Universidad de los Andes

Ingeniería de Sistemas y Computación ISIS2503 Arquitectura y diseño de software Actividad en clase

Instrucciones

- 1. Leer la descripción de la arquitectura Rest.li la cual se utiliza en linkedin
- 2. Al comparar la arquitectura de Rest.li con la del ejemplo de Angular de la sesión de laboratorio, cuáles son las principales diferencias que encuentra?

Rest.li architecture

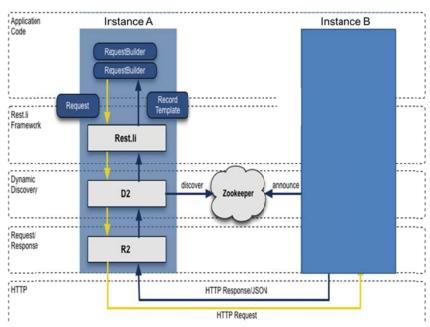


Fig. 1

One of the key components in LinkedIn's transition towards a Service Oriented Architecture (SOA) was Rest.li. Fig. 1 shows an operational view of Rest.li architecture. Suppose an "Instance A" requests for a service available on "Instance B". Next, we describe how the different elements of the architecture interact to meet the request.

The application code of Instance A builds a request. Rest.li takes the request and gives as output a HTTP-style verb corresponding to the request. In addition, it serializes data as JSON objects if needed.

Given the verb, D2 performs a dynamic discovery and client-side load balancing layer. Linkedin uses **ZooKeeper** as a registry for information about available services and the

hosts that provide them. Clients automatically get the latest information from ZooKeeper and apply load-balancing algorithms on the client side to distribute load evenly across servers and reduce load to overloaded servers.

Finally, R2, which is a REST transport layer abstraction in Java, consumes the functionality exposed as a low-level REST-style interface at the "Instance B" side. It is worth noting that "Instance A" does not interact only with "Instance B", if required the former can request a service announced by other instance.