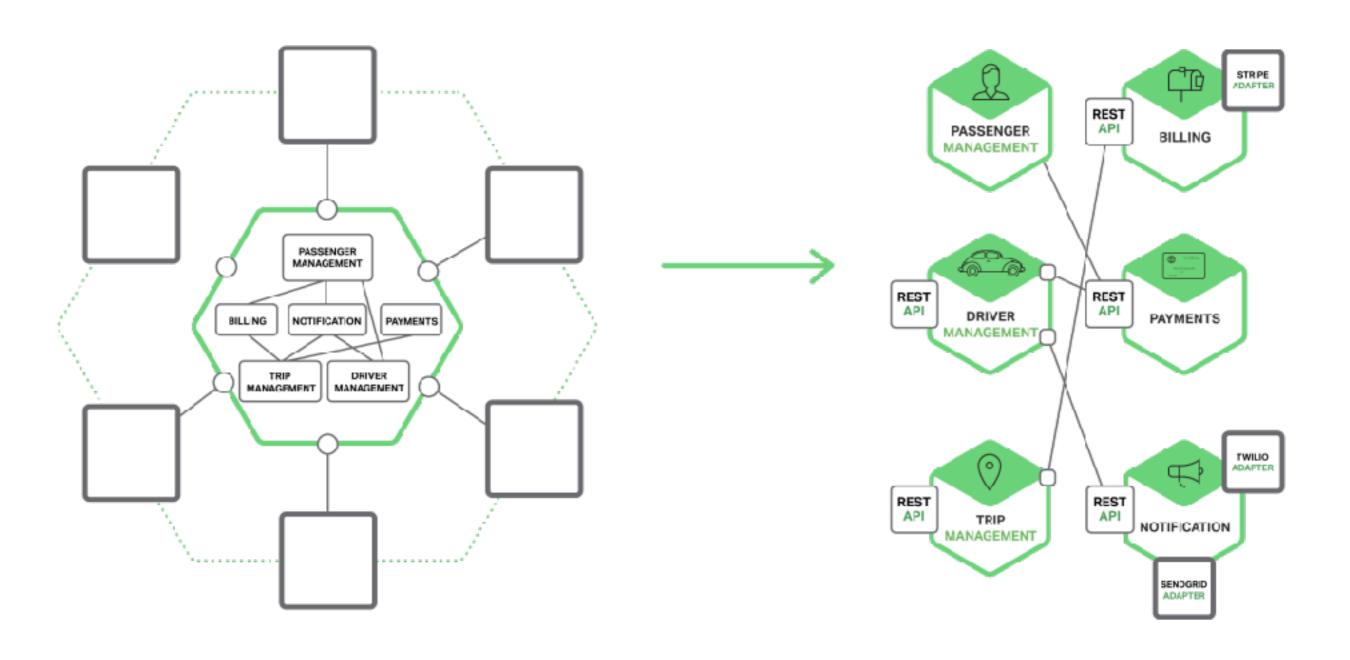
#### Service Communication



# Inter-Process Communication (IPC)





# Interaction Styles (1)

One-to-one
One-to-many



#### One-to-one

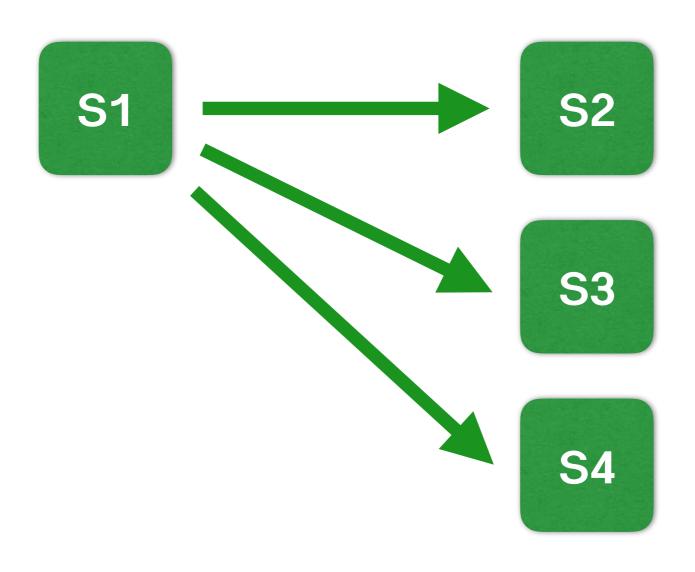
Each client request is processed by exactly one service instance





#### One-to-many

Each request is processed by multiple service instances





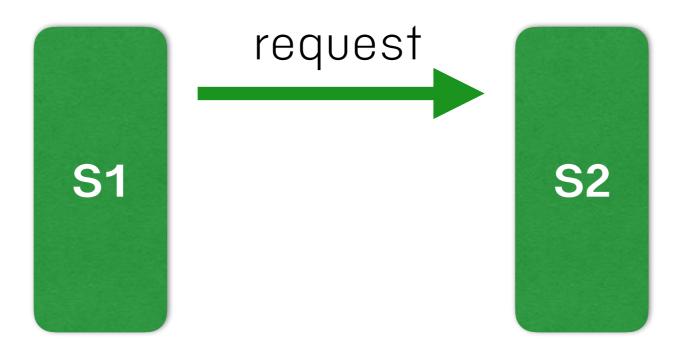
# Interaction Styles (2)

Synchronous Asynchronous



### Synchronous

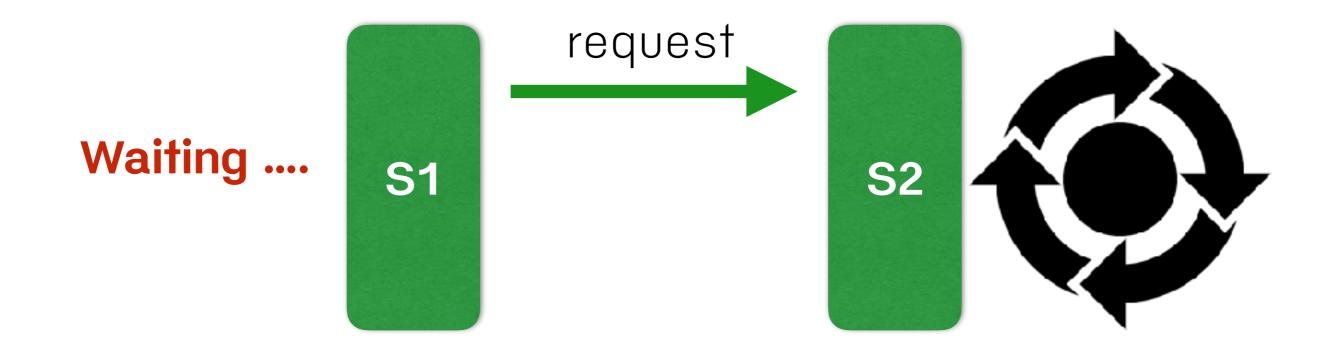
The client expects a timely response from the service and might even block while it waits





#### Synchronous

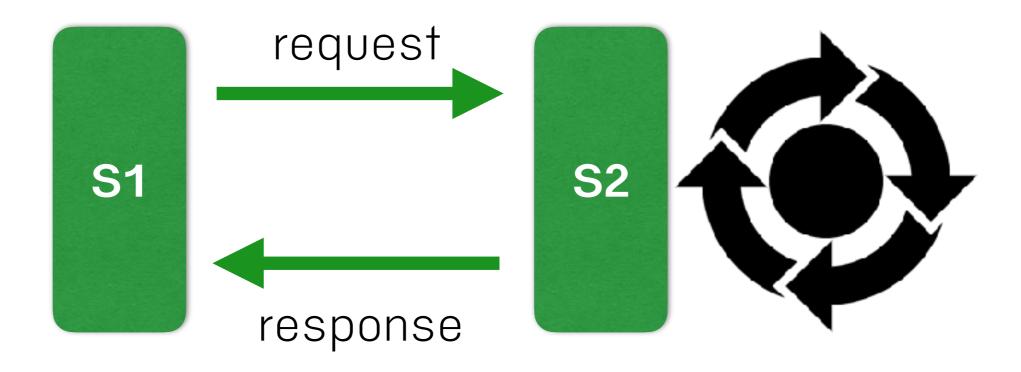
The client expects a timely response from the service and might even block while it waits





#### Synchronous

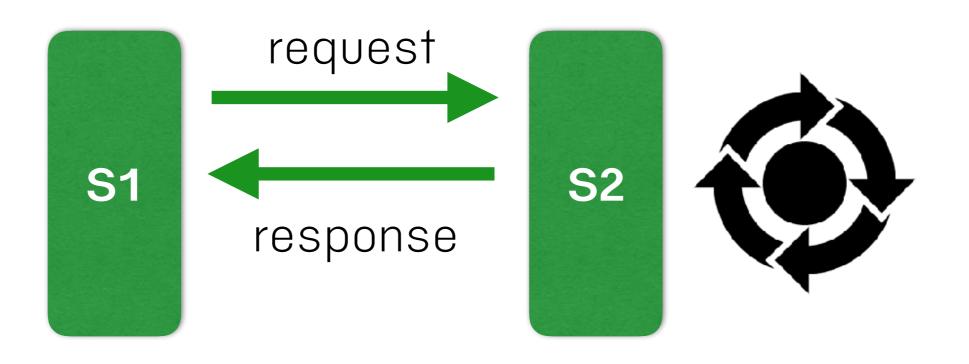
The client expects a timely response from the service and might even block while it waits





#### Asynchronous

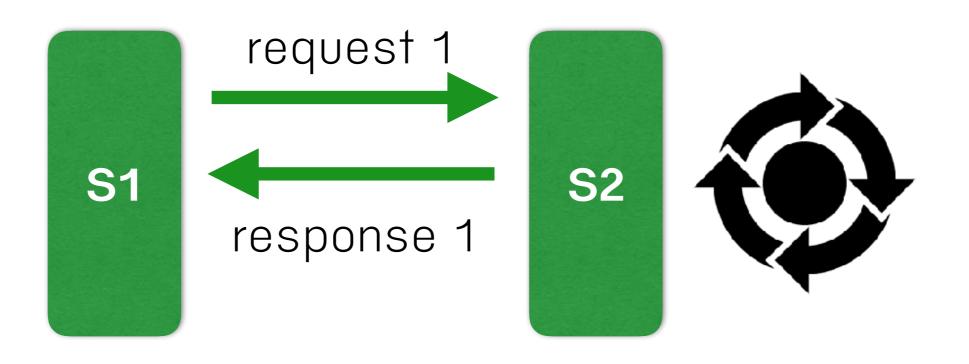
The client doesn't block while waiting for a response, and the response, if any, isn't necessarily sent immediately





#### Asynchronous

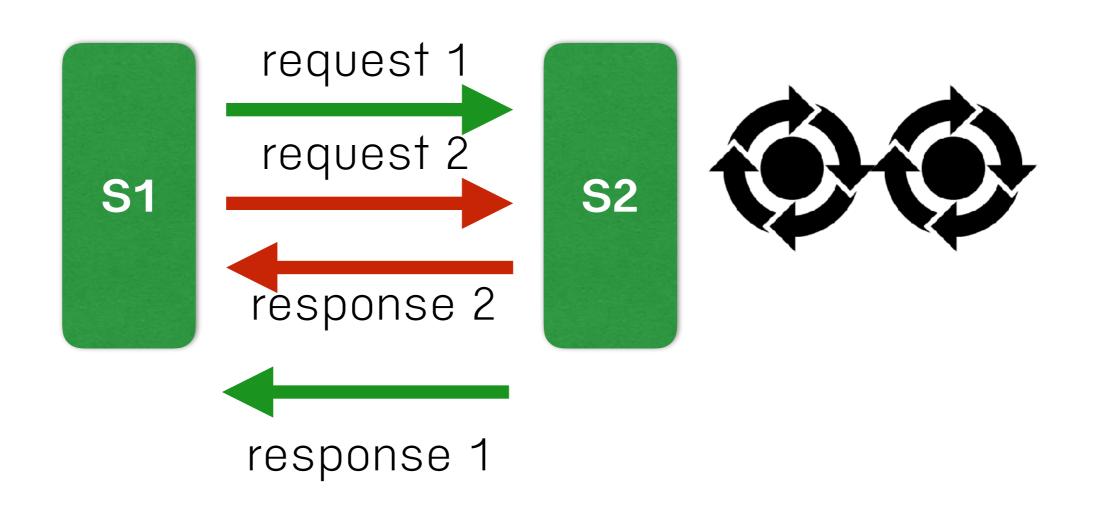
The client doesn't block while waiting for a response, and the response, if any, isn't necessarily sent immediately





#### Asynchronous

The client doesn't block while waiting for a response, and the response, if any, isn't necessarily sent immediately





# Combination of Styles

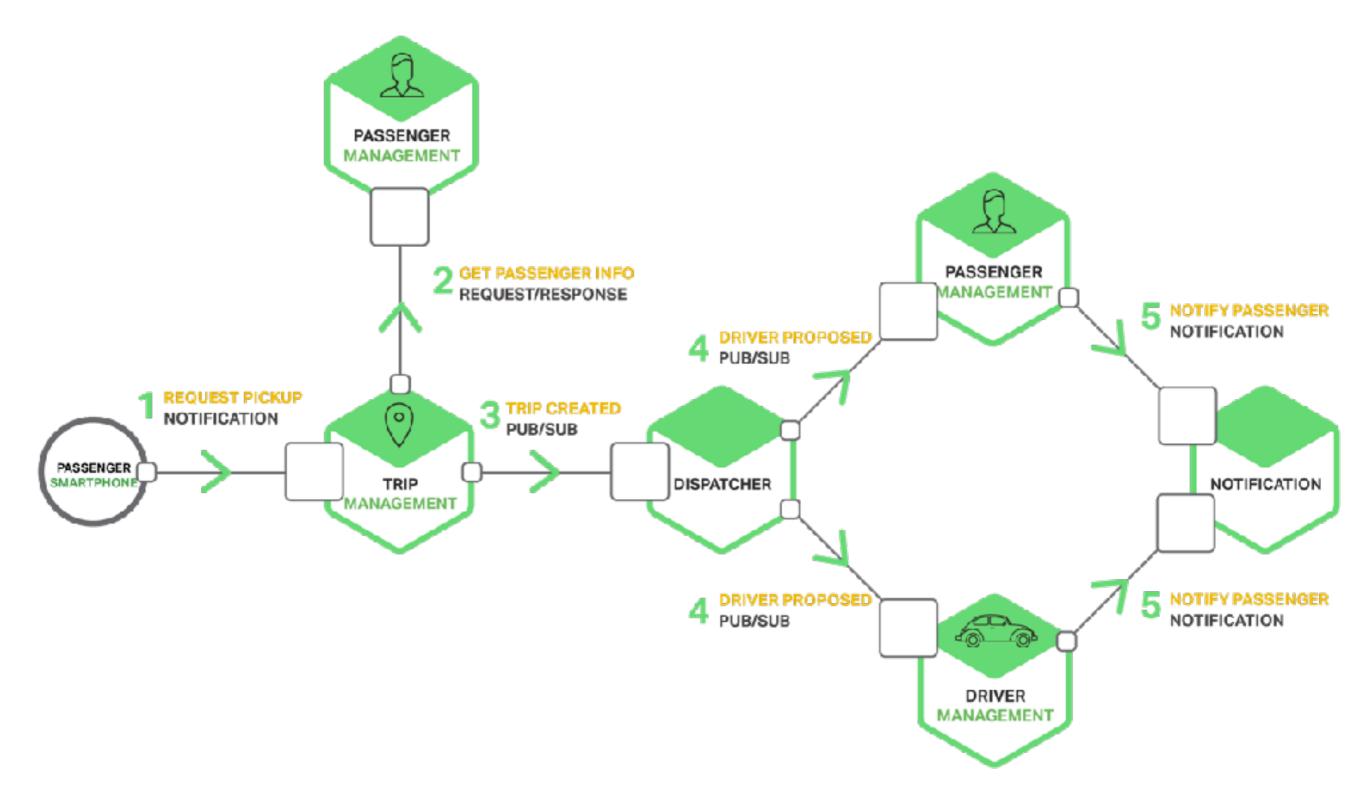


# Interaction Styles

	One-to-One	One-to-Many
Synchronous	Request/Response	
Asynchronous	Notification	Publish/Subscribe
	Request/Async response	Publish/Async response

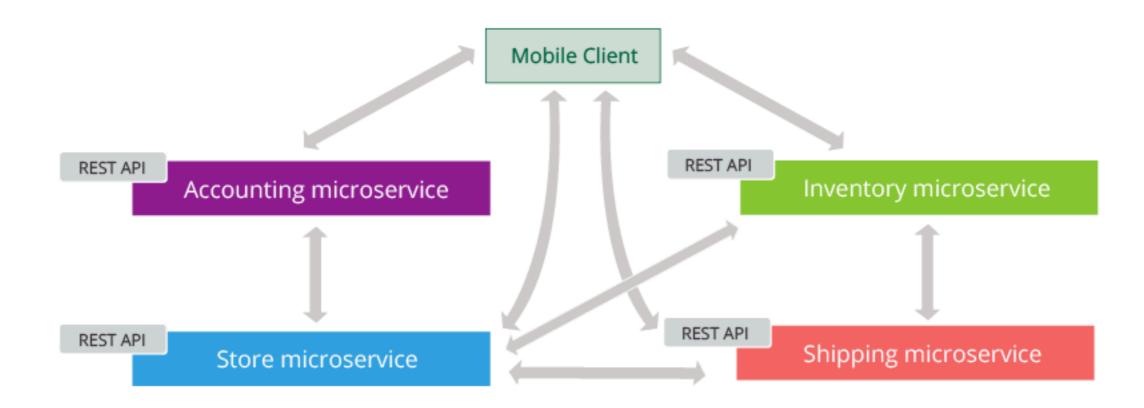


## Example



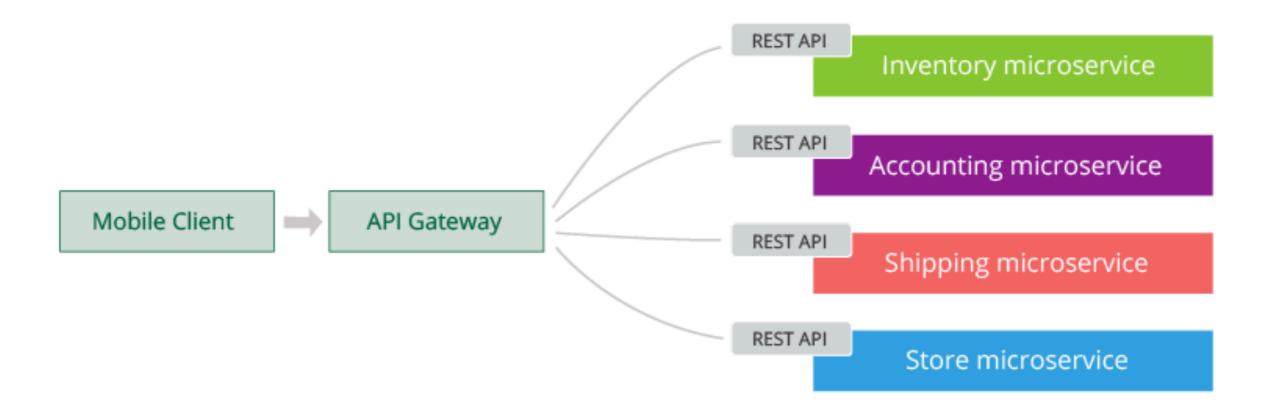


#### Point-to-Point





# **API Gateway**





## Message Broker

