## **Light-4j Server Components**

Handler 1	Handler 2	Handler 3		Handler N	Business Logic Handlers
Fine- Grained Auth	Service Business Audit	Business Context Validation	Request Transformer	Response Filter	Business Middleware Handlers
Body Parser	Traceability	Correlation	Sanitizer	Router	Technical Middleware Handlers
Security	Audit	Metrics	Exception	Validator	
Undertow HTTP Core					HTTP Server

### **Service Initialization Process**

- Database Connection Pool Creation
- Kafka Consumer/ Producer
- Reference Data loading
- Resource allocation

Startup Plugin Registration

#### Shutdown Plugin Registration

- Database Connection Pool shutdown
- Resource de-

- Technical Middleware Registration
- Business
   Middleware
   Registration
- Business Logic Handler

Handler Registration

## Server Configuration

- Server options config
- Threading mechanism config

### **Invocation Handler Chain**

#### **Technical Request Middleware Handlers**

#### **Business Request Middleware Handlers**



Finegrained Auth Handler Business Audit Handler

Business

Audit

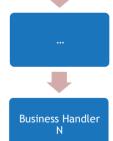
Handler



The Java API invocation handler chain illustrates the key middleware plugins implementing the cross-cutting concerns addressed by the platform.

These out-of-the-box components allow developers to focus on implementing their domain business logic in the business handlers.

[1..N]
API
Business
Handlers



**Business Handler** 



**Technical Response Middleware Handlers** 

**Business Response Middleware Handlers** 

Response Filter

Handler

### **Light Platform**

Cross-Cutting Concerns
 API Interaction Styles

Infrastructure Services

Tool Chains

# **Cross-Cutting Concerns**

- Technical Concerns
- Purely tenchical and the platform povides over 100 bult-in middleware handlers

- Business Concerns
- Running within the business context and need business or backend knowledge

# Interaction Styles

- Swagger 2.0 REST API based on Swagger 2.0 spec.
- OpenAPI 3.0 REST API based on OpenAPI 3.0 spec.
- GraphQL GraphQL query, mutation and subscription
- Hybrid Schema based JSON Rpc Serverless framework
- Eventuate Event sourcing and CQRS framework
- Tram Transaction messaging
- Saga Microservices orchestration

## Infrastructure Services

- Logging
- Metrics
- Config
- OAuth

- Portal
- Proxy
- Router
- Tokenization

## **Tool Chains**

- Light-bot Micoserivces DevOps
- Light-codegen Poject generation from spec
- Swagger Bundler Multiple spec files support
- OpenAPI Bundler Multiple spec files support

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