Service Architecture & Access Guide

Microservices Overview

Microservice	Port	Description
Discovery Service	8761	Eureka Server for service registration and discovery.
Config Service	9999	Centralized configuration server.
Gateway Service	8888	API Gateway entry point.
Customer Service	8081	Customer management (Spring Data REST).
Inventory Service	8082	Product inventory (Spring Data REST).
Billing Service	8083	Billing and invoices (Rest Controller).

🔗 Quick Access & Test Links

Use these links to verify the services are running and accessible.

Infrastructure

- **Discovery Service Dashboard**: http://localhost:8761
- **Config Service (Test)**: http://localhost:9999/customer-service/default (Check if config loads)
- **Gateway Actuator**: http://localhost:8888/actuator/gateway/routes (View configured routes)

Data Services (via Gateway)

These are the primary endpoints for client access.

- **Customers (List)**: http://localhost:8888/api/customers
- **Products (List)**: http://localhost:8888/api/products
- **Bill via ID (e.g., 1)**: http://localhost:8888/api/bills/1 *(Requires Bill with ID 1 to exist)*

Data Services (Direct Access)

Useful for debugging individual services bypassing the gateway.

- **Customer Service**: http://localhost:8081/api/customers

- **Inventory Service**: http://localhost:8082/api/products
- **Billing Service (Get Bill 1)**: http://localhost:8083/bills/1

Gateway Configuration

The Gateway runs on port **8888** and routes traffic as follows:

Path Pattern	Target Service
`/api/customers/**`	`CUSTOMER-SERVICE`
`/api/products/**`	`INVENTORY-SERVICE`
`/api/bills/**`	`BILLING-SERVICE`

Architecture Diagram