

Consul: Discover your Services

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Why are we talking
about Consul?

Distributed Systems
are the new normality

Monitoring

Configuration

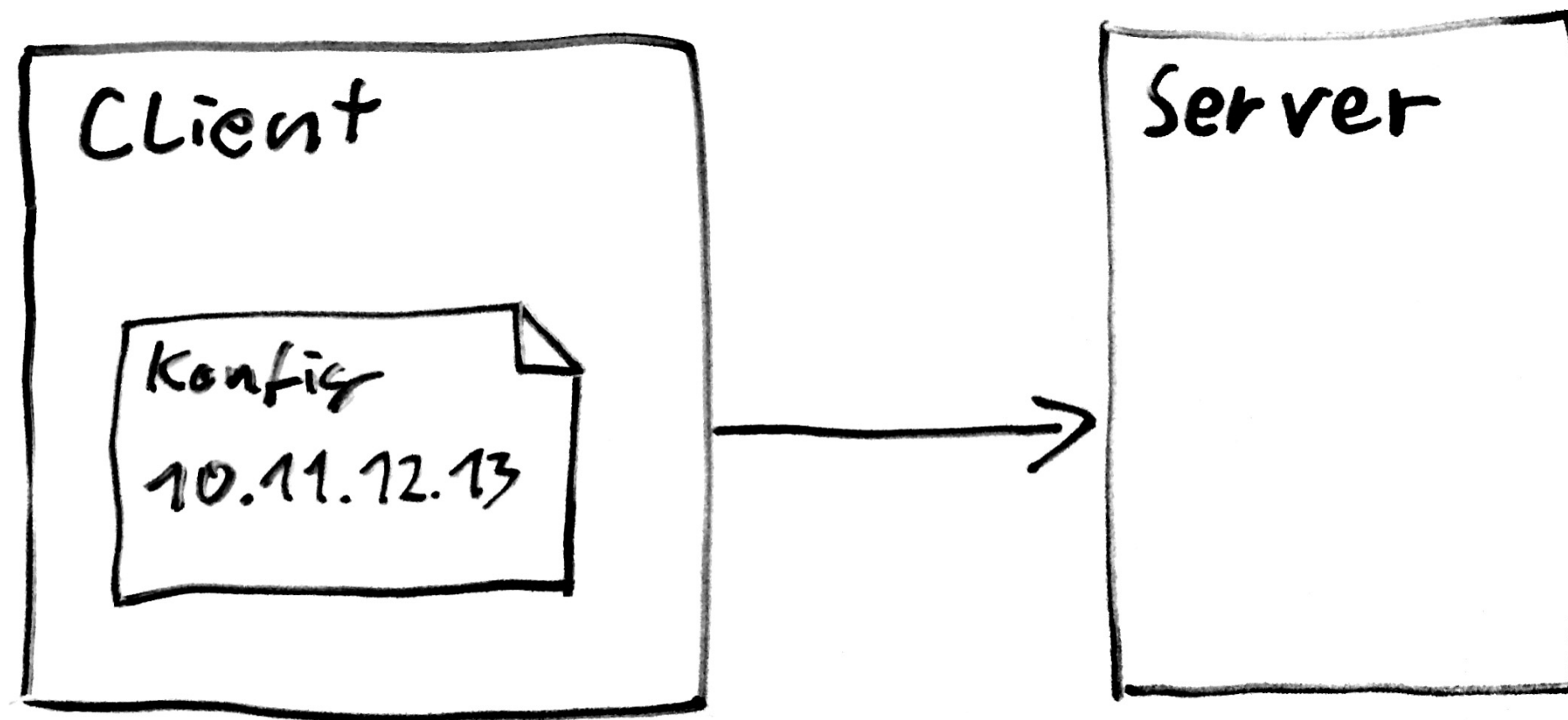
Problem Areas

Service Discovery

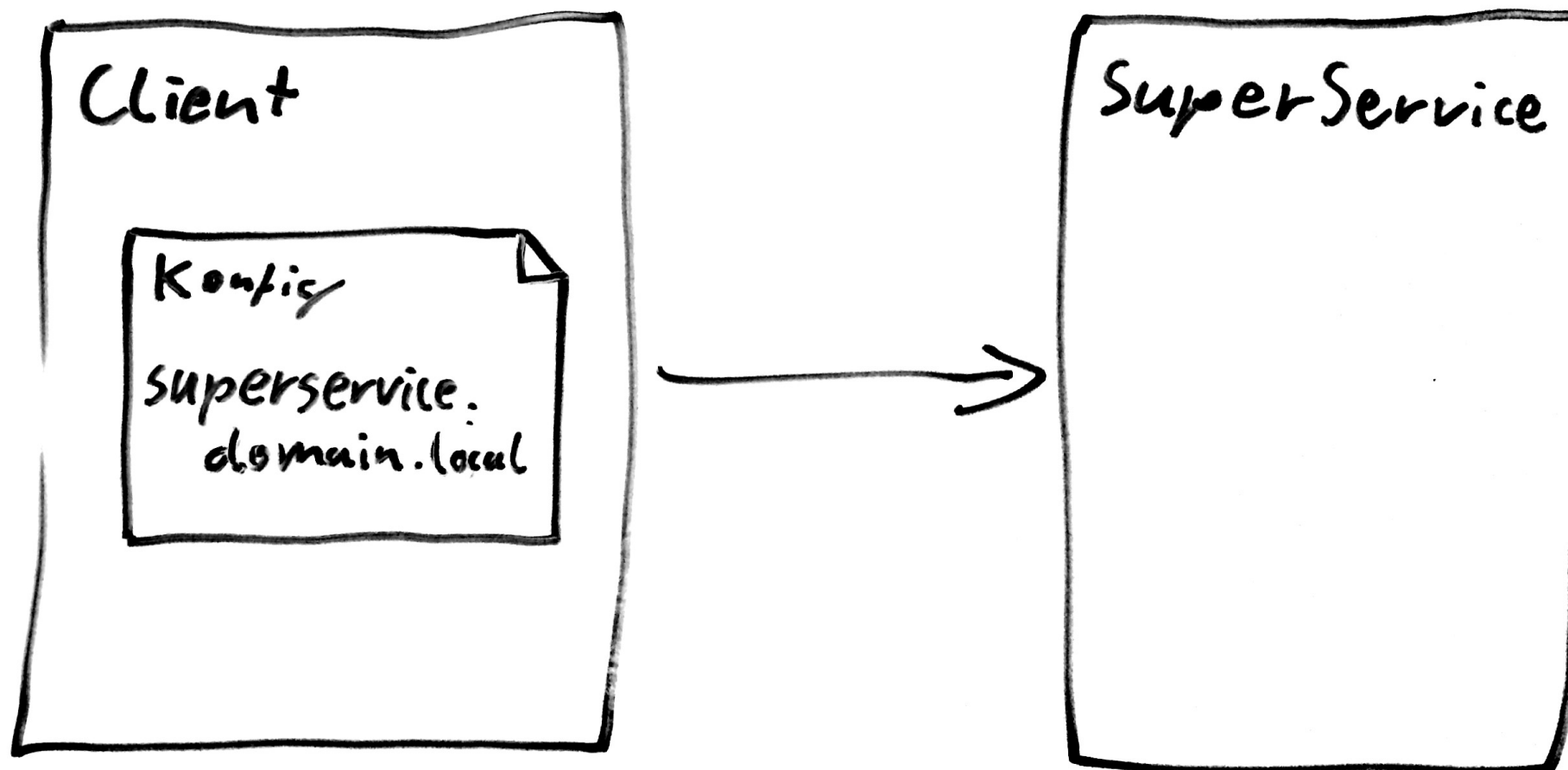
Orchestration

What exactly is
Service Discovery?

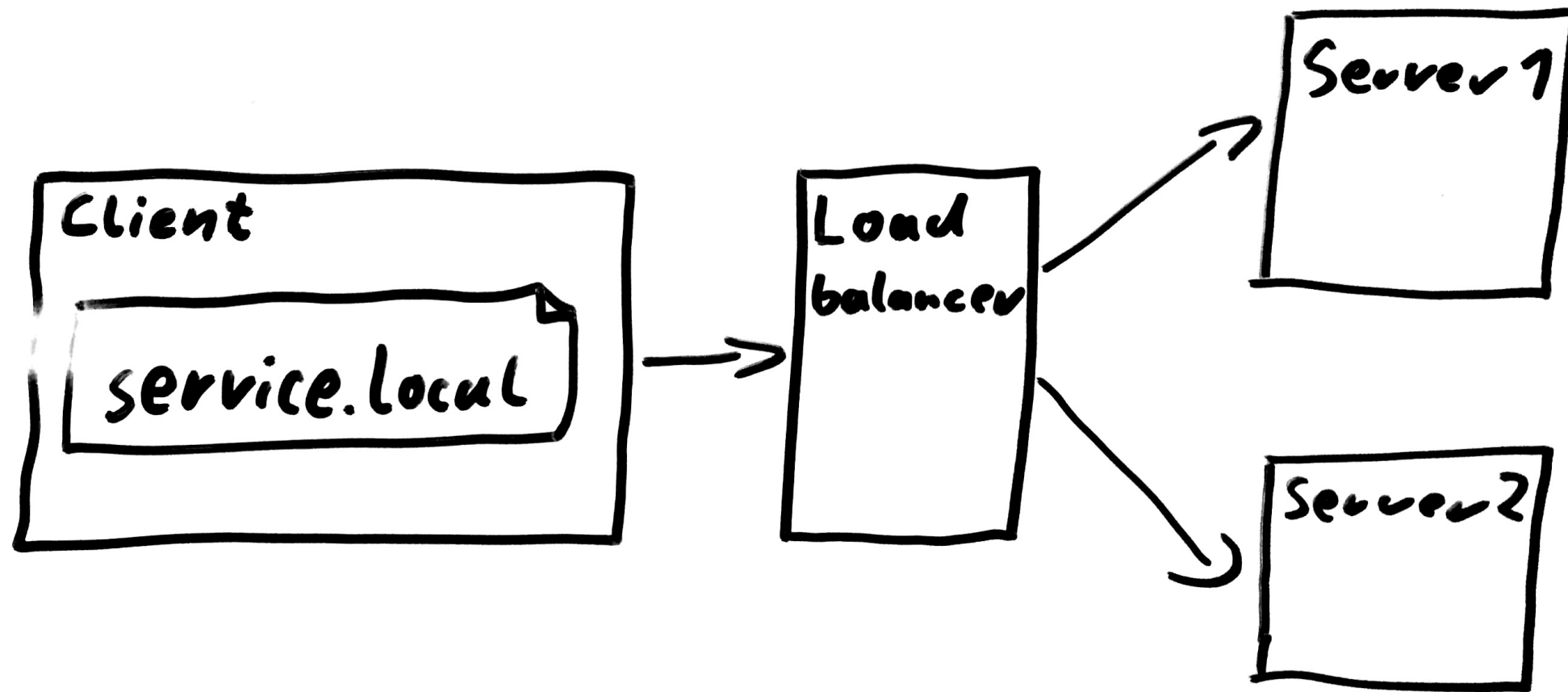
Static Configuration



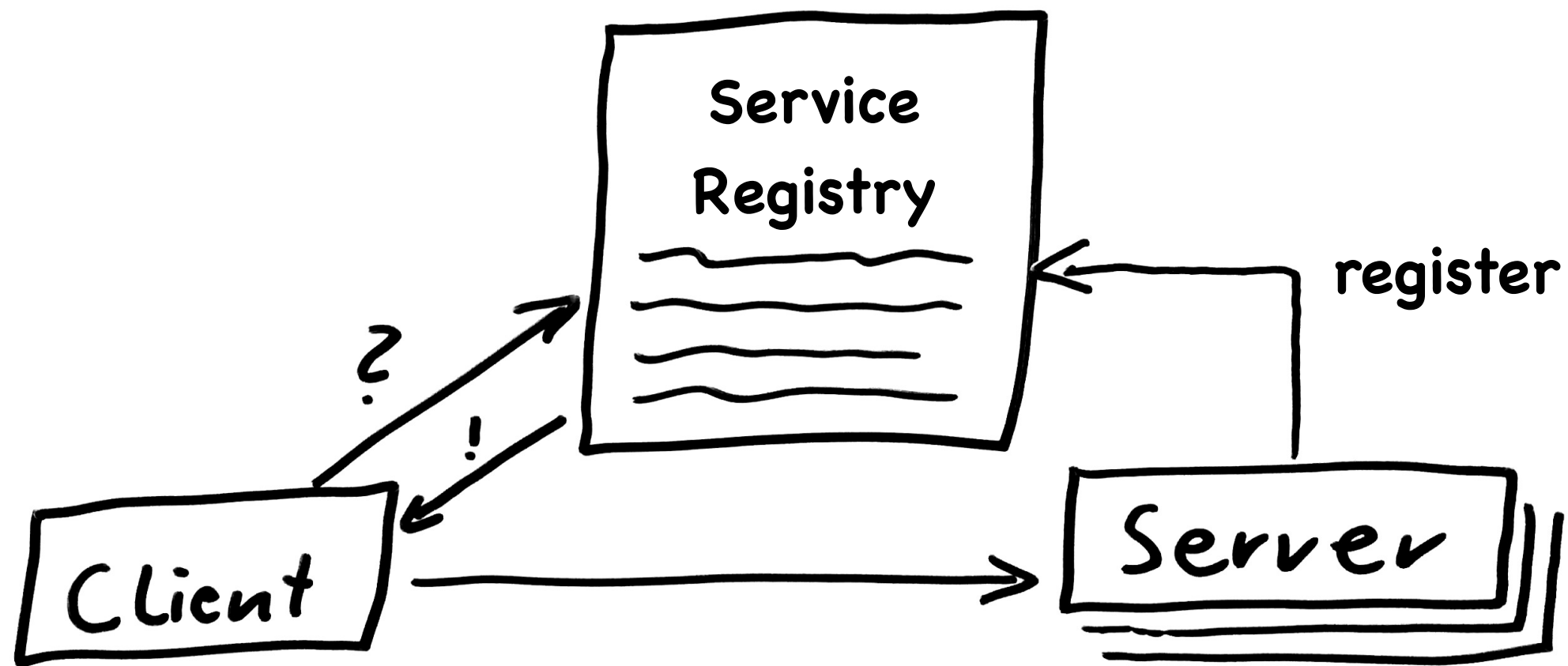
Semantic DNS



DNS and Loadbalancer



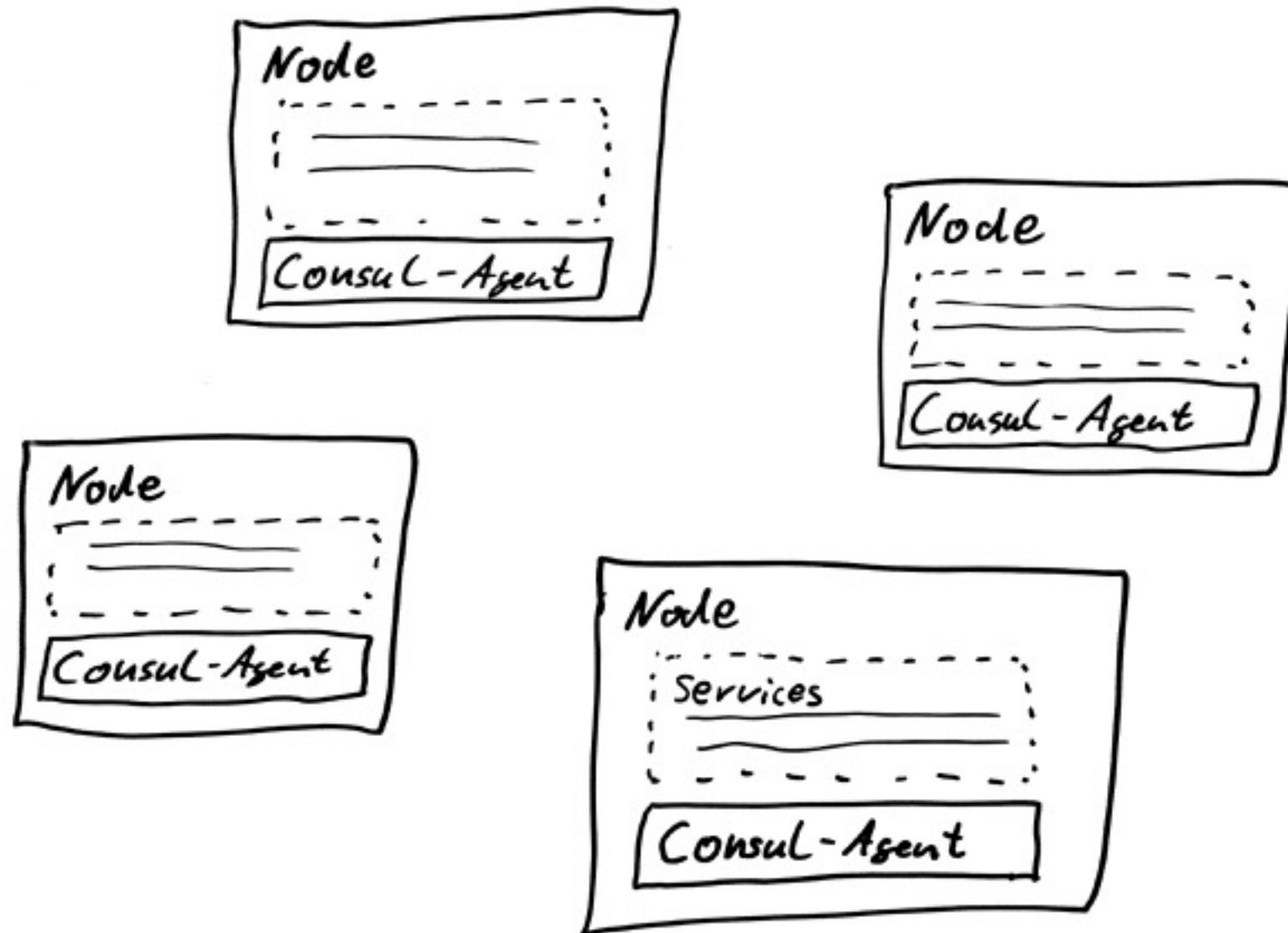
Discovery via Registry



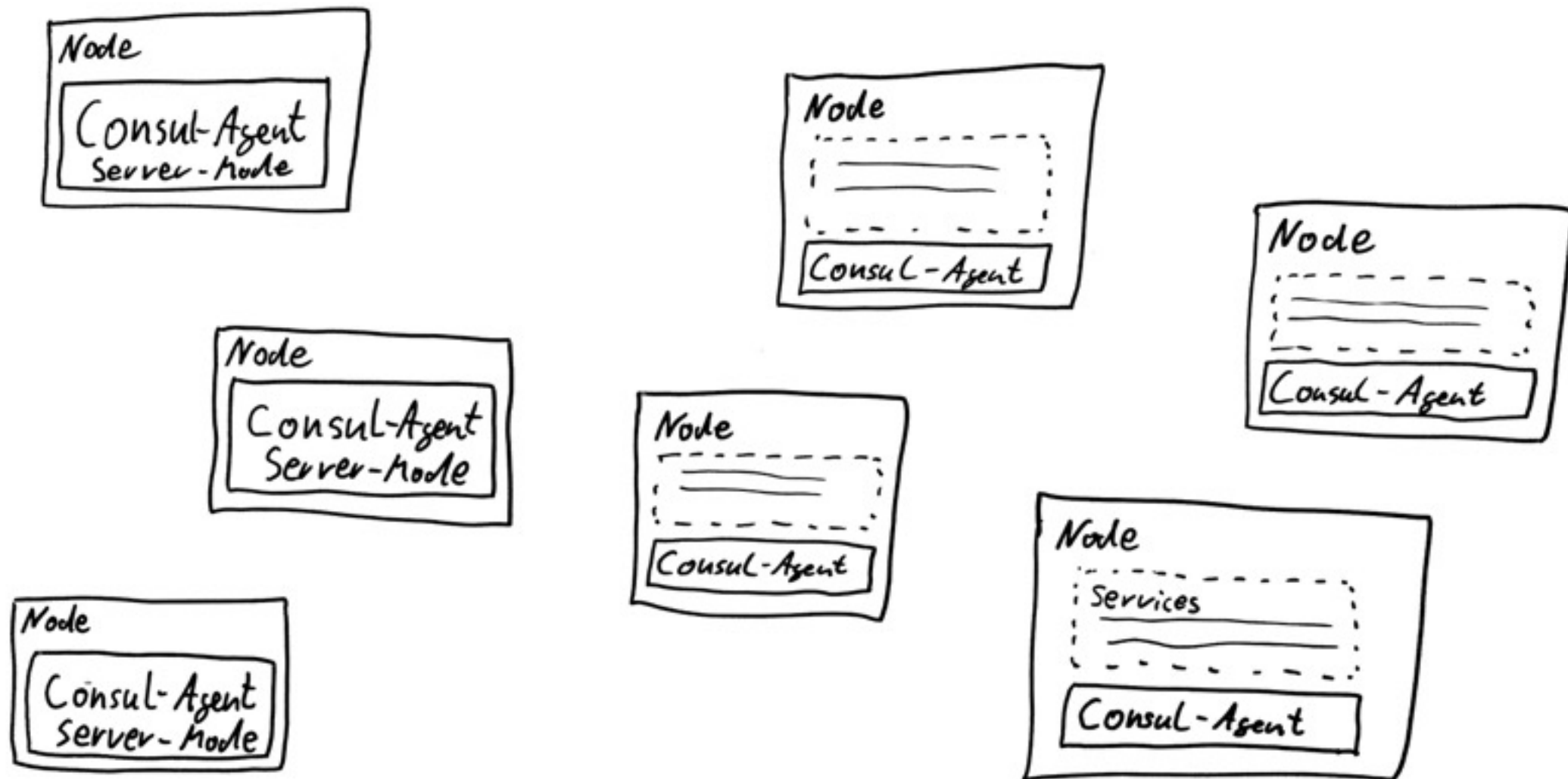
Using Consul for Service Discovery

How does this work?

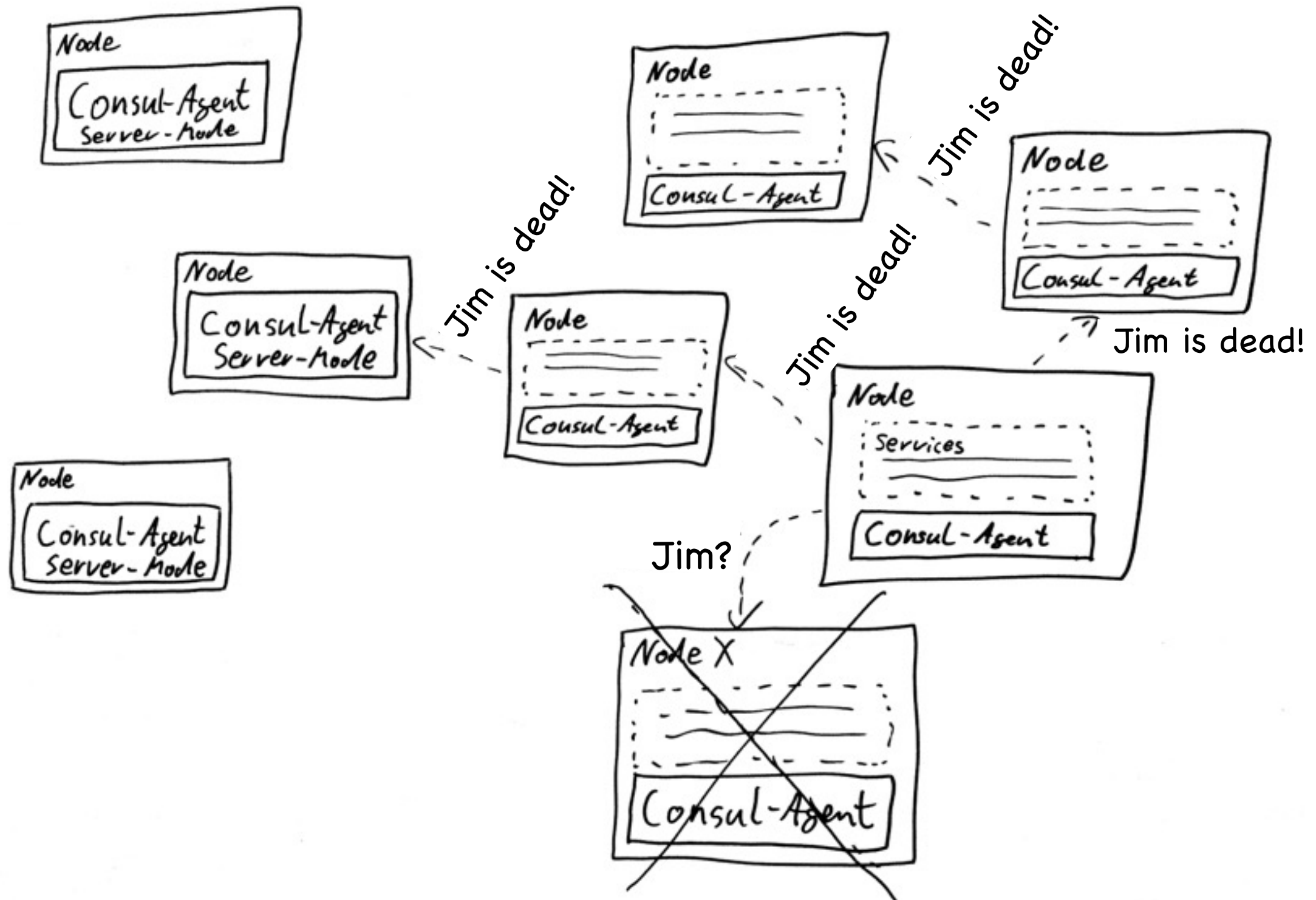
Local agents everywhere



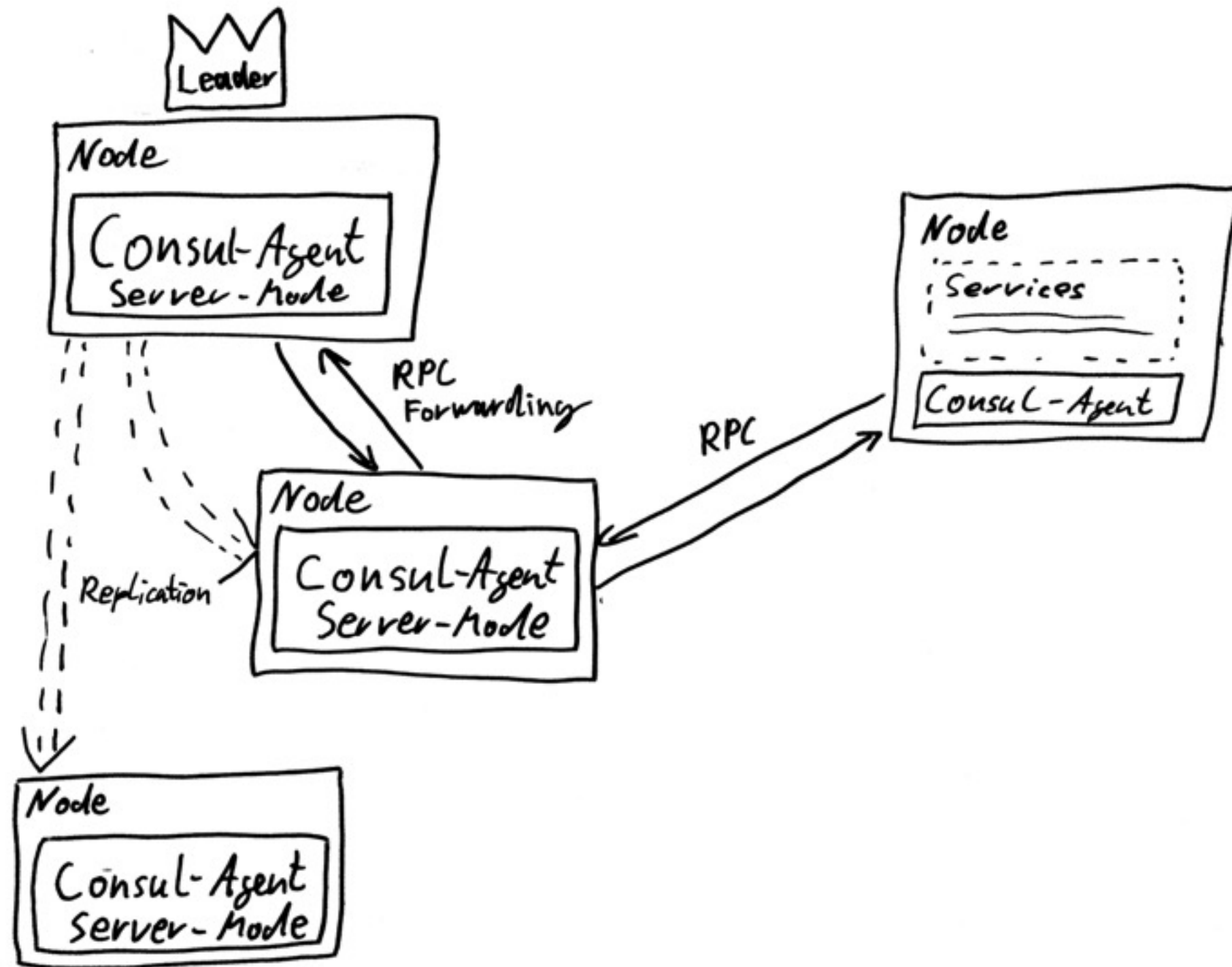
Server are cluster state aware



Communication between cluster nodes



Interaction of agents



Complex example

Real World Use Case

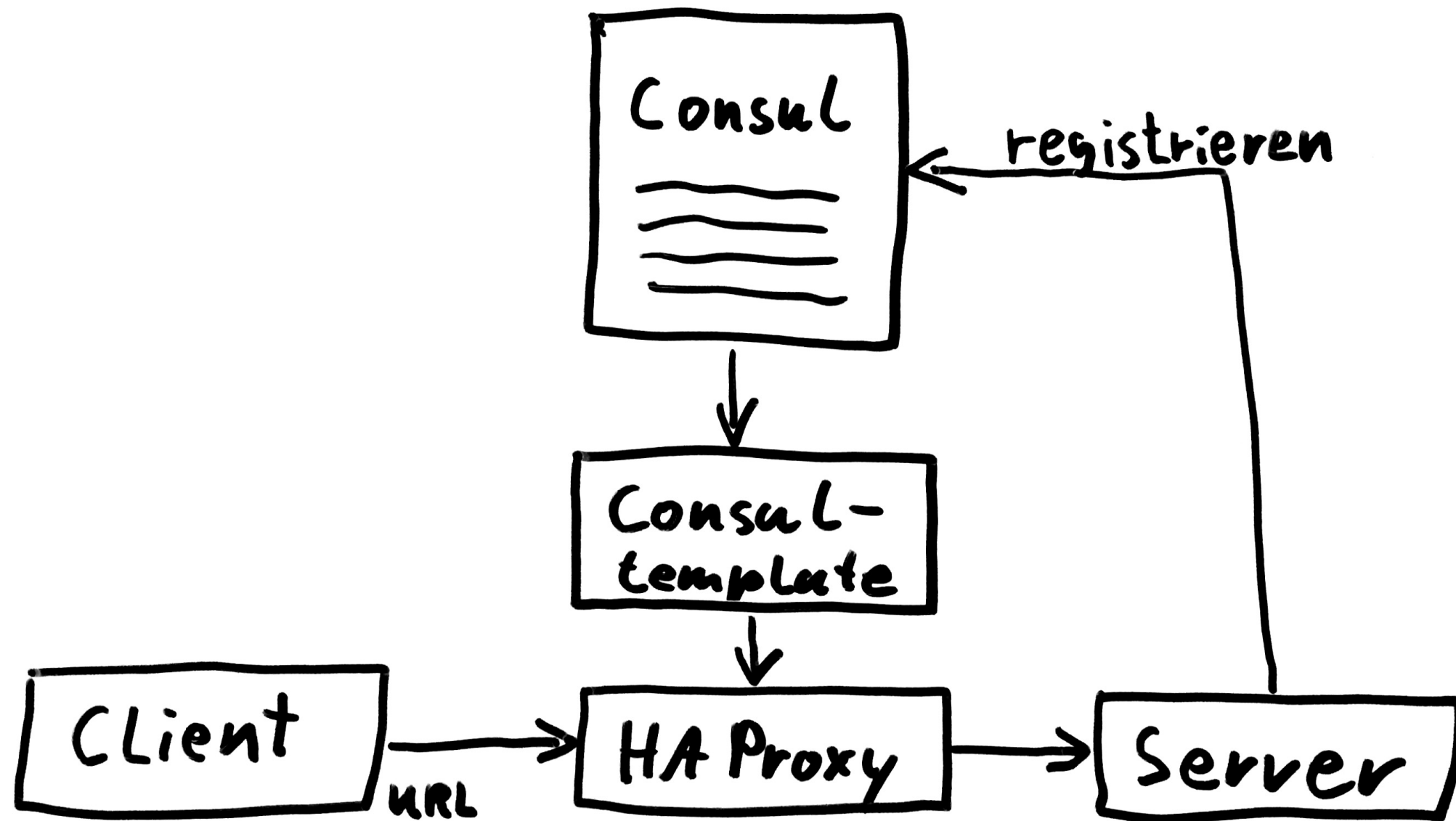
DNS?

DNS? -> No

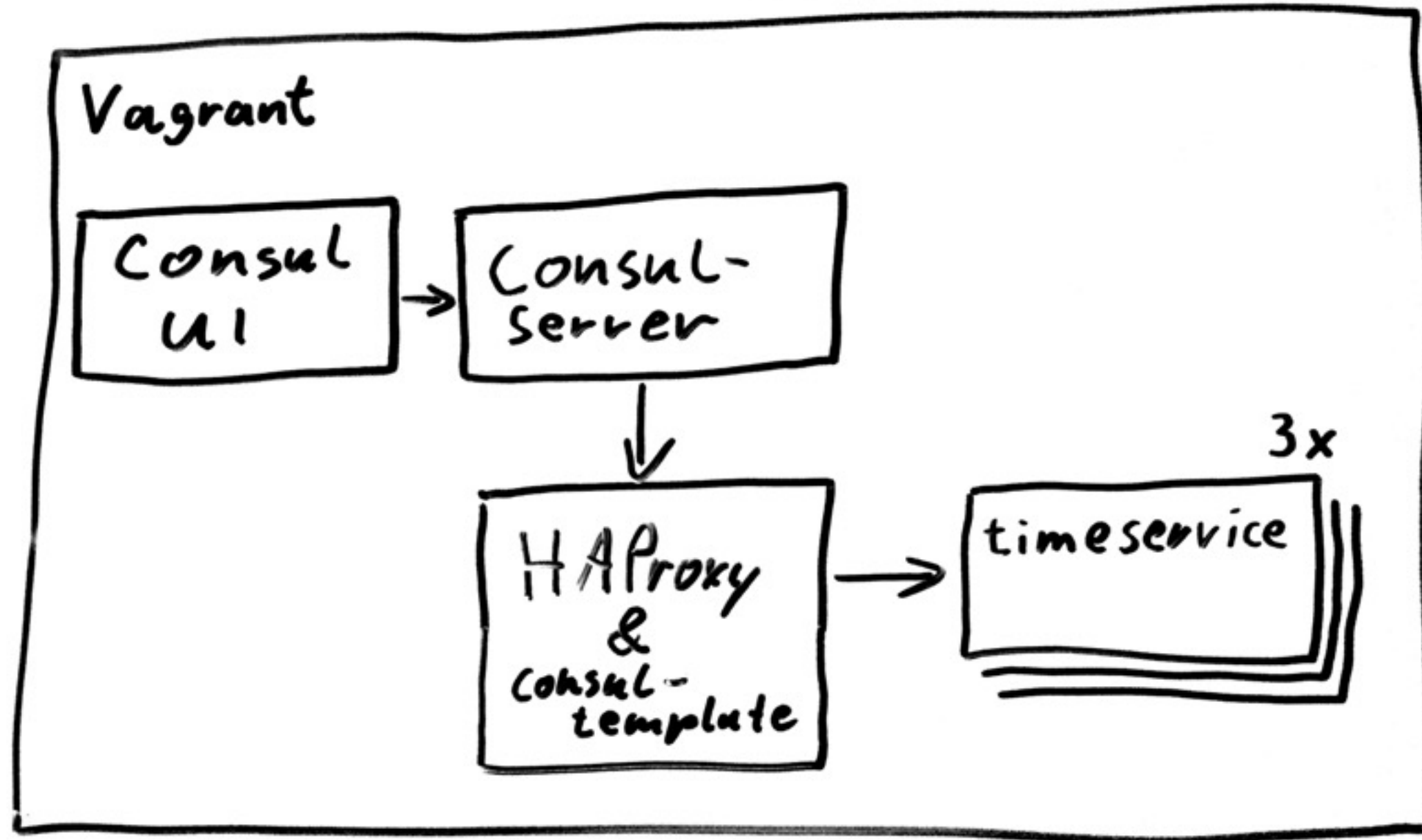
REST-API?

REST-API? -> No

Consul & HAProxy



Show case



DEMO

But there is more...

Features of Consul

Service registry

Consul

Service registry

DNS Server

Consul

Example on
Github

Service registry

DNS Server

Consul

HTTP API

Example on
Github

Service registry

DNS Server

Consul

HTTP API

Key Value Store

Service registry

DNS Server

Locks

Consul

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Example on
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Remote Execution

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Encryption and ACLs

Multiple Datacenters

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Third party integrations

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Encryption and ACLs

Summary

State of Consul

Difficulties today

The potential rises
while using it

More on Consul

Getting started:

<https://consul.io/intro/index.html>

Documentation:

<https://consul.io/docs/index.html>

Our examples:

<https://github.com/JoergM/consul-examples>

Q & A