

# Microservices

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June 12, 2019

## Abstract

SOA = Service-Oriented Architecture

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### 1.0.1 Autonomous

All communication between services are made via network calls. This helps avoid tight coupling between them.

- Avoids tight coupling
- Helps keep/enforce the separation of services
- Services should be able to independently to each other
- Services are exposed by/provide an API

Collaborating services communicate via these APIs

As they are separate to one another, we can use different technology stacks best suited for that service (e.g. by using different languages/frameworks).

Instead of scaling the whole thing, we can instead allocate different amounts of resources to each microservice, therefore, saves cost/resources. (e.g. One instance for A and 2 for B).

As each microservice is small, can easily be re-written/detached for something better (only a few hundred lines long (should be able to be written in one day)).