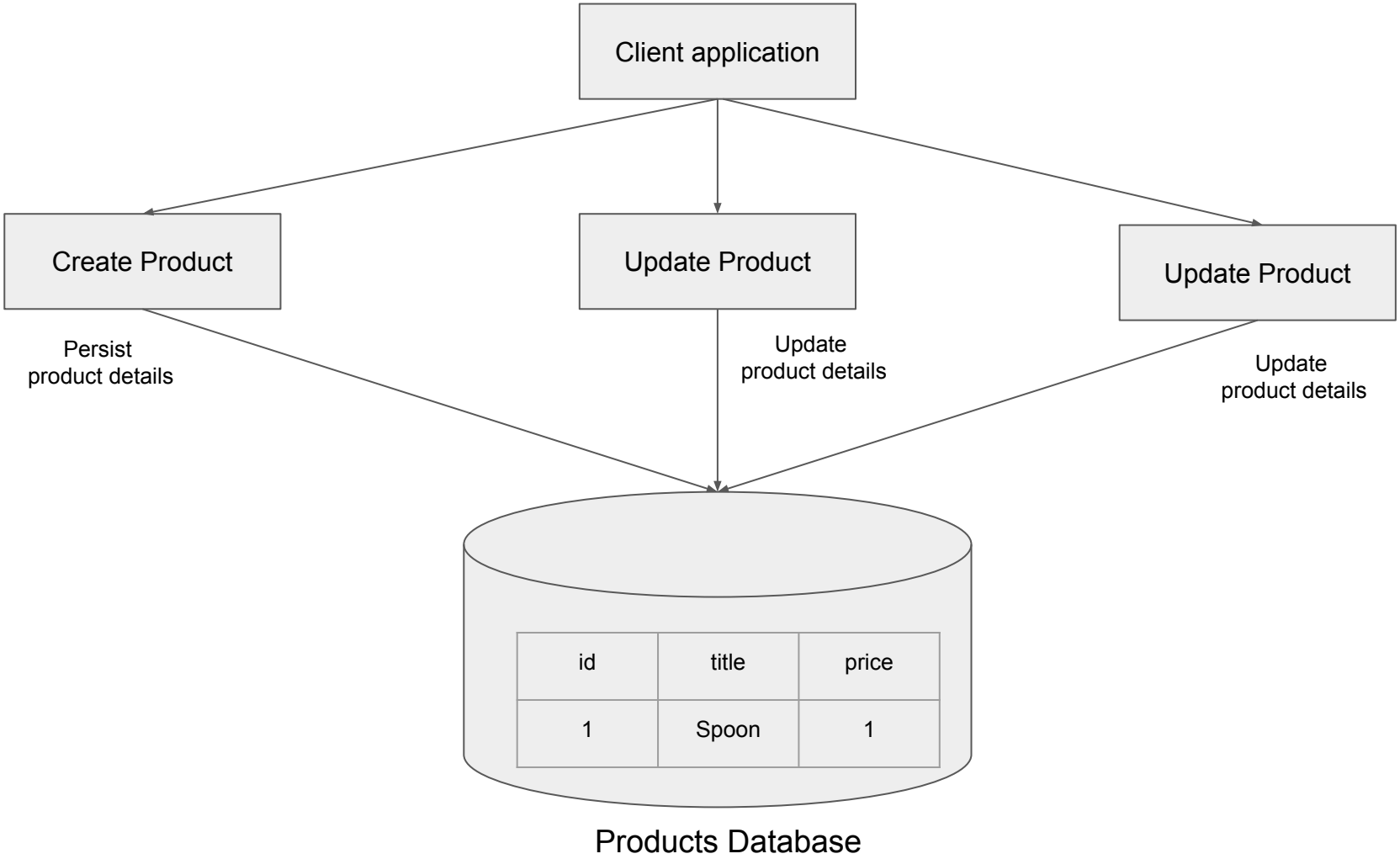
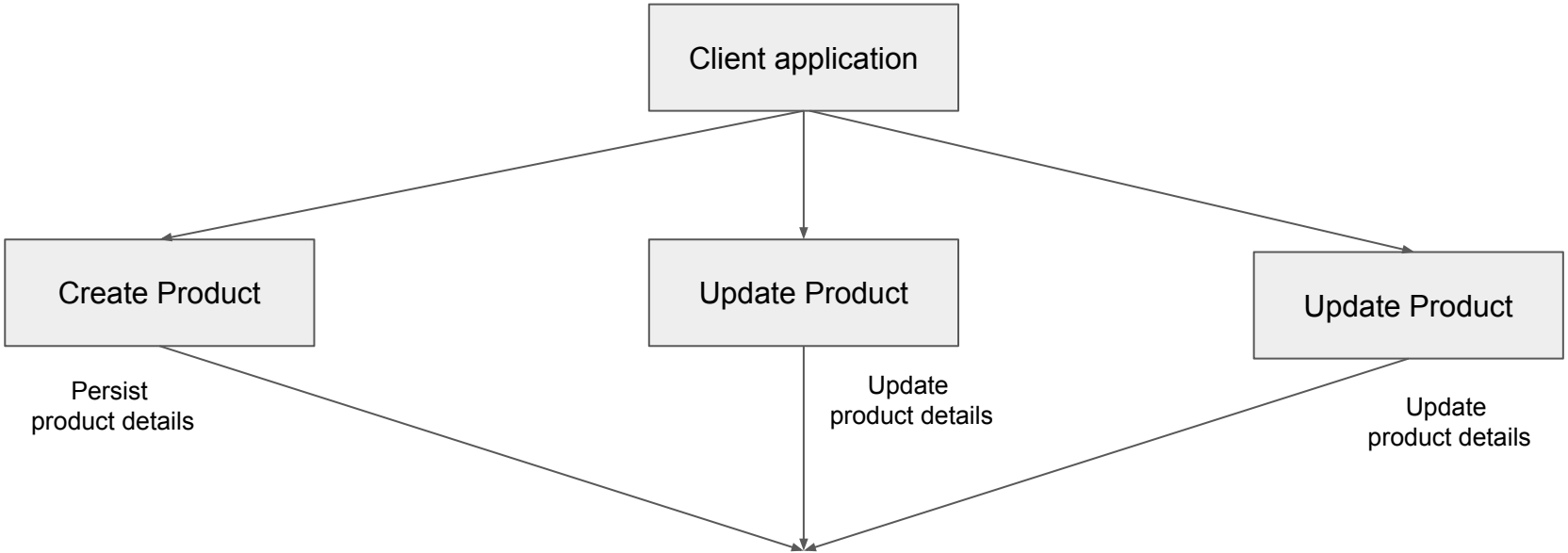
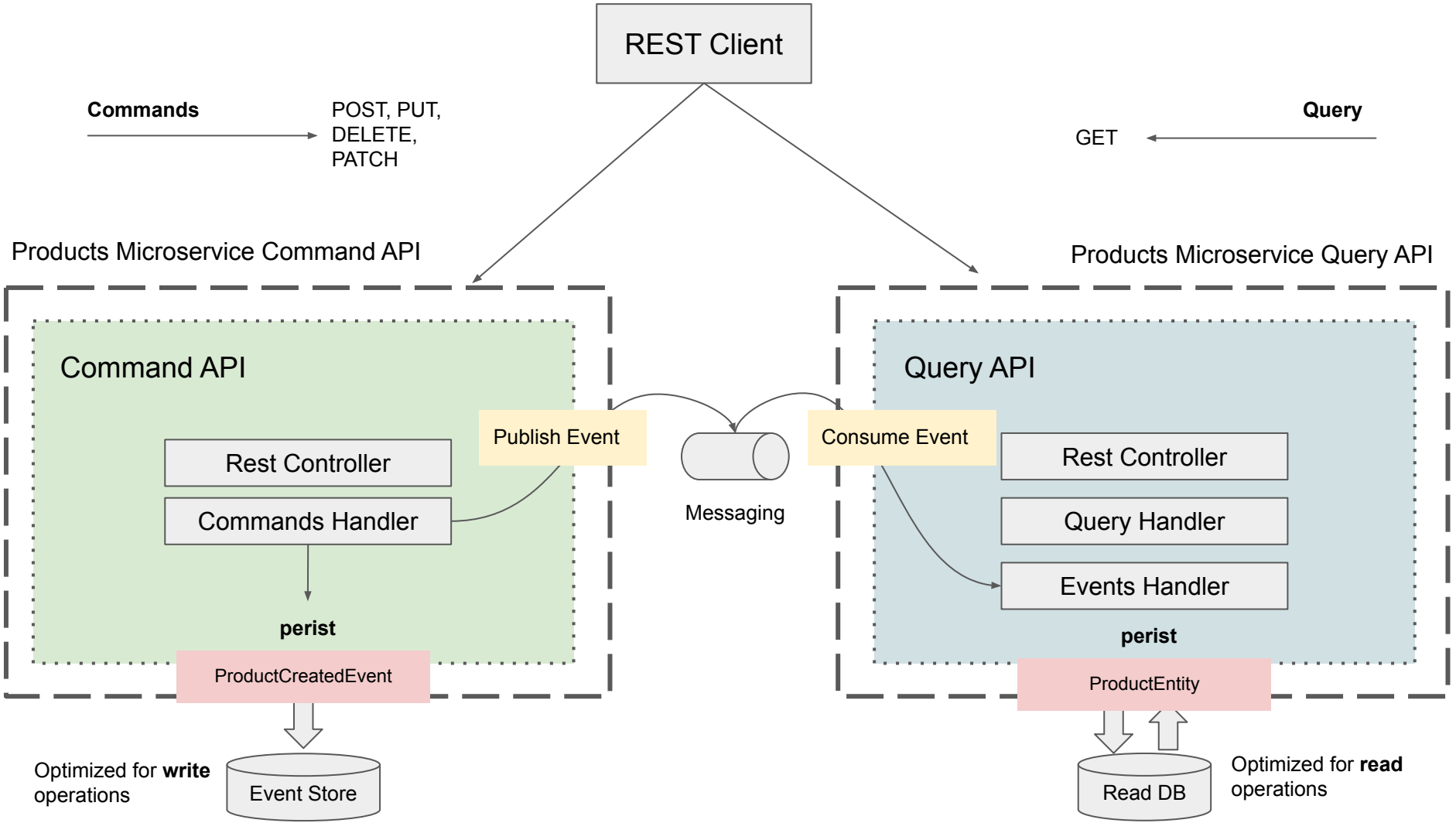
CQRS
&
Event Sourcing


Client application
Create Product
Update Product
Update Product
Persist
product details
Update
product details
Update
product details
id
title
price
1
Spoon
1
Products Database



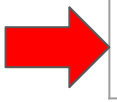
eventIdentifier	eventType	eventPayload
5e584f4e	ProductCreatedEvent	{"productId":"4ee43c56","title":"Spoon","price":1}
60e74f5b	ProductUpdatedEvent	{"productId":"4ee43c56","title":"Spoon","price":2}
d6f2d6c5	ProductUpdatedEvent	{"productId":"4ee43c56","title":"Spoon","price":3}

Event Store


REST Client
Commands
POST, PUT, DELETE, PATCH
Query
GET
Products Microservice Command API
Products Microservice Query API
Command API
Query API
Rest Controller
Commands Handler
Publish Event
Messaging
Consume Event
Rest Controller
Query Handler
Events Handler
perist
perist
ProductCreatedEvent
ProductEntity
Optimized for write operations
Event Store
Read DB
Optimized for read operations

Event Store

eventIdentifier	eventType	eventPayload
5e584f4e	ProductCreatedEvent	{"productId":"4ee43c56","title":"Spoon","price":1}
60e74f5b	ProductUpdatedEvent	{"productId":"4ee43c56","title":"Spoon","price":2}
d6f2d6c5	ProductUpdatedEvent	{"productId":"4ee43c56","title":"Spoon","price":3}
3e73f699	ProductPriceUpdatedEvent	{"productId":"4ee43c56", "price":3}



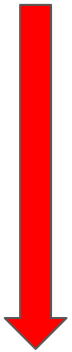
Read Database

id	title	price
1	Spoon	3

Event Store

eventIdentifier	eventType	eventPayload
5e584f4e	ProductCreatedEvent	{"productId":"4ee43c56","title":"Spoon","price":1}
60e74f5b	ProductUpdatedEvent	{"productId":"4ee43c56","title":"Spoon","price":2}
d6f2d6c5	ProductUpdatedEvent	{"productId":"4ee43c56","title":"Spoon","price":3}
3e73f699	ProductPriceUpdatedEvent	{"productId":"4ee43c56", "price":3}

Replay

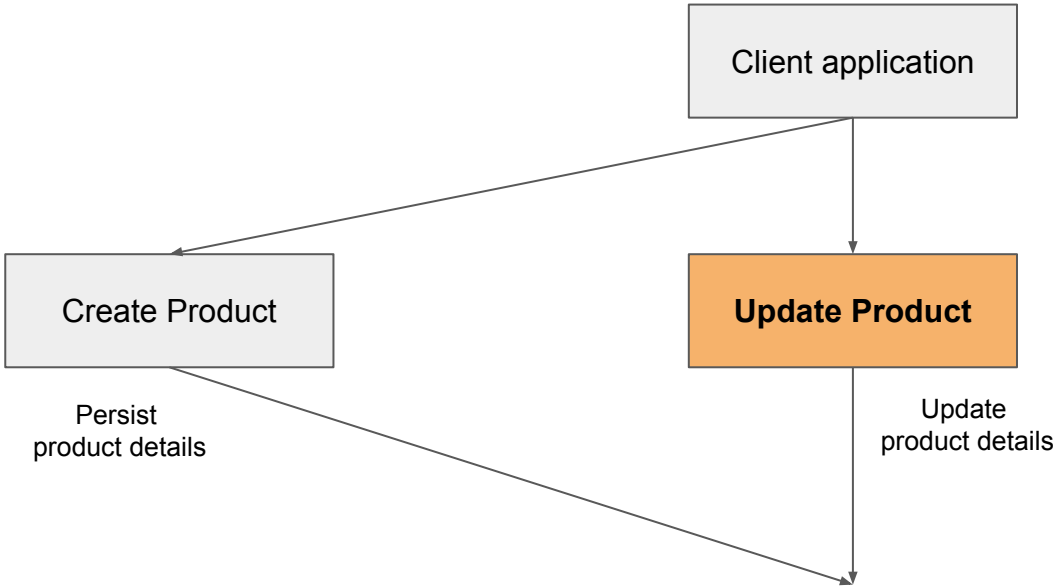


Read Database

id	title	price
1	Spoon	3

Read Database 2

title	price
Spoon	3



eventIdentifier	eventType	eventPayload
5e584f4e	ProductCreatedEvent	{"productId":"4ee43c56","title":"Spoon","price":1}
60e74f5b	ProductUpdatedEvent	{"productId":"4ee43c56","title":"Spoon","price":2}
d6f2d6c5	ProductUpdatedEvent	{"productId":"4ee43c56","title":"Spoon","price":3}

Event Store