

## Taller Arquitectura Cliente-Servidor



Universidad  
del Cauca

Vigilada Mineducación

### Ingeniería de software II

Solucion Taller Arquitectura Cliente-Servidor

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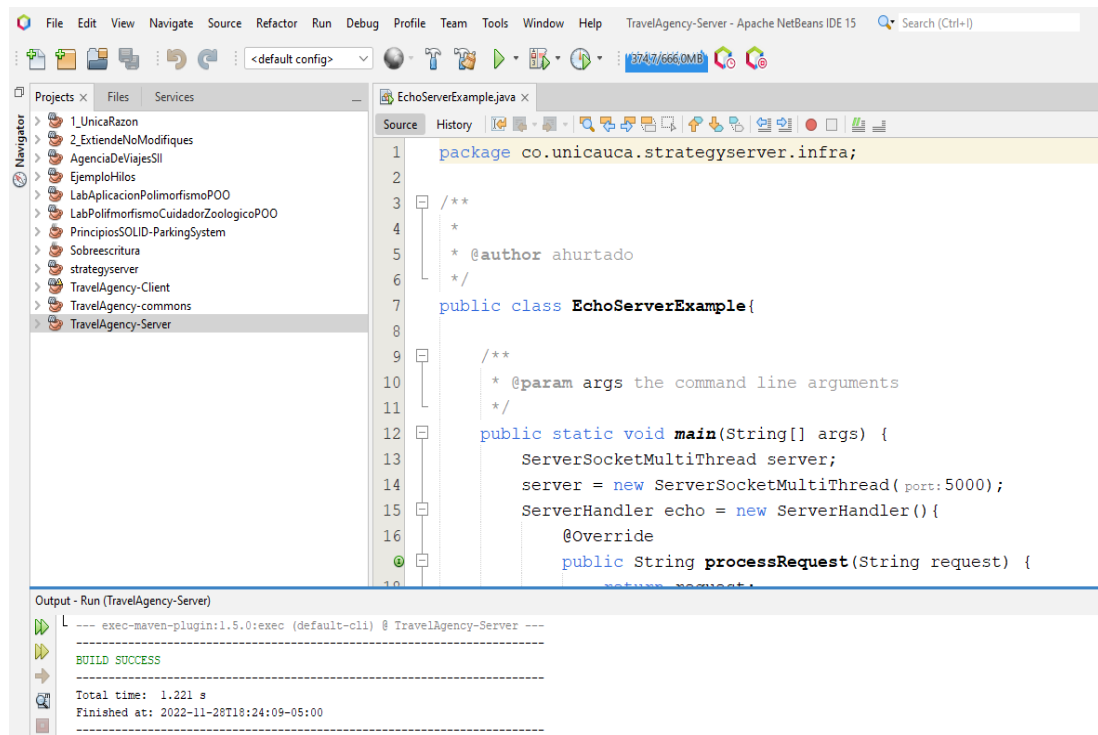
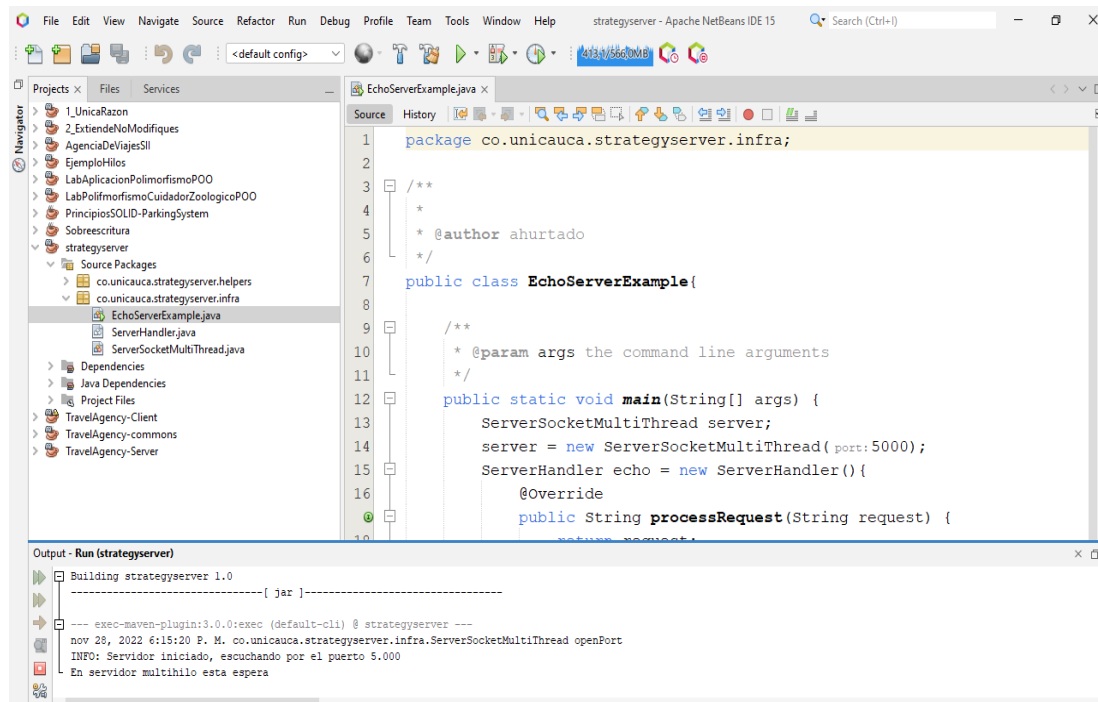
# Universidad del Cauca

Facultad de Ingeniería Electrónica y Telecomunicaciones

Ingeniería de sistemas

Popayán, diciembre de 2022

1. Descargar, instalar y correr la clase EchoServerExample que viene en el proyecto strategyserver.



2. Descargar, instalar y correr el AgencyTravelServer como servidor tcp/ip y el AgencyTravelClient (infra.tcpip).

The screenshot shows the IDE interface for the **TravelAgency-Server** project. The left sidebar displays the project structure with the following packages:

- Source Packages
  - co.unicauca.travelagency.server.access
  - co.unicauca.travelagency.server.app
  - co.unicauca.travelagency.server.domain.services
  - co.unicauca.travelagency.server.infra.tcpip
  - TravelAgencyHandler.java
  - TravelAgencyServer.java (selected)
  - co.unicauca.travelagency.server.infra.web
- Test Packages
- Dependencies
- Test Dependencies
- Java Dependencies
- Project Files

The main editor shows the **TravelAgencyServer.java** file with the following code:

```
8
9
10 /**
11  * @param args the comm
12  */
13 public static void main
14     ServerSocketMultiTh
15     server = new Server
16     ServerHandler echo
17     @Override
18     public String p
19     return requ
```

The Output window shows the following logs:

```
Run (strategyserver) x Run (TravelAgencyServer) x
Ingrese el puerto de escucha
8001
nov 28, 2022 6:35:01 P. M. co.unicauca.strategyserver.infra.ServerSocketMultiThread openPort
INFO: Servidor iniciado, escuchando por el puerto 8.001
En servidor multihilo esta espera
```

The screenshot shows the IDE interface for the **TravelAgency-Client** project. The left sidebar displays the project structure with the following packages:

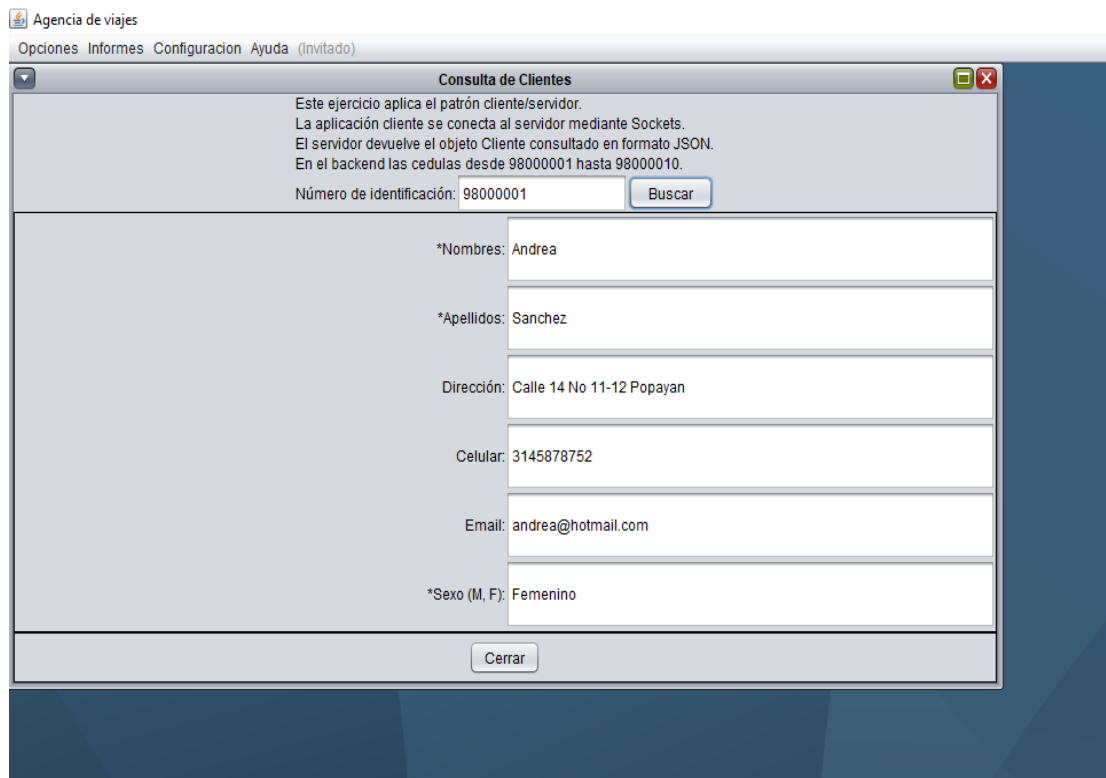
- Source Packages
  - co.unicauca.travelagency.commons.domain
  - co.unicauca.travelagency.commons.infra
- Dependencies
- Java Dependencies
- Project Files
- TravelAgency-Server
  - Source Packages
    - co.unicauca.travelagency.server.access
    - co.unicauca.travelagency.server.app

The main editor shows the **EchoServerExample** class with the following code:

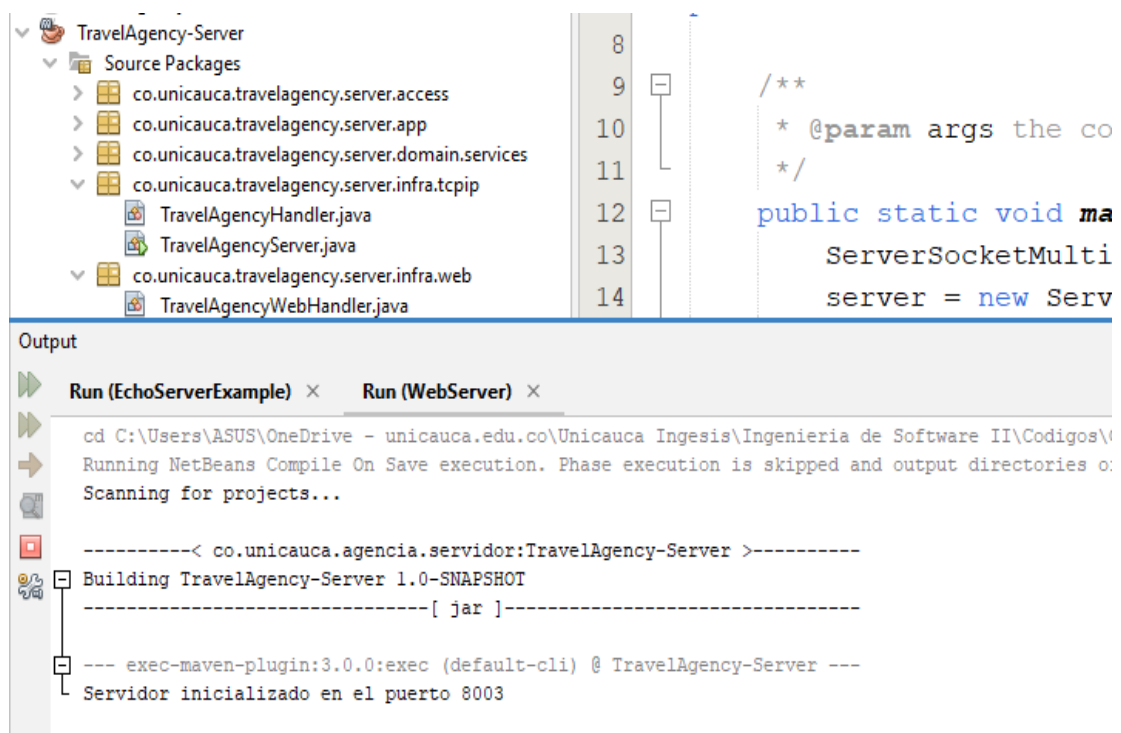
```
6 L */
7 public class EchoServerExample{
8
9     /**
10     * @param args the command line arguments
11     */
12     public static void main(String[] args) {
13         ServerSocketMultiThread server;
14         server = new ServerSocketMultiThread( port:5000);
```

The Output window shows the following logs:

```
Run (EchoServerExample) x Run (TravelAgency-Client) x
--- exec-maven-plugin:1.5.0:exec (default-cli) @ TravelAgency-Client ---
{"resource":"customer","action":"get","parameters":[{"name":"id","value":"98000001"}]}
nov 28, 2022 6:48:58 P. M. co.unicauca.travelagency.client.infra.TravelAgencySocket connect
INFO: Socket establecido
nov 28, 2022 6:48:58 P. M. co.unicauca.travelagency.client.infra.TravelAgencySocket sendRequest
INFO: Lo que se le envia al: ({"resource":"customer","action":"get","parameters":[{"name":"id","value":"98000001"}]})
nov 28, 2022 6:48:58 P. M. co.unicauca.travelagency.client.infra.TravelAgencySocket sendRequest
INFO: Lo que se lee del servidor: ({"id":"98000001","firstName":"Andrea","lastName":"Sanchez","address":"Calle 14 No 11-12 Popayan","mobile":"3145878752","email":"andrea@h
nov 28, 2022 6:48:58 P. M. co.unicauca.travelagency.client.access.CustomerAccessImplSockets findCustomer
INFO: Lo que va en el JSON: ({"id":"98000001","firstName":"Andrea","lastName":"Sanchez","address":"Calle 14 No 11-12 Popayan","mobile":"3145878752","email":"andrea@hotmail.
```



3. Correr el Web Server(infra.web) que viene en el mismo proyecto AgencyTravelServer. Usar un cliente postman para hacer la consulta, recuerden que el protocolo cambió y ahora solo van los parámetros. Ver la consulta postman.



Overview GET http://localhost:8003/c + ... No Environment

http://localhost:8003/client Save

GET http://localhost:8003/client Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON Beautify

```
1 [{"parameters":[{"name":"id","value":"98000003"}]}
```

Body Cookies Headers (2) Test Results 200 OK 243 ms 239 B Save Response

Pretty Raw Preview Visualize Text

```
1 [{"id":"98000003","firstName":"Carlos","lastName":"Pantoja","address":"Santa Barbar Popayan",
  "mobile":"3141257846","email":"carlos@gmail.com","gender":"Masculino"}]
```

- Realizar el taller de la API Rest y probar las consultas a través de postman o un Jersey Client. Siguen el paso a paso del taller.

http://localhost:8080/Simple-API-REST/product-service/products/ Save

GET http://localhost:8080/Simple-API-REST/product-service/products/ Send

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL

This request does not have a body

Body Cookies Headers (5) Test Results 200 OK 8 ms 392 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   {
3     "id": 1,
4     "name": "Tv samsung",
5     "price": 200000.0
6   },
7   {
8     "id": 2,
9     "name": "Tv lg",
10    "price": 300000.0
11  },
12  {
13    "id": 1,
14    "name": "Tablet asus RESD-TD-34",
15    "price": 400000.0
16  }
17 }
```

http://localhost:8080/Simple-API-REST/product-service/products/1

GET http://localhost:8080/Simple-API-REST/product-service/products/1

Params Authorization Headers (6) **Body** Pre-request Script Tests Settings Cookies

● none ● form-data ● x-www-form-urlencoded ● raw ● binary ● GraphQL

This request does not have a body

Body Cookies Headers (5) Test Results 200 OK 7 ms 290 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "id": 1,
3   "name": "Tv samsung",
4   "price": 200000.0
5 }
```

http://localhost:8080/Simple-API-REST/product-service/products/

POST http://localhost:8080/Simple-API-REST/product-service/products/

Params Authorization Headers (8) **Body** Pre-request Script Tests Settings Cookies

● none ● form-data ● x-www-form-urlencoded ● raw ● binary ● GraphQL JSON Beautify

```
1 {
2   "id": 99,
3   "name": "Portatil Lenovo Thinkpad",
4   "price": 400000.0
5 }
```

Body Cookies Headers (5) Test Results 200 OK 22 ms 294 B Save Response

Pretty Raw Preview Visualize Text

```
1 {"ok": "true", "mensaje": "Producto creado", "errores": ""}
```

http://localhost:8080/Simple-API-REST/product-service/products/2

DELETE ▼ http://localhost:8080/Simple-API-REST/product-service/products/2 Send ▼

Params Authorization Headers (6) **Body** Pre-request Script Tests Settings Cookies

☒ none ☐ form-data ☐ x-www-form-urlencoded ☐ raw ☐ binary ☐ GraphQL

This request does not have a body

Body Cookies Headers (5) Test Results 200 OK 11 ms 295 B Save Response ▼

Pretty Raw Preview Visualize Text ▼ 🔍

```
1 {"ok": "true", "mensaje": "Producto borrado", "errores": ""}
```

http://localhost:8080/Simple-API-REST/product-service/products/

PUT ▼ http://localhost:8080/Simple-API-REST/product-service/products/ Send ▼

Params Authorization Headers (8) **Body** Pre-request Script Tests Settings Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL JSON ▼ Beautify

```
1 {
2   ... "id": 99,
3   ... "name": "Portatil Asus",
4   ... "price": 500000.0
5 }
```

Body Cookies Headers (5) Test Results 200 OK 7 ms 298 B Save Response ▼

Pretty Raw Preview Visualize Text ▼ 🔍

```
1 {"ok": "true", "mensaje": "Producto modificado", "errores": ""}
```

5. Hacer una API Rest para el AgencyTravelServer. Probarla desde un Jersey Client o a través de posman.

http://localhost:8080/TravelAgency-API-REST/customer-service/customers/98000001

Save



GET

http://localhost:8080/TravelAgency-API-REST/customer-service/customers/98000001

Send

Params

Authorization

Headers (6)

Body

Pre-request Script

Tests

Settings

Cookies

Query Params

|  | KEY | VALUE | DESCRIPTION | ... | Bulk Edit |
|--|-----|-------|-------------|-----|-----------|
|  | Key | Value | Description |     |           |

Body

Cookies

Headers (5)

Test Results



200 OK

10 ms

412 B

Save Response

Pretty

Raw

Preview

Visualize

JSON



```
1 {
2   "address": "Calle 14 No 11-12 Popayan",
3   "email": "andrea@hotmail.com",
4   "firstName": "Andrea",
5   "gender": "Femenino",
6   "id": 98000001,
7   "lastName": "Sanchez",
8   "mobile": "3145878752"
9 }
```