Architecture Diagram for Movie Catalogue Service

Spring Cloud uses Eureka which is a client side load balancing, which means client first requests with service discovery/eureka server for service address. Eureka Server then responds with ip address of requested server. Now Client goes directly to the service. It uses inbuilt cache mechanism incase service discovery dies. Incase any other service dies, eureka uses heartbeat mechanism to check the status of service. It keeps details of multiple instances of a single service also for load balancing. By default Eureka server uses port number 8761.

So 2 hops are required for every request of client. The client and all other services know the address of service discovery. If changed we need to configure it in each service.

Here movie-catalogue request movie-info service for information and ratings service info for information. It then collates it and returns to the requested client.

Movie catalogue service is similar to goodreads.com

