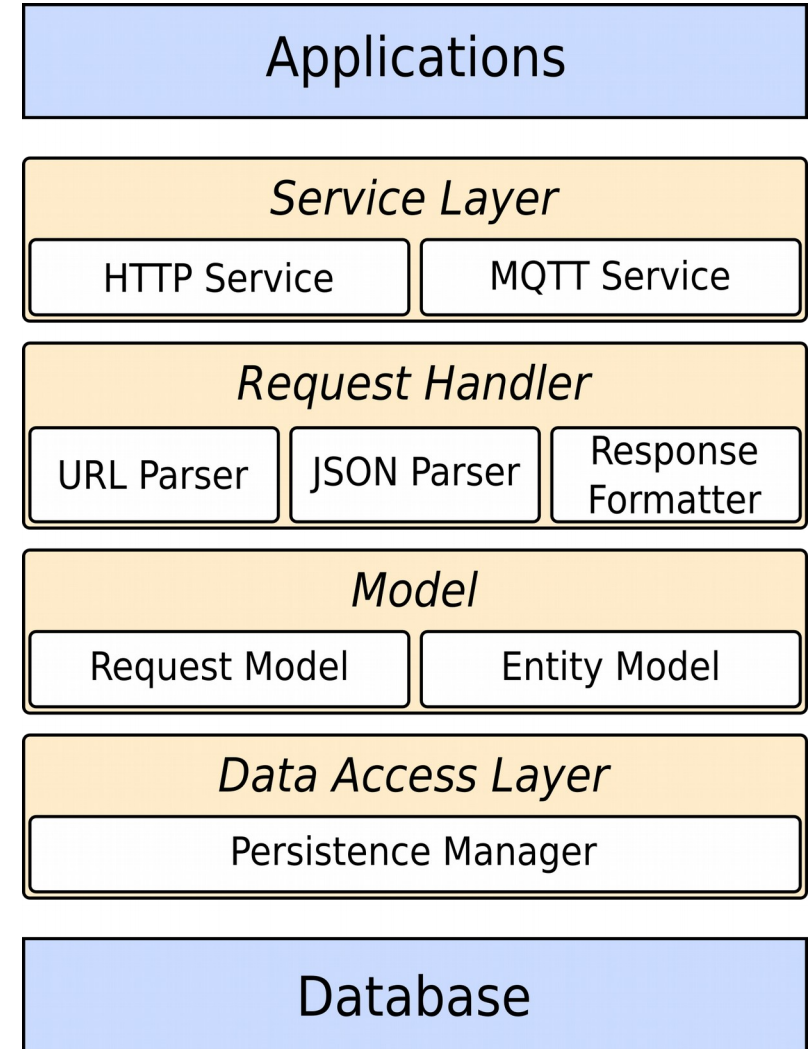

FROST-Server Architecture

Dr. Hylke van der Schaaf



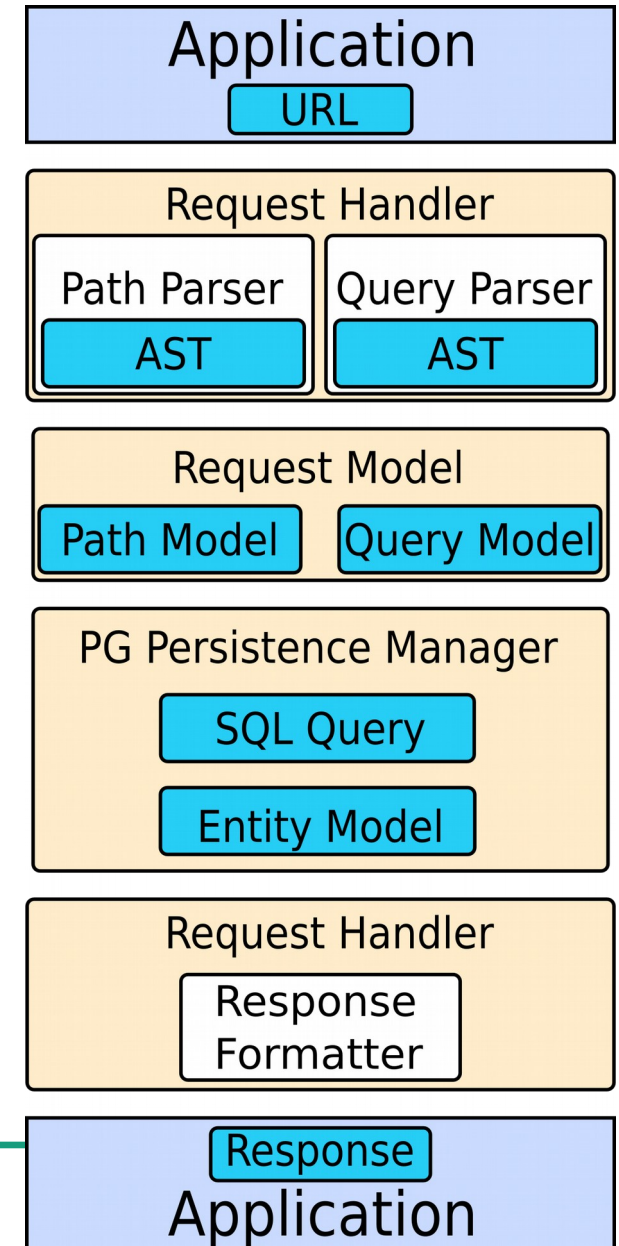
Internal Architecture

- Runs in a Java EE Servlet Container
 - Tomcat
 - Wildfly
- Database abstraction layer
 - PostgreSQL + PostGIS
 - Long IDs
 - String IDs
 - UUID IDs

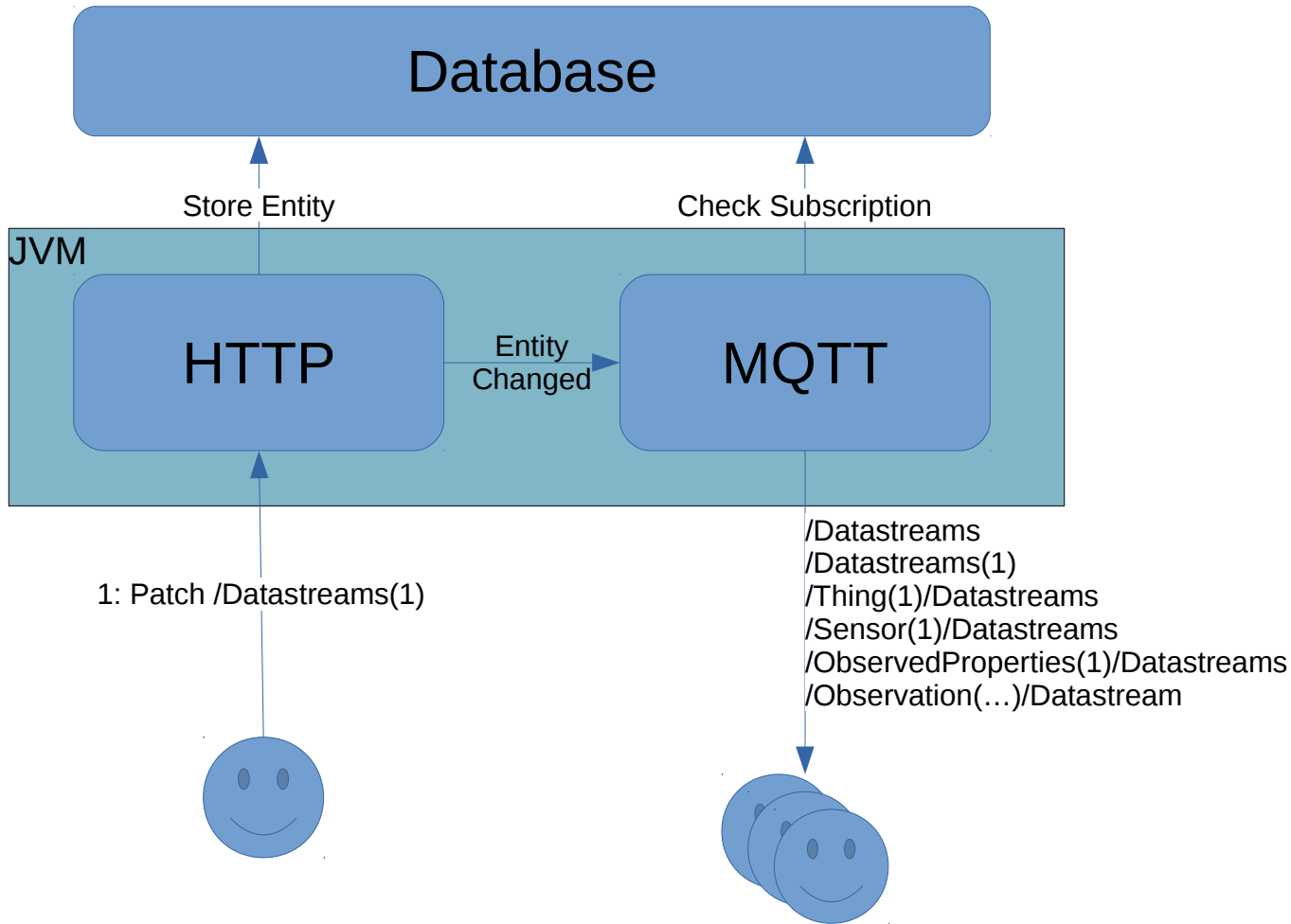


Processing a Request

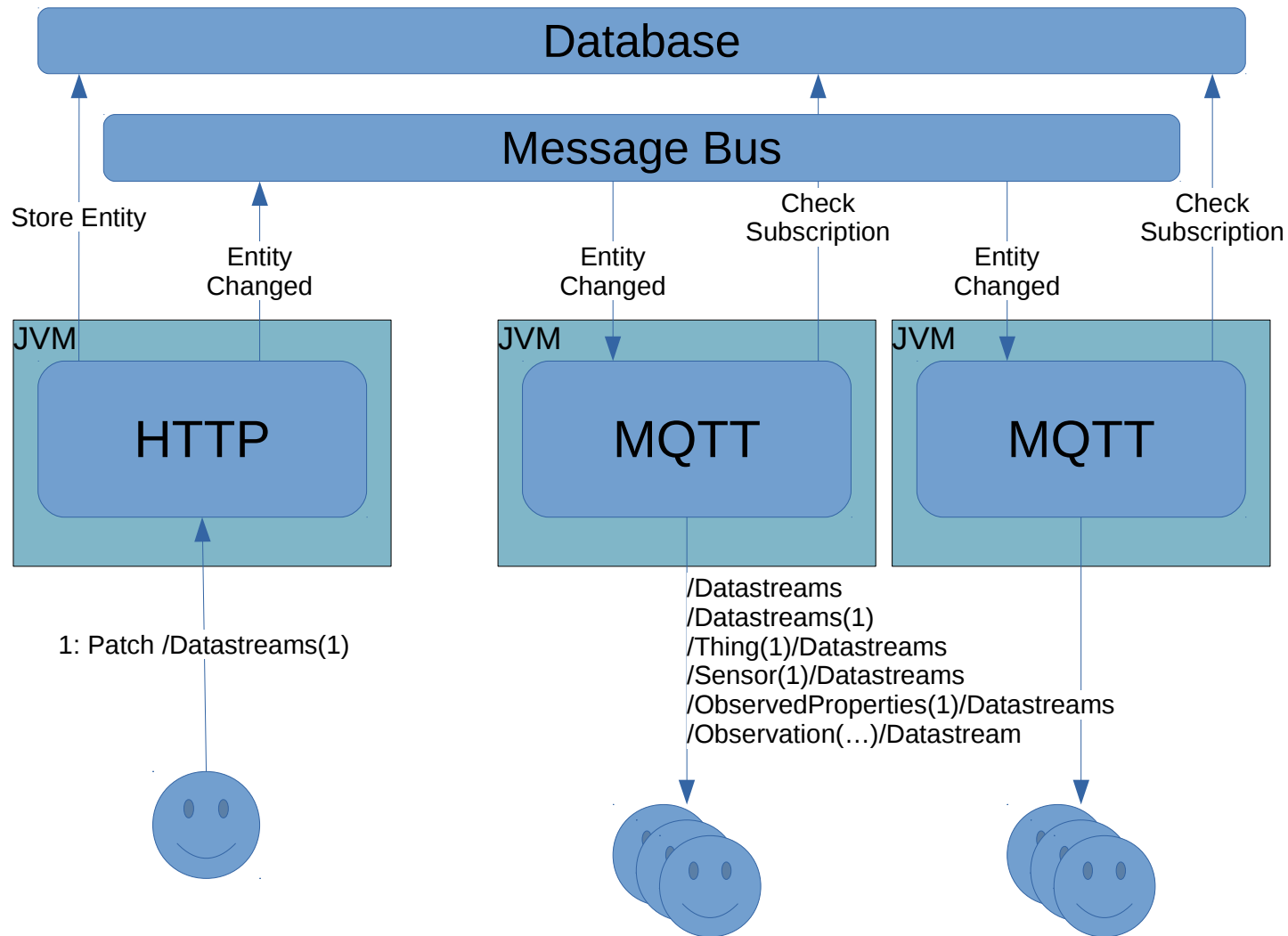
- Application requests URL
- Path & Query parts parsed into Abstract Syntax Trees
- Path & Query ASTs converted into Path & Query Model
- P&Q models handed to Persistence Manager
- Path & Query models converted to SQL Query(s)
- Database response converted to Entity Model
- Entity Model formatted by response formatter
- Response sent to Application



Deployment: All-In-One



Deployment: Horizontal Scaling



Deployment: Containers

■ Docker

- <https://github.com/FraunhoferIOSB/FROST-Server/blob/master/docs/docker.adoc>

■ Kubernetes / Helm

- <https://github.com/FraunhoferIOSB/FROST-Server/blob/master/helm/frost-server/README.md>