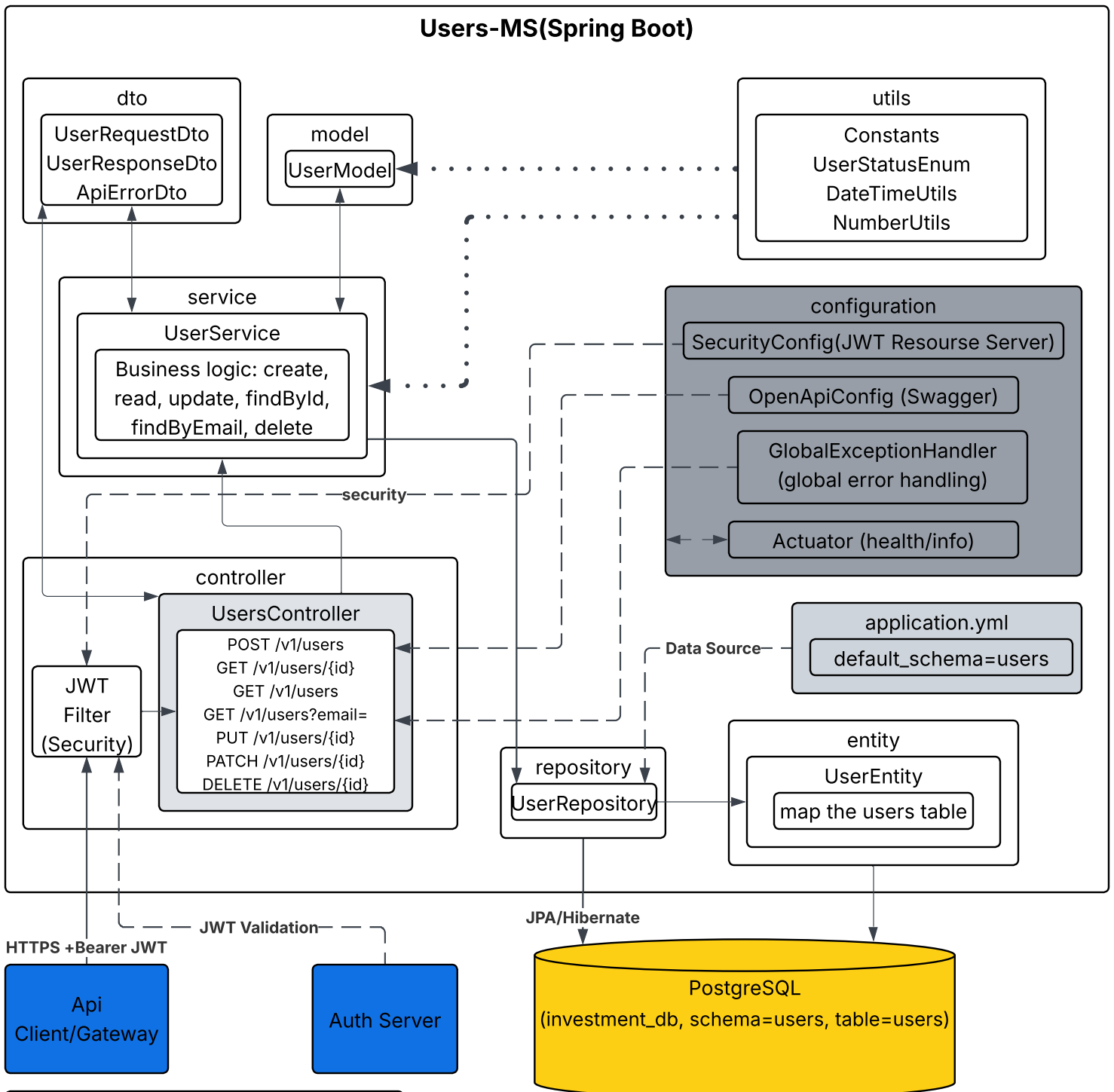


## C3 – Users-MS (Component Diagram)



### Legend:

Colors → White=internal, Dark Gray=configuration, Light Gray=application.yml, Lighter Gray=controllers, Blue=external, Yellow=DB

Lines → Solid=dependency, Dashed=config/security, Dotted=utils

Flow → Client → JWT Filter → Controller → Service → Repository → Entity → DB

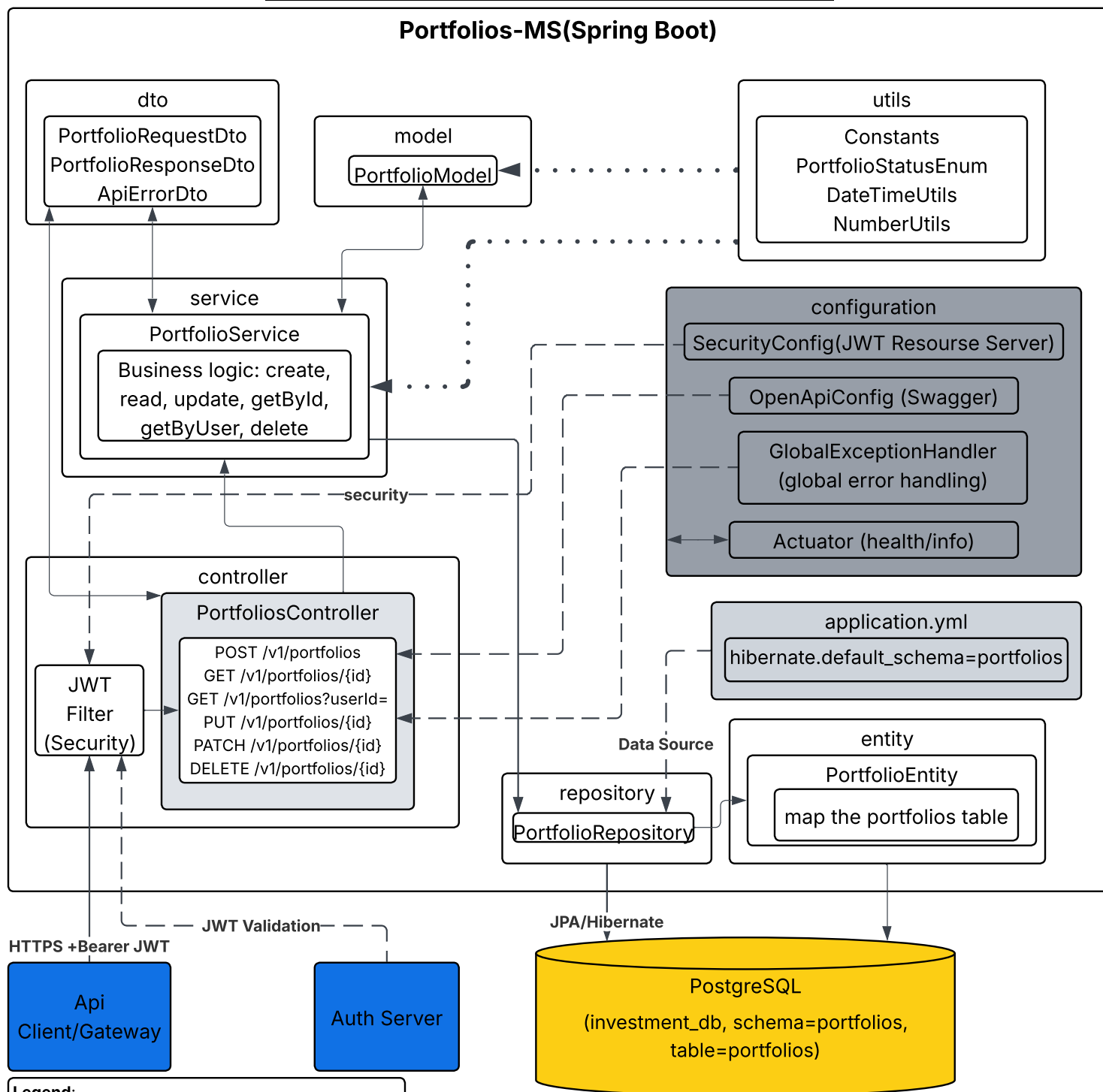
Controller ↔ DTO, Service ↔ Model/DTO

Naming → Controller=plural, others=singular, Utils/Constants=plural

DB → investment\_db, schema=users, table=users

Author: Remus-Ciprian Cotunoaea  
Version: 1.0  
Date: 08/09/2025  
Notation: C3 Container Diagram

### C3 – Portfolios-MS (Component Diagram)

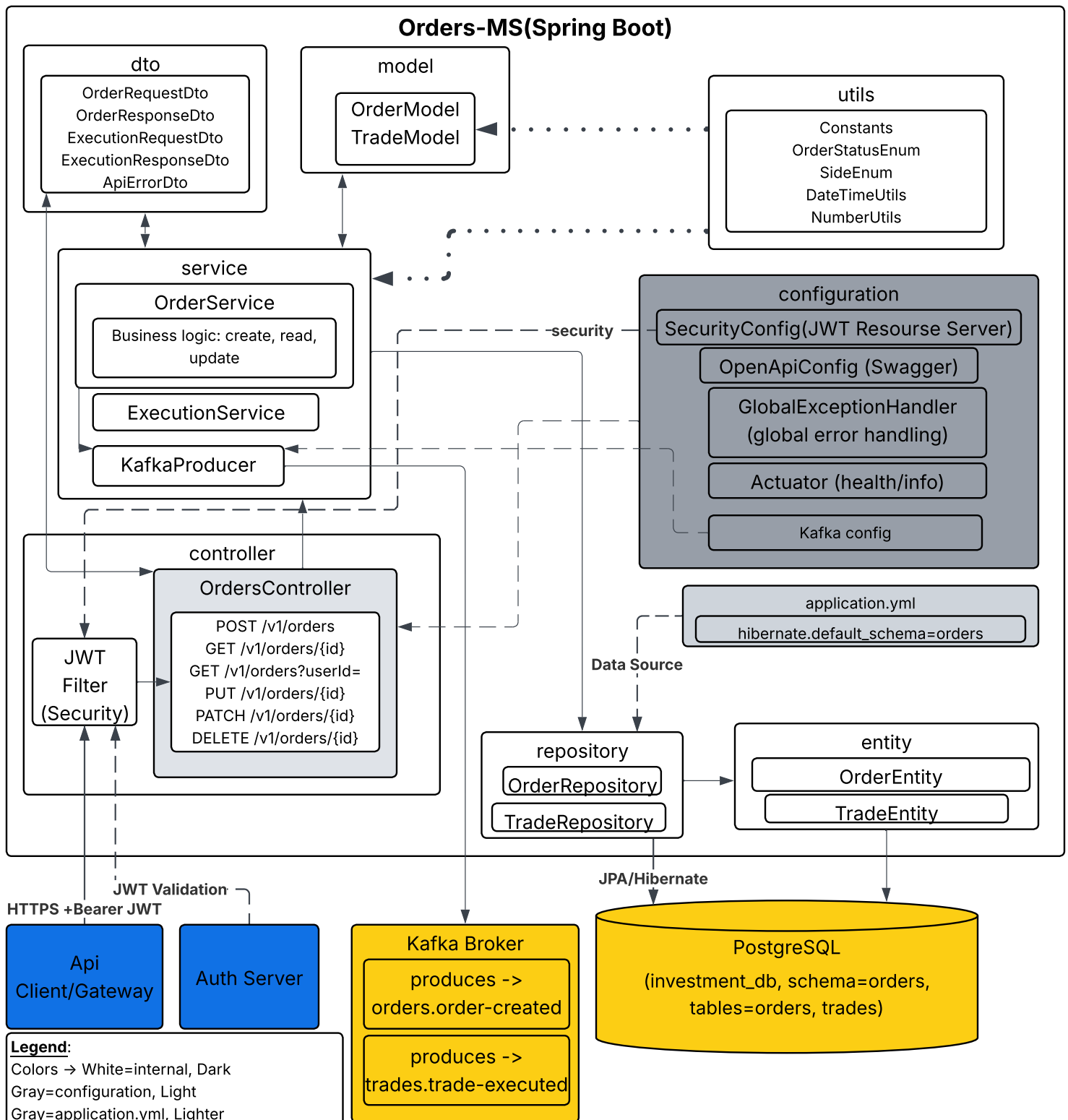


**Legend:**

Colors → White=internal, Dark Gray=configuration,  
Light Gray=application.yml, Lighter  
Gray=controllers, Blue=external, Yellow=DB  
Lines → Solid=dependency,  
Dashed=config/security,  
Dotted=utils  
Flow → Client→JWT Filter→Controller  
→Service→Repository→Entity→DB  
Controller↔DTO, Service↔Model/DTO  
Naming → Controller=plural,  
others=singular,  
Utils/Constants=plural  
DB → investment\_db,  
schema=portfolios,  
table=portfolios

Author: Remus-Ciprian Cotunoaea  
Version: 1.0  
Date: 08/09/2025  
Notation: C3 Container Diagram

## C3 – Orders-MS (Component Diagram)



### Legend:

Colors → White=internal, Dark Gray=configuration, Light Gray=application.yml, Lighter Gray=controllers, Blue=external, Yellow=DB/Kafka

Lines → Solid=dependency, Dashed=config/security, Dotted=utils

Flow → Client→JWT  
Filter→Controller→Service  
Service→Repo→Entity→DB  
Service→KafkaProducer→Broker

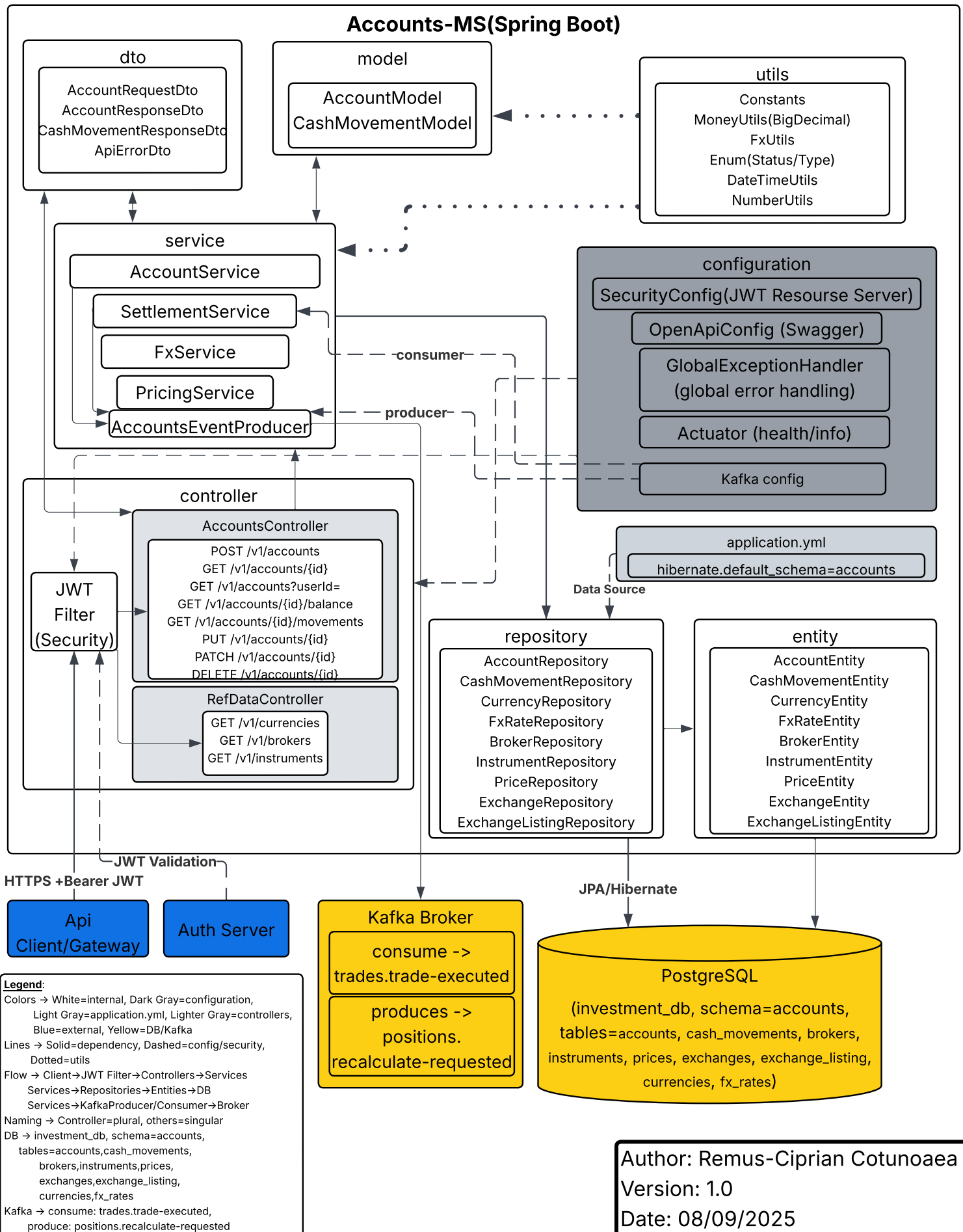
Naming → Controller=plural, others=singular

DB → investment\_db, schema=orders, tables=orders,trades

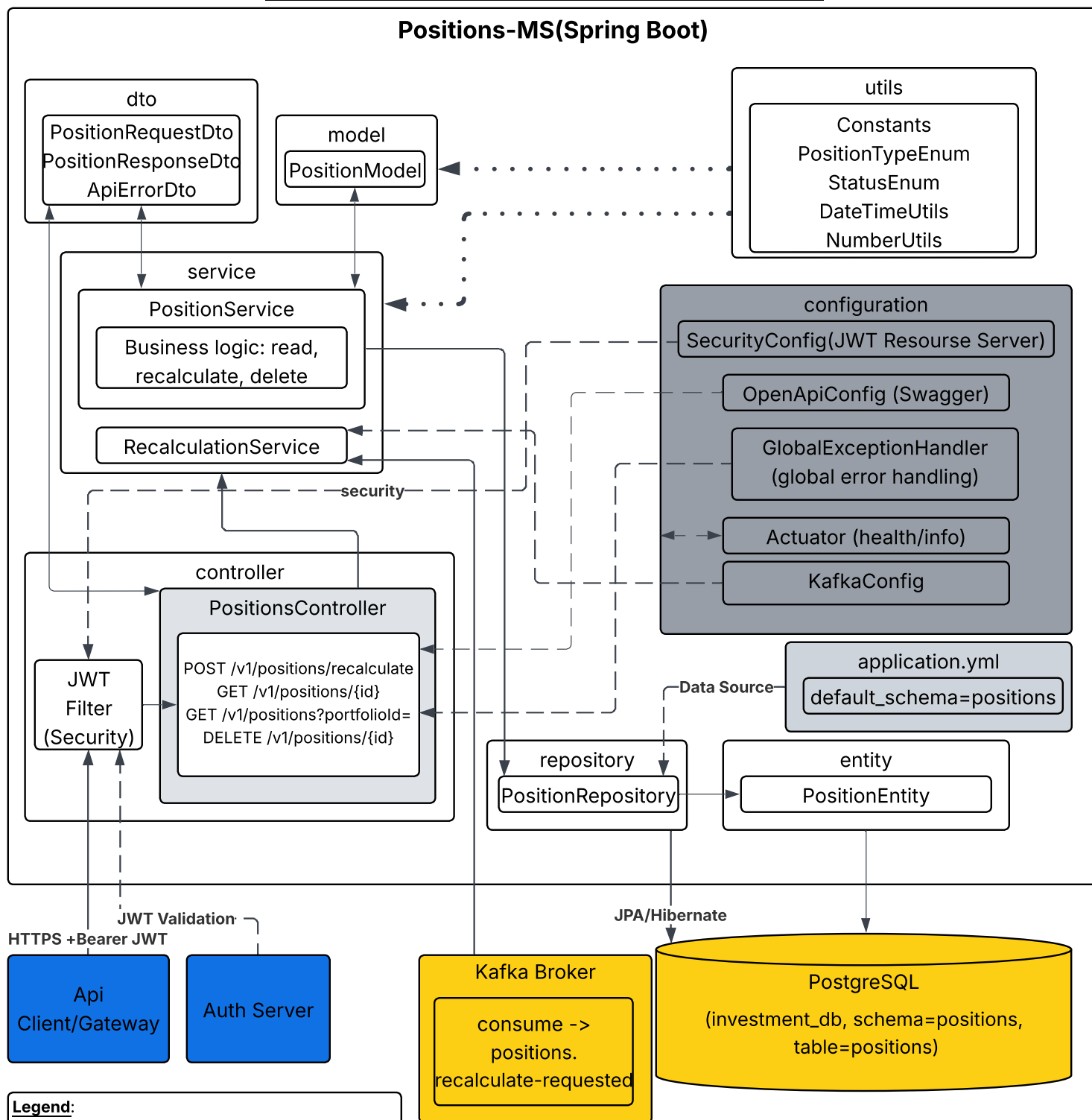
Kafka → produces: orders.order-created, trades.trade-executed

Author: Remus-Ciprian Cotunoaea  
Version: 1.0  
Date: 08/09/2025  
Notation: C3 Container Diagram

### C3 – Accounts-MS (Component Diagram)



### C3 – Positions-MS (Component Diagram)



**Legend:**

Colors → White=internal, Dark Gray=configuration,  
Light Gray=application.yml, Lighter  
Gray=controllers,  
Blue=external, Yellow=DB/Kafka

Lines → Solid=dependency,  
Dashed=configuration/security, Dotted=utils

Flow → Client→JWT

Filter→Controllers→Services→Repositories→  
Entities→Database

Kafka Broker→RecalculationService (consume)

Naming → Controllers=plural, others=singular

Database → investment\_db, schema=positions,  
table=positions

Kafka → consume: positions.recalculate-requested

Author: Remus-Ciprian Cotunoaea  
Version: 1.0  
Date: 08/09/2025  
Notation: C3 Container Diagram