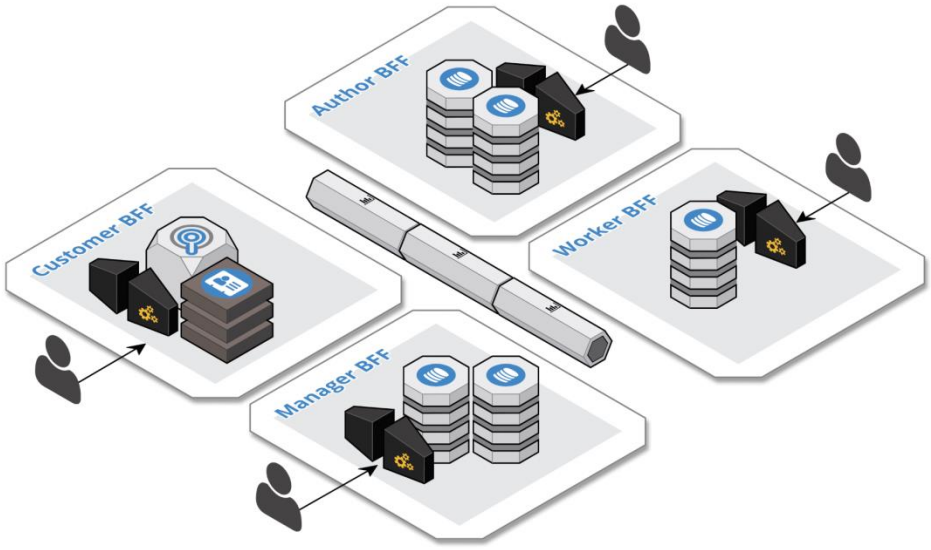

subscribe
publish
command/query

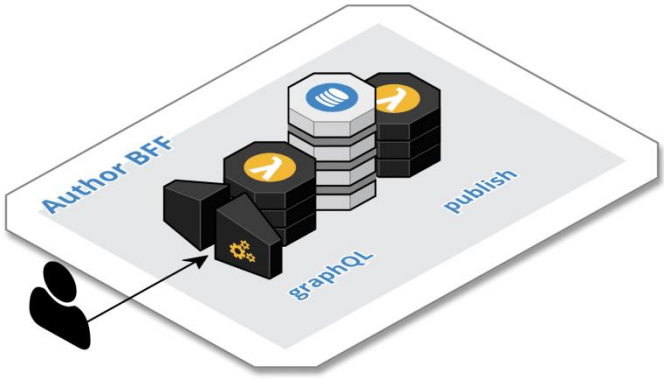
Chapter 4: Boundary Patterns

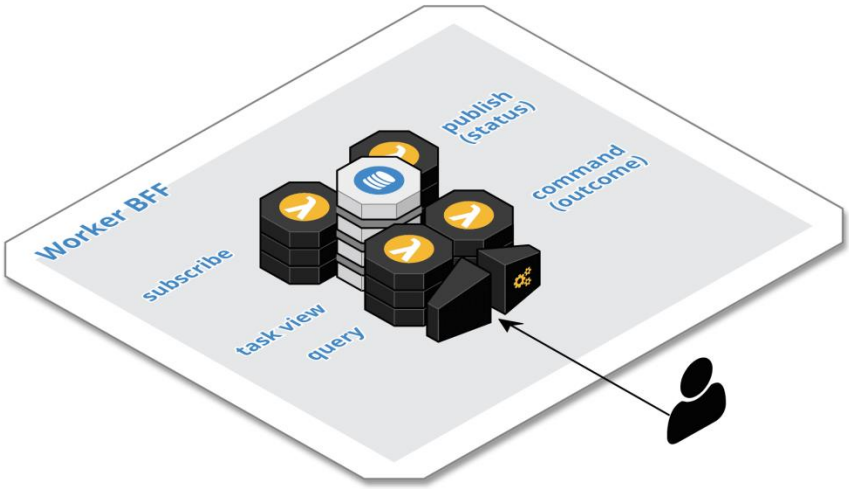


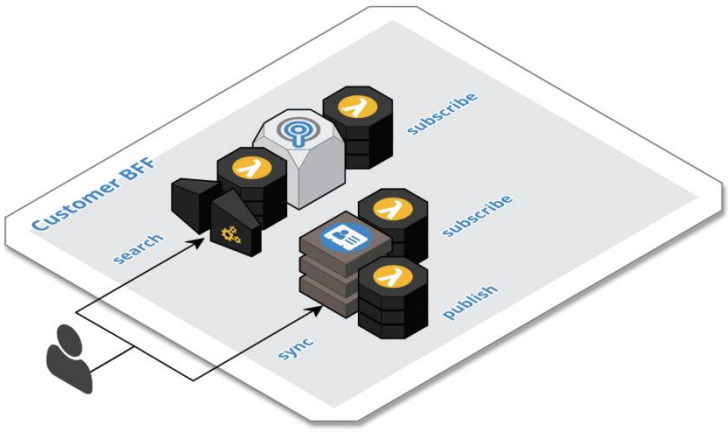


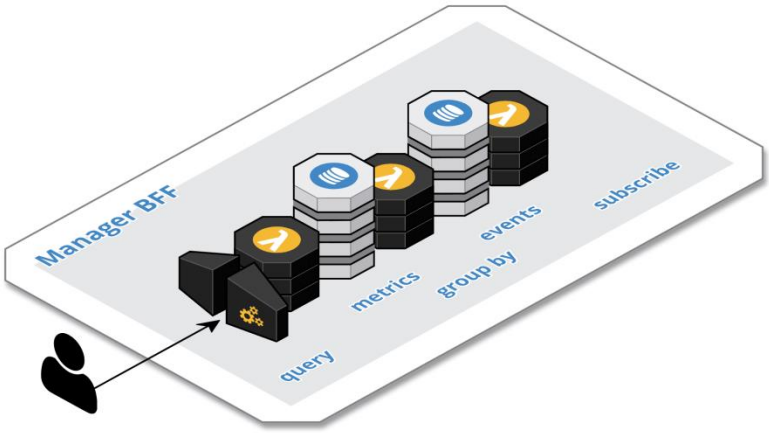


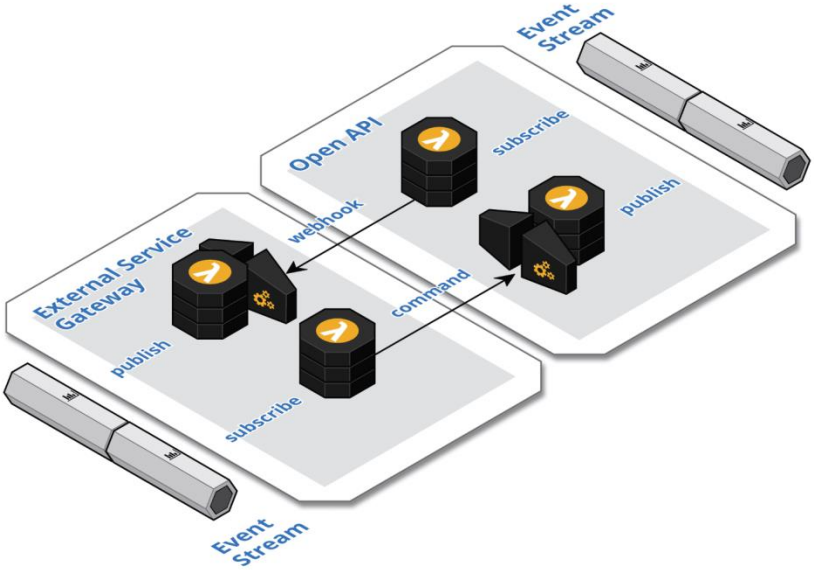

Author BFF
Customer BFF
Worker BFF
Manager BFF


Author BFF
publish
GraphQL

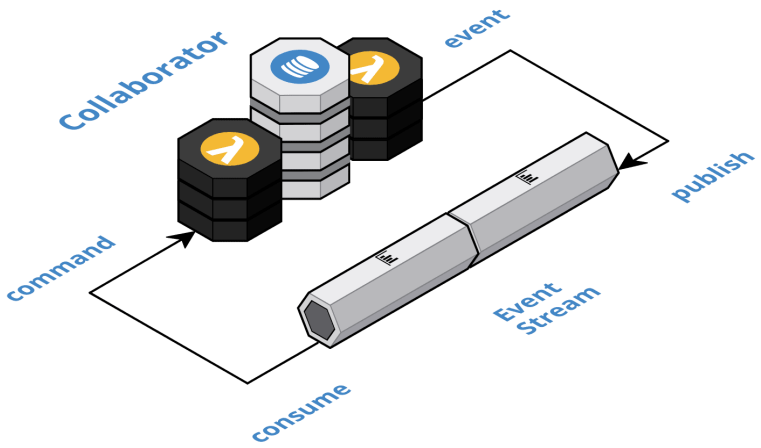

Worker BFF
publish
(status)
command
(outcome)
subscribe
task view
query

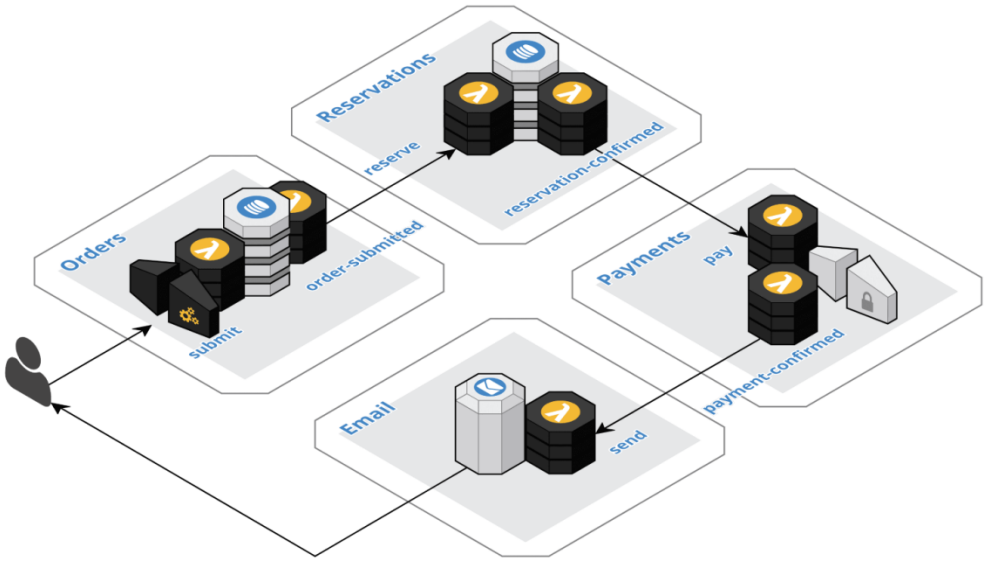

Customer BFF
search
sync
subscribe
subscribe
publish

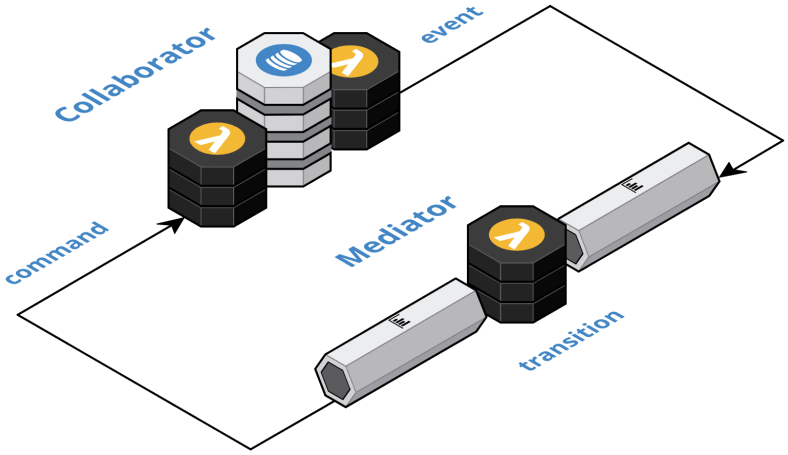

Manager BFF
query
metrics
group by
events
subscribe

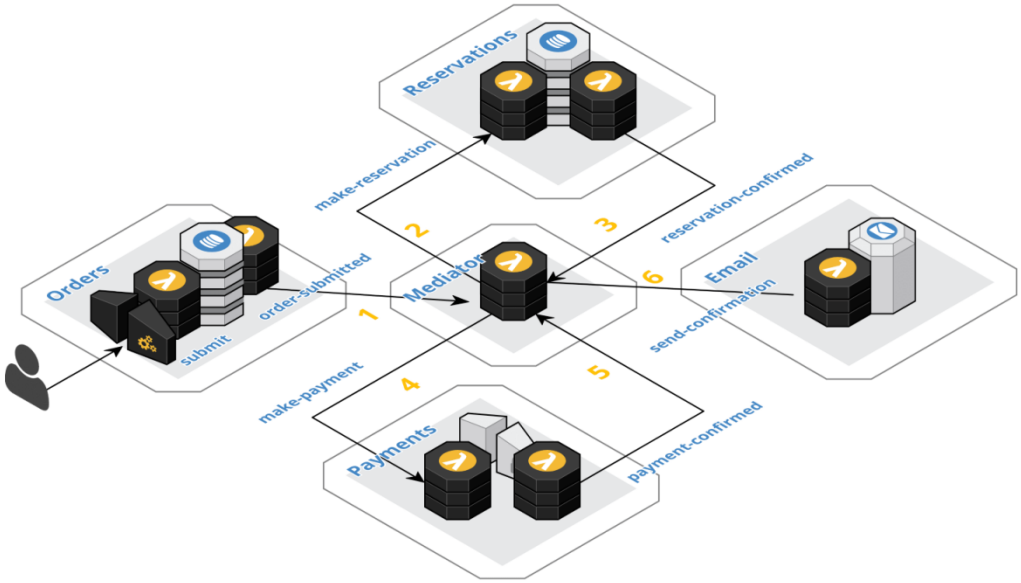

Event Stream
Open API
subscribe
publish
webhook
command
External Service Gateway
publish
subscribe
Event Stream

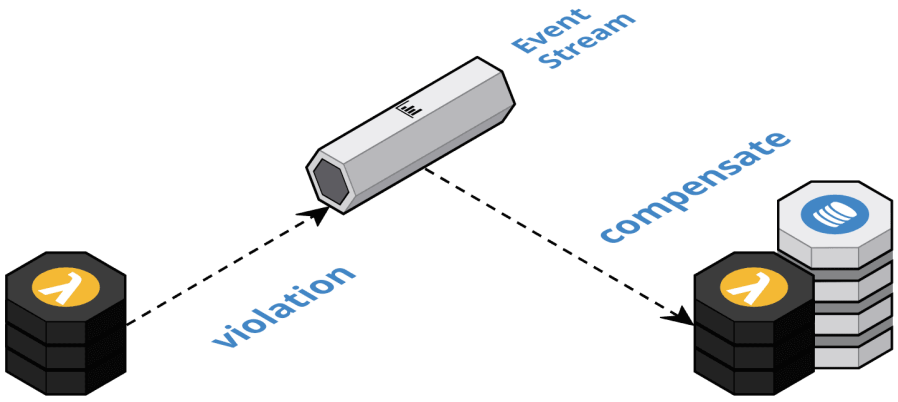
Chapter 5; Control Patterns

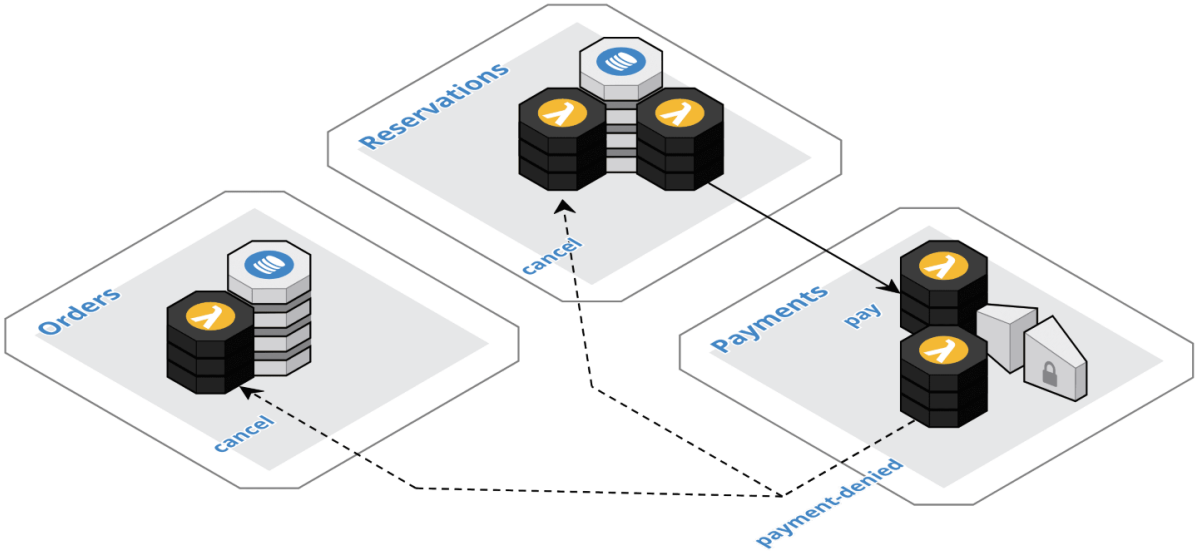


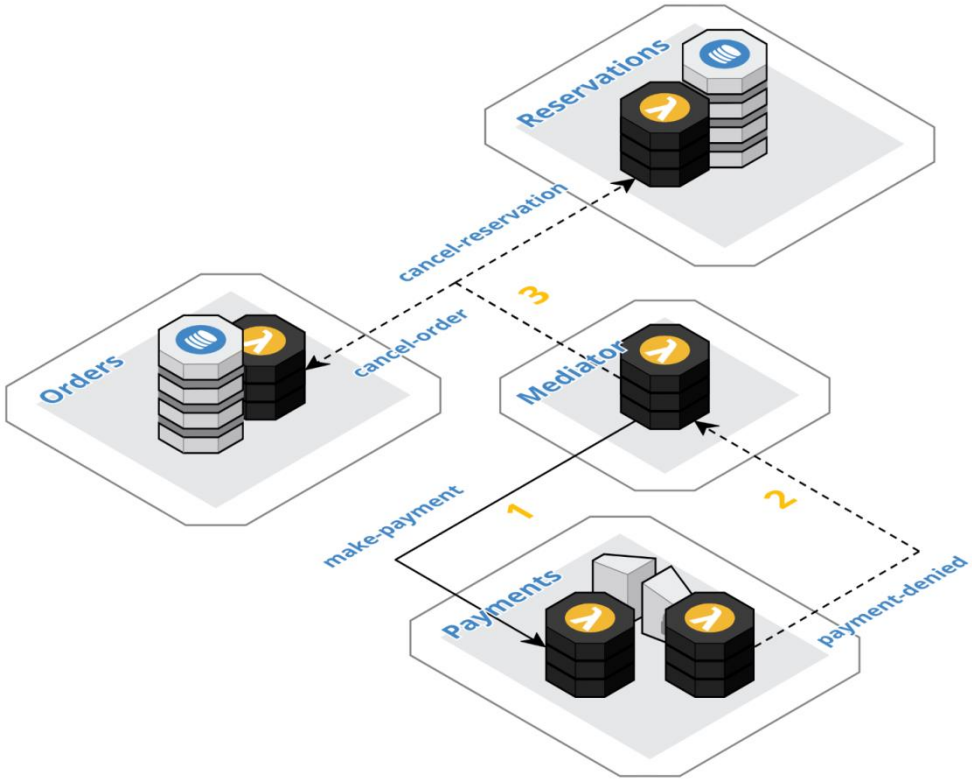


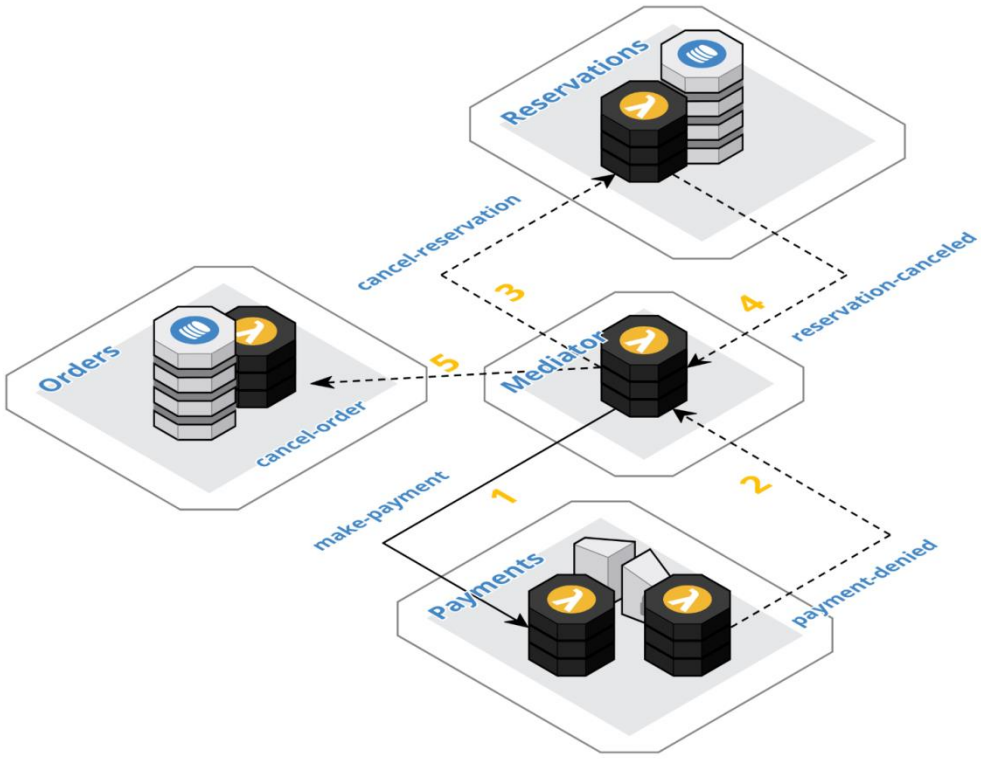

Collaborator
event
command
Mediator
transition


Reservations
make-reservation
2
3
reservation-confirmed
Orders
order-submitted
Mediator
6
Email
submit
1
send-confirmation
make-payment
4
5
Payments
payment-confirmed

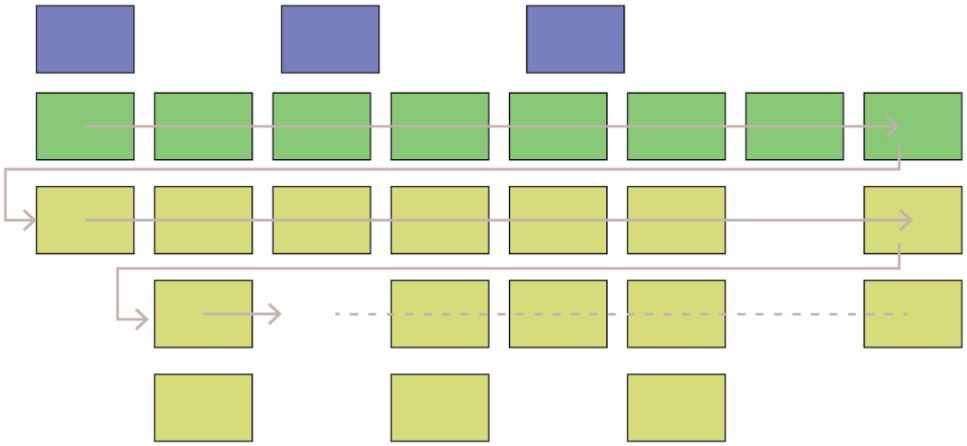

Event
Stream
compensate
violation

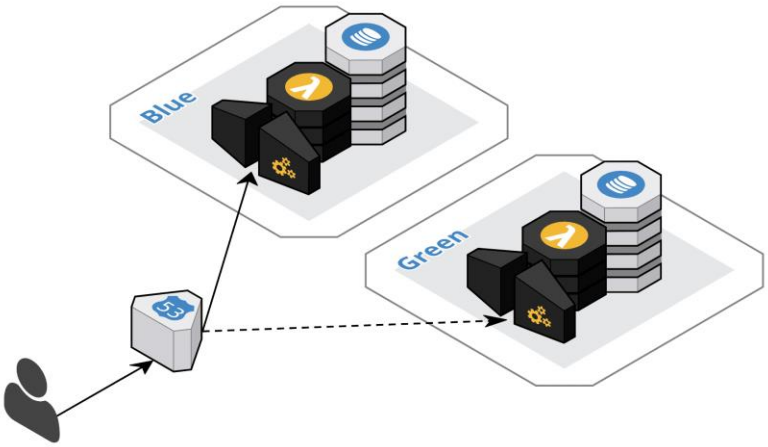

Reservations
Orders
Payments
cancel
cancel
pay
payment-denied

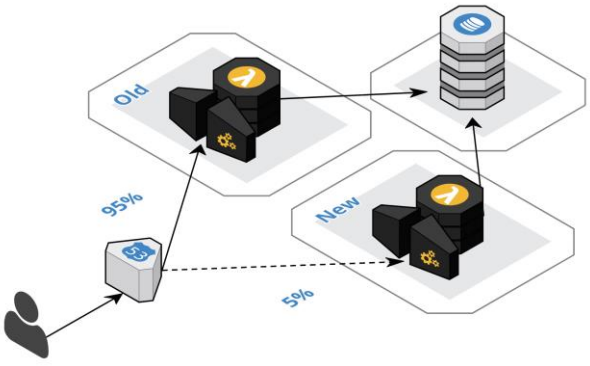

Reservations
cancel-reservation
3
Orders
cancel-order
Mediator
make-payment
1
2
Payments
payment-denied

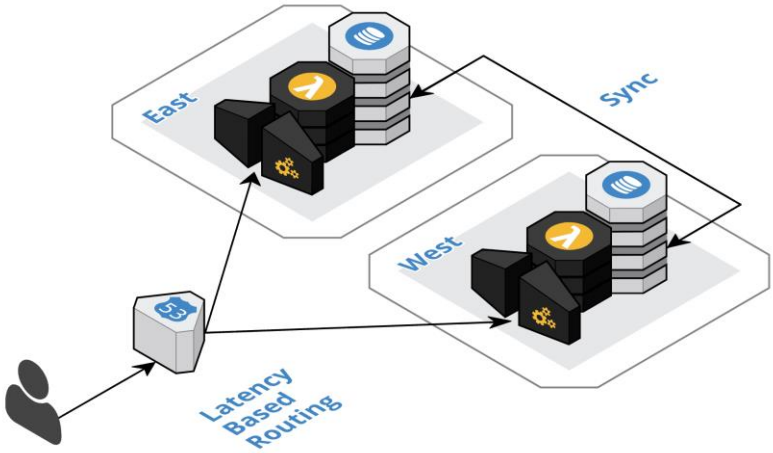

Reservations
cancel-reservation
3
4
reservation-canceled
Orders
5
Mediator
cancel-order
make-payment
1
2
Payments
payment-denied

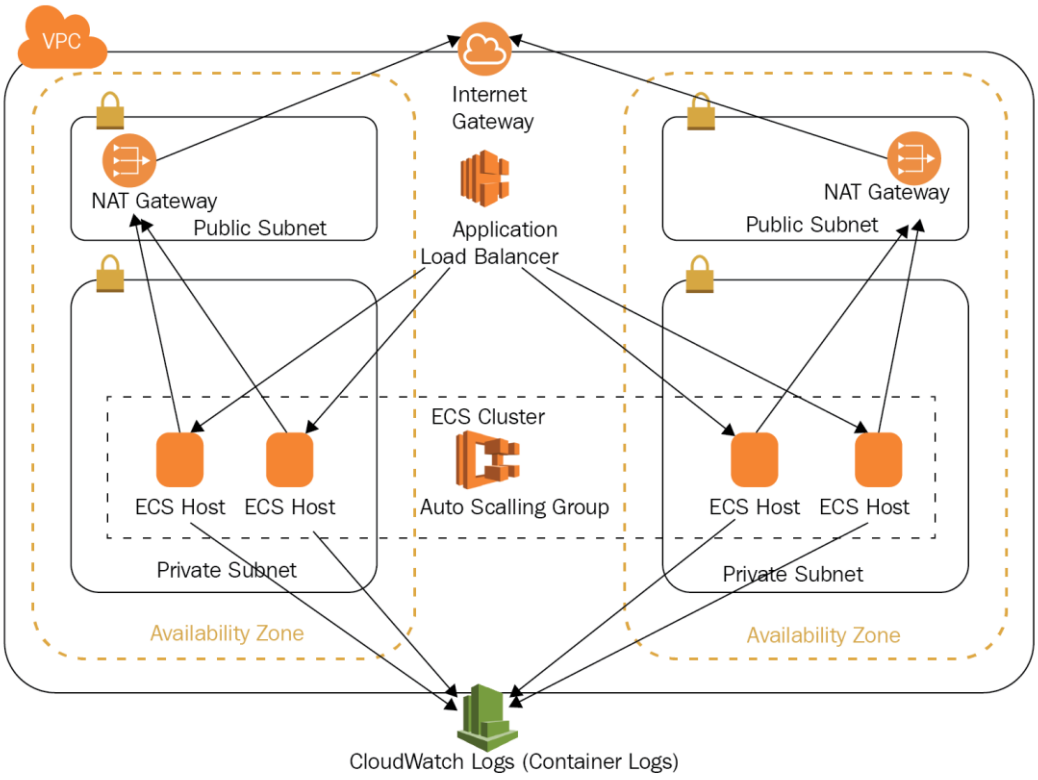
Chapter 6: Deployment



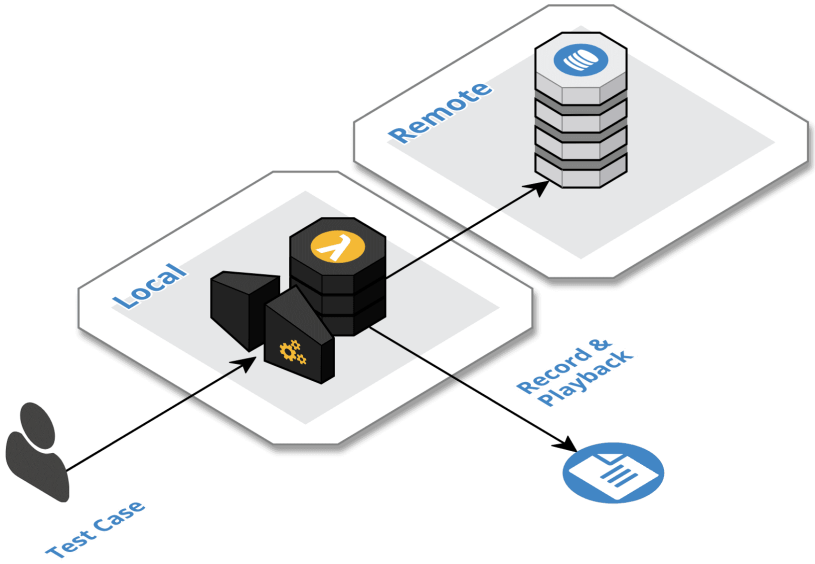


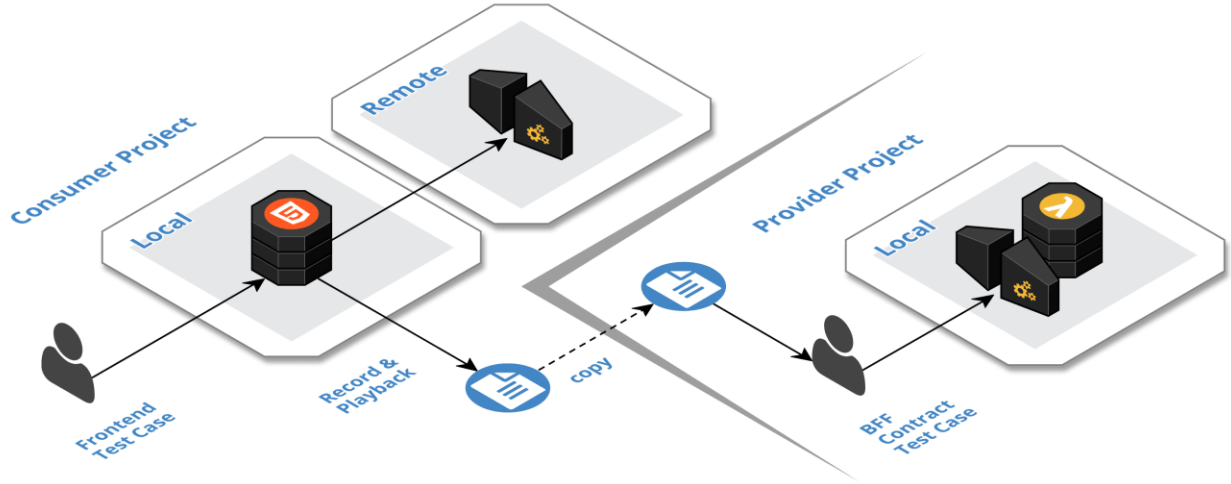


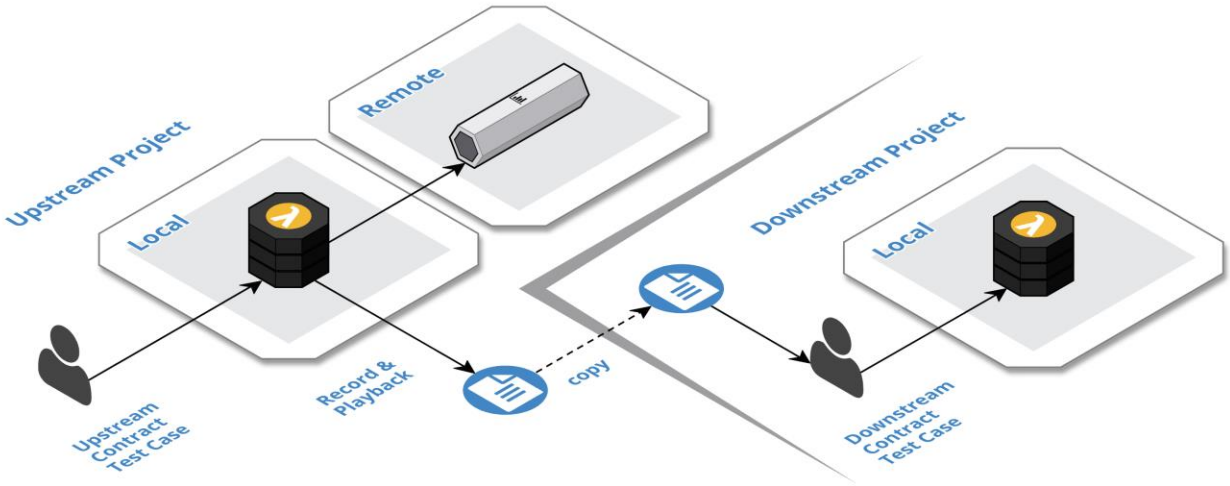

East
Sync
West
Latency
Based
Routing

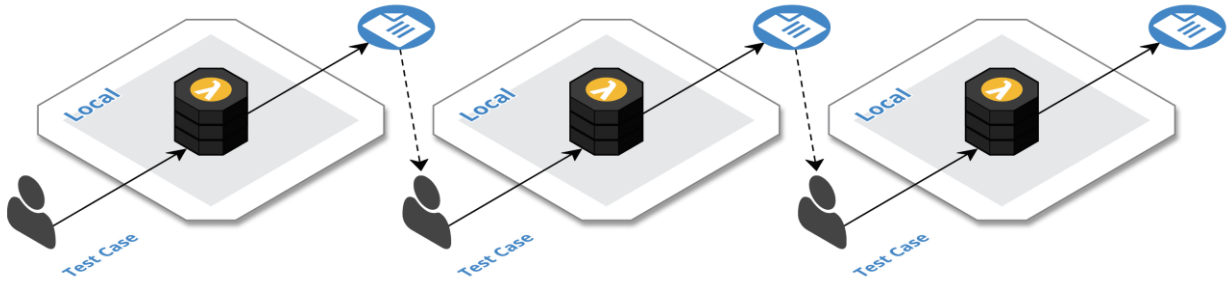

VPC
Internet
Gateway
NAT Gateway
Public Subnet
Application
Load Balancer
NAT Gateway
Public Subnet
ECS Cluster
ECS Host
ECS Host
Auto Scalling Group
ECS Host
ECS Host
Private Subnet
Private Subnet
Availability Zone
Availability Zone
CloudWatch Logs (Container Logs)

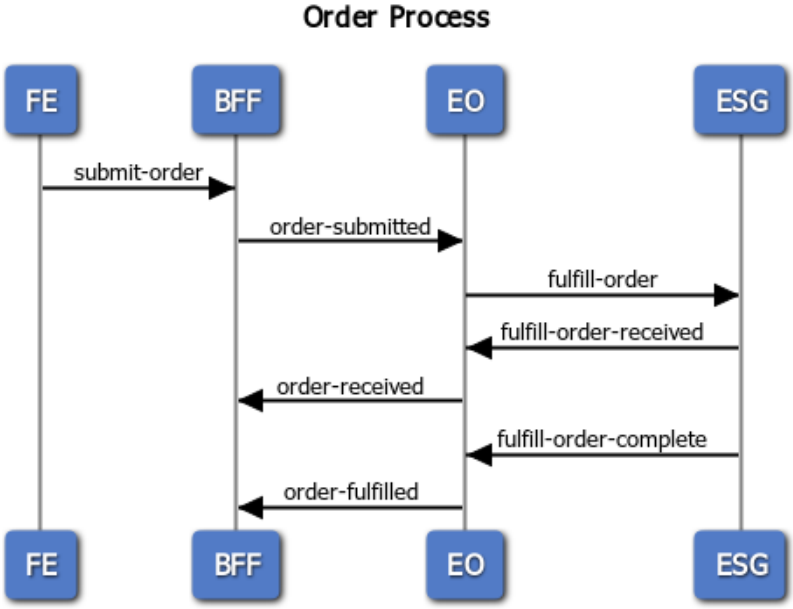
Chapter 7: Testing



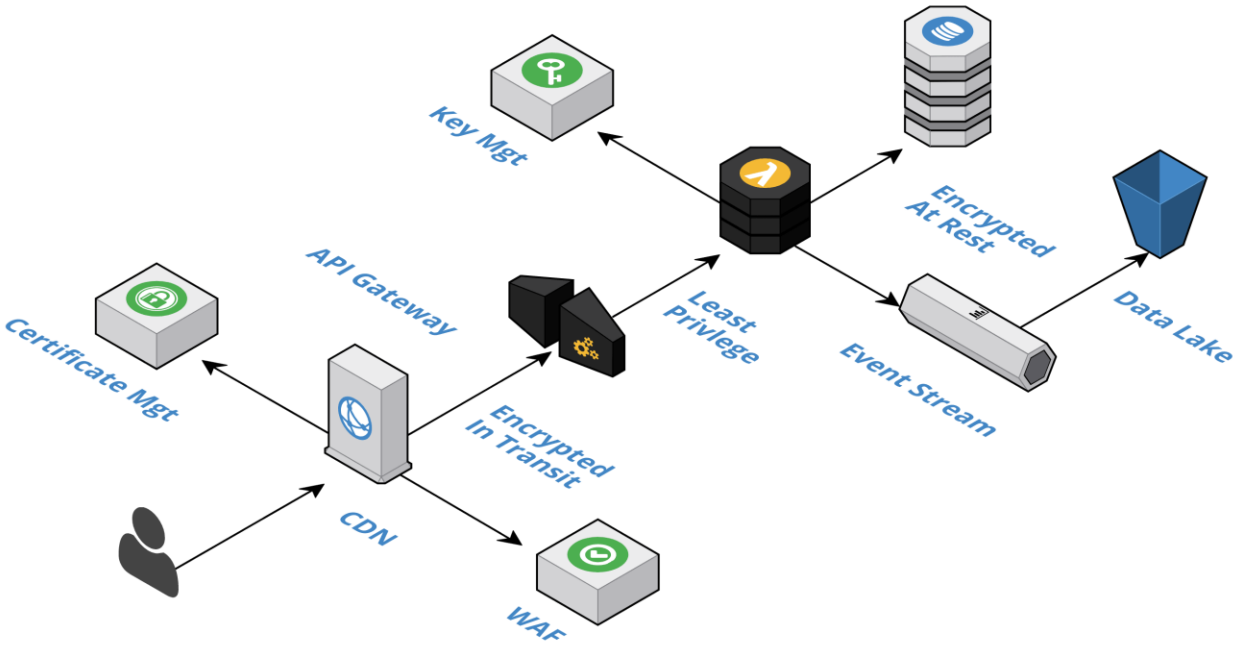


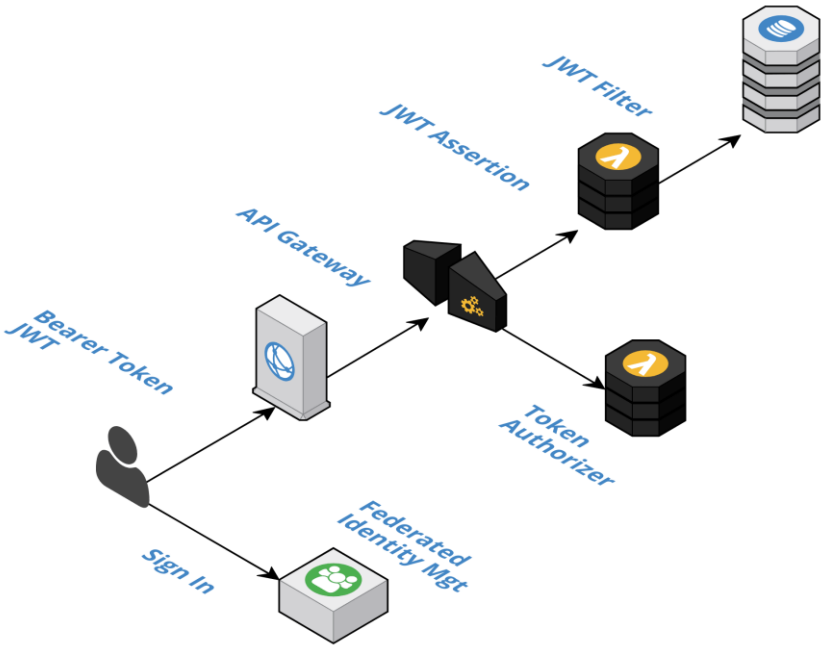
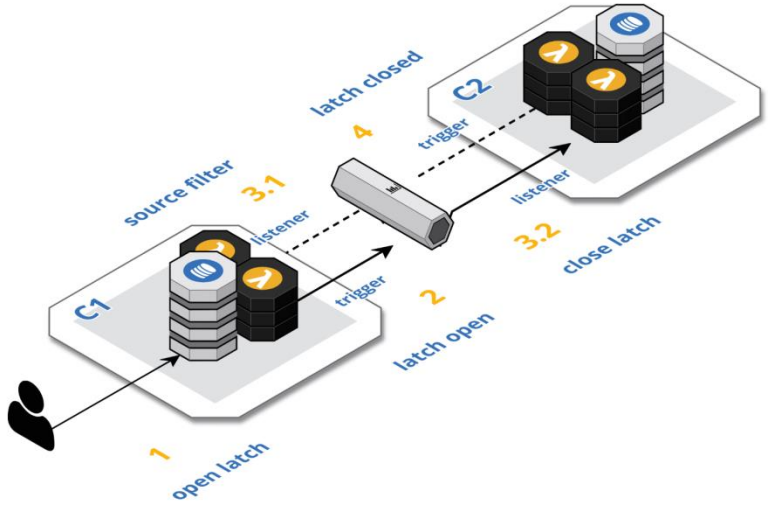
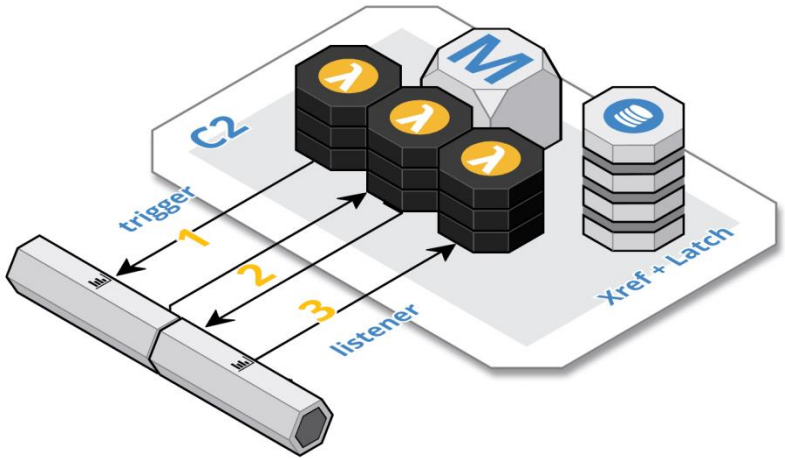

Upstream Project
Remote
Local
Downstream Project
Local
Record &
Playback
copy
Upstream
Contract
Test Case
Downstream
Contract
Test Case


Local
Local
Local
Test Case
Test Case
Test Case


Order Process
FE
BFF
EO
ESG
submit-order
order-submitted
fulfill-order
fulfill-order-received
order-received
fulfill-order-complete
order-fulfilled
FE
BFF
EO
ESG

Chapter 9: Security





Chapter 10: Value Focused Migration