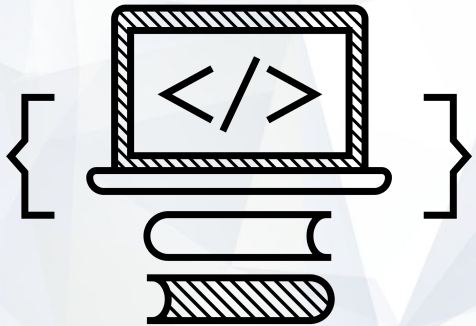
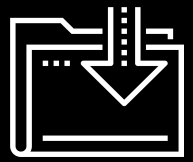


Service Registry

Course: Java

S2



Learning Outcomes

By the end of this lesson, you will be able to:

01 Explain what a service registry is.

02 Explain the advantages of using a service registry.

03 Explain the drawbacks of using a service registry.

04 Use a service registry.

Service Registry

What Is a Service Registry?

01

A service registry is a database of services, their instances, and their locations.

02

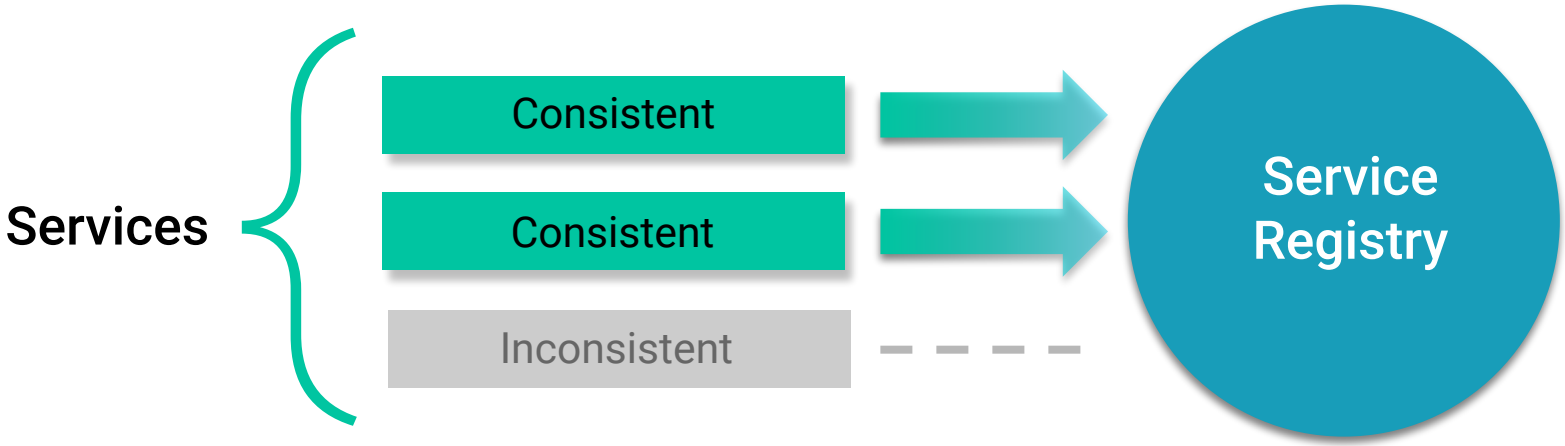
Applications can use the service registry to dynamically discover and call registered services.

03

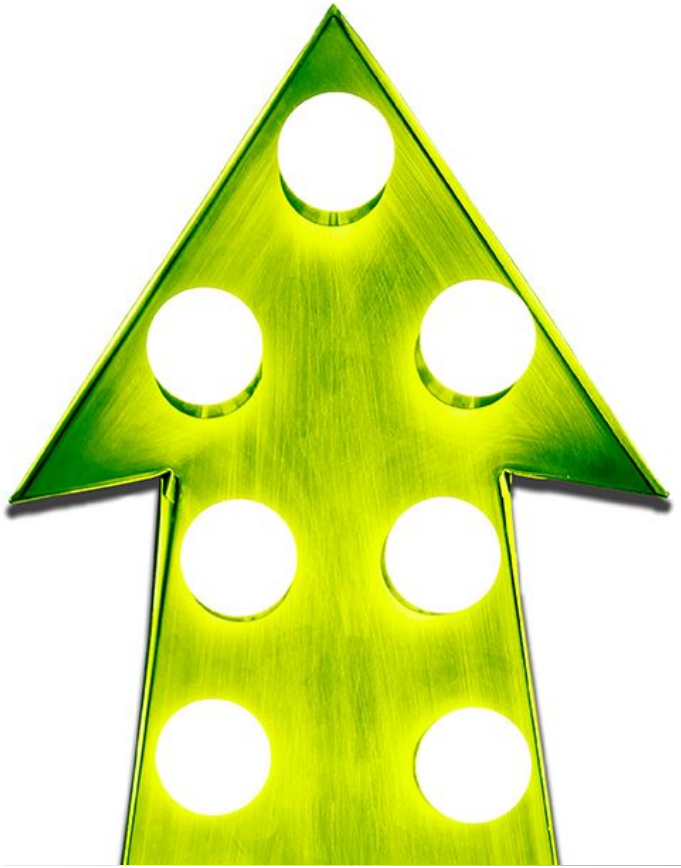
Clients use the service registry to know where to send their requests.

How Does a Service Registry Work?

- When the client registers itself as a service, it includes metadata including its host and port.
- The service sends a "heartbeat" to the registry.
  - If an instance of the service does not deliver a consistent “heartbeat,” the service registry will remove the instance from the registry.

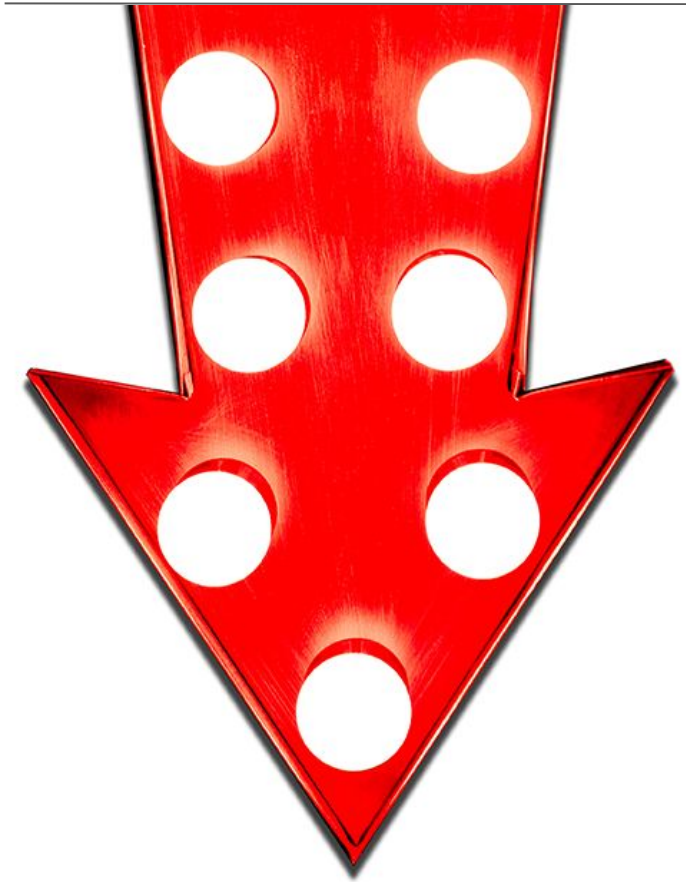


What Are the Advantages of Using a Service Registry?



- Service instances are registered at startup and deregistered at shutdown.
- Allows the client to find available instances of a service.
- Can use the Health Check API to verify that the service is available to handle the request.

What Are the Drawbacks of Using a Service Registry?



- Must be set up.
- Must be configured.
- Must be managed.
- Is a critical system component—therefore, it needs to be highly available and up-to-date.

What happens if the service registry fails?

Similar to how DNS is used to find the IP address of a site, the service registry leads to the discovery of the service, a.k.a **service discovery**.


RECAP

Questions?