

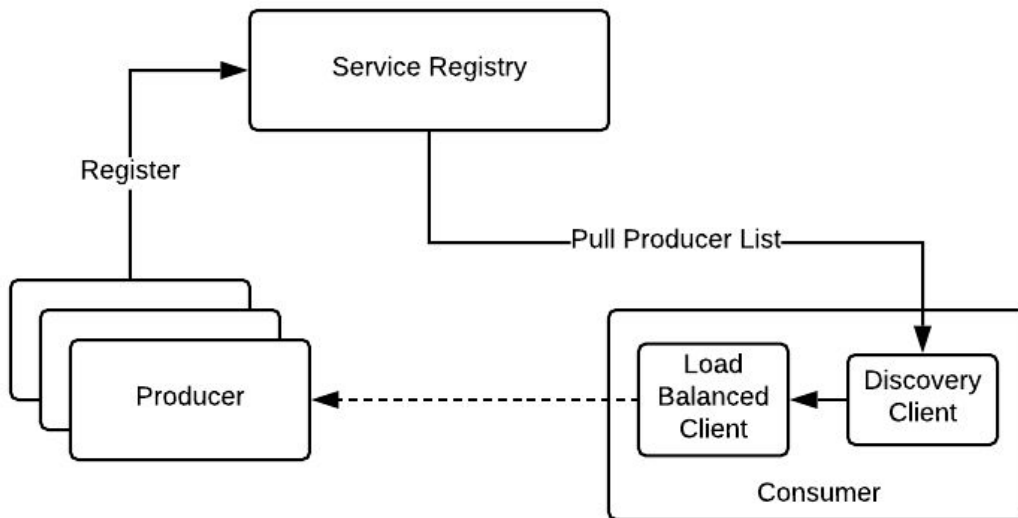


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# Spring Cloud Netflix Ribbon - Client Load Balancing

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# Works in Concert with Discovery Client



*Ribbon runs in-process in the consumer, gets its list of producers from Discovery Client, and so does not require manual configuration of the server list*

# Components of a Ribbon Load Balancer

- **Rule** - a logic component to determine which server to return from a list
- **Ping** - a component running in background to ensure liveness of servers
- **ServerList** - this can be static or dynamic. If it is dynamic (as used by `DynamicServerListLoadBalancer`), a background thread will refresh and filter the list at certain interval

# Load Balancing Rule Options

- RoundRobinRule
- WeightedResponseTimeRule
- RandomRule
- BestAvailableRule
- AvailabilityFilteringRule

See:

<https://github.com/Netflix/ribbon/wiki/Working-with-load-balancers>

# Why Use It?

- Tailor fit load balancing algorithm
- Latency sensitive operations (where reduction of round-trips necessary)

# Ribbon Load Balancing Client Approaches

- LoadBalancerClient API
- @LoadBalanced Annotation - We will cover in the lab

# Ribbon Load Balancing Client Configuration Annotation

- `@RibbonClient`
- Used to specify configuration bean for overriding default behavior
- To be supplanted by the more generic `@LoadBalancerClient` configuration annotation coming in Spring Cloud Hoxton