



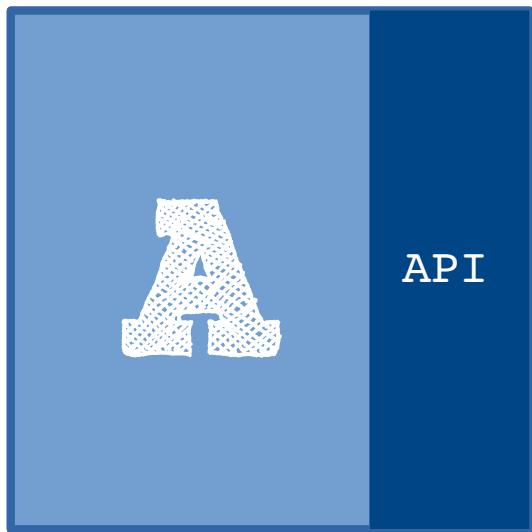
Landeshauptstadt
München



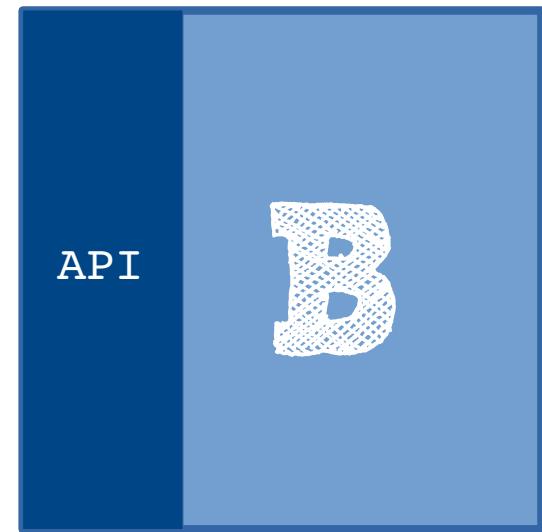
Wenn

SCHNITTSTELLEN

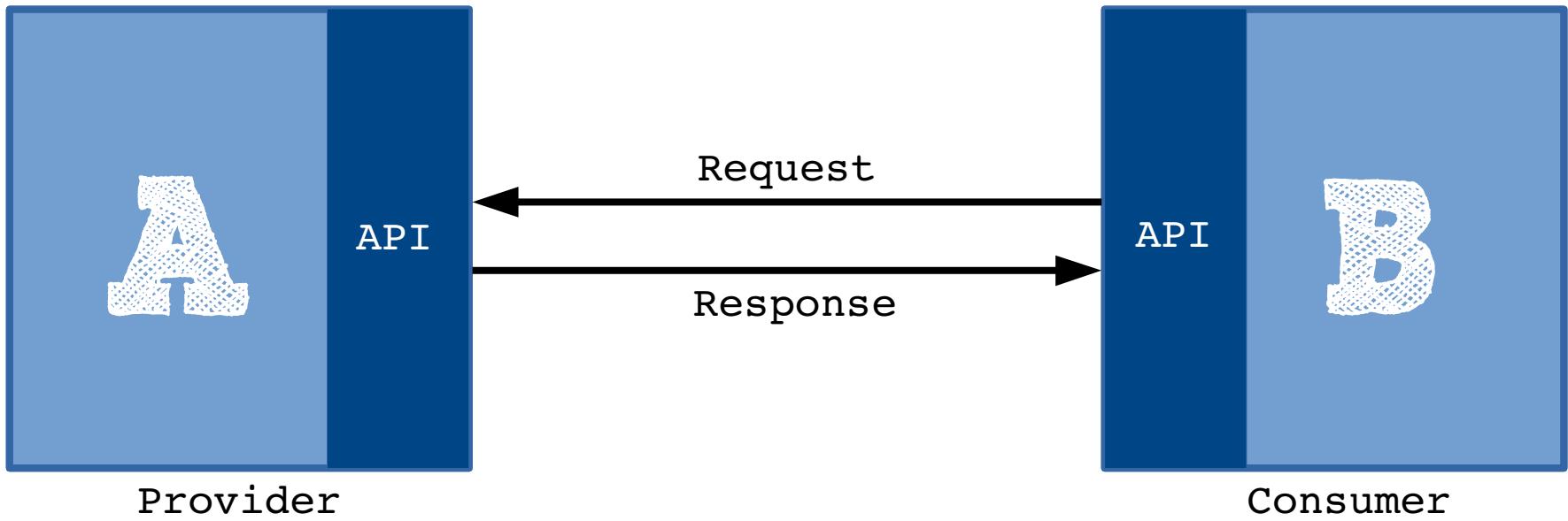
alt werden...

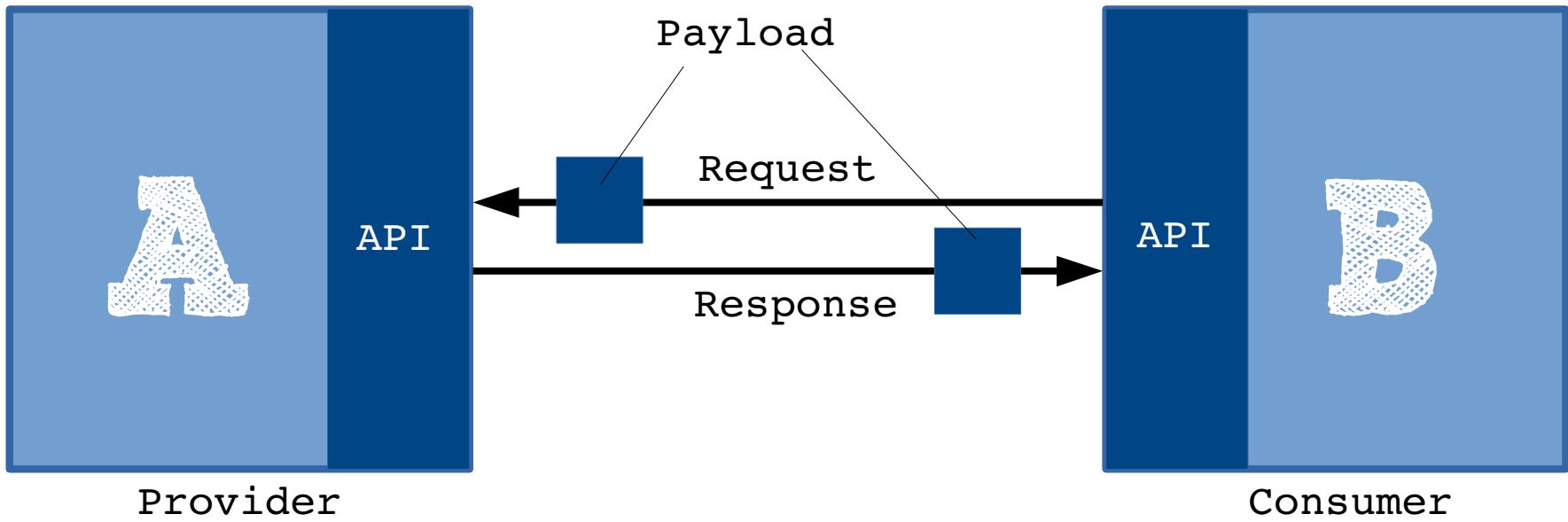


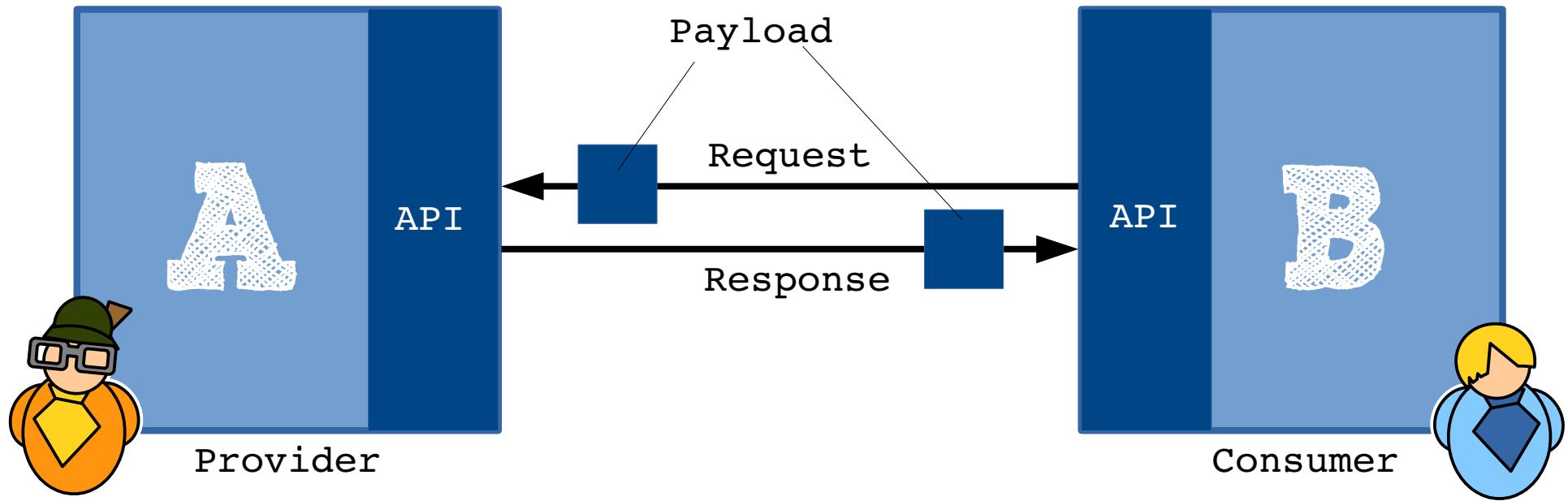
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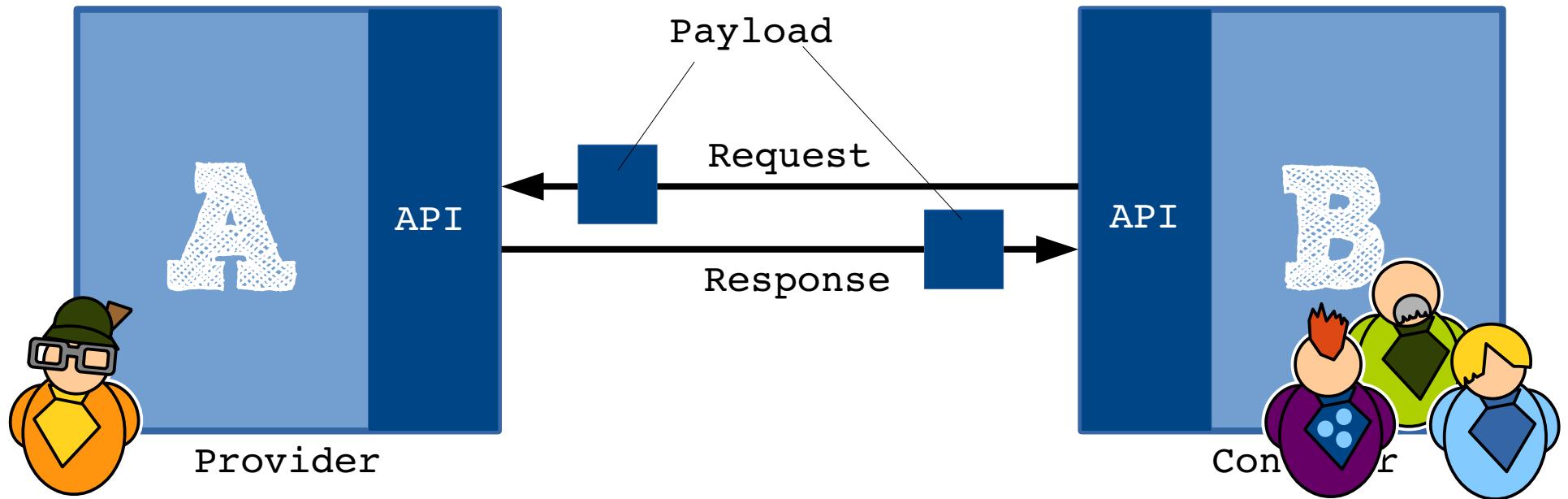


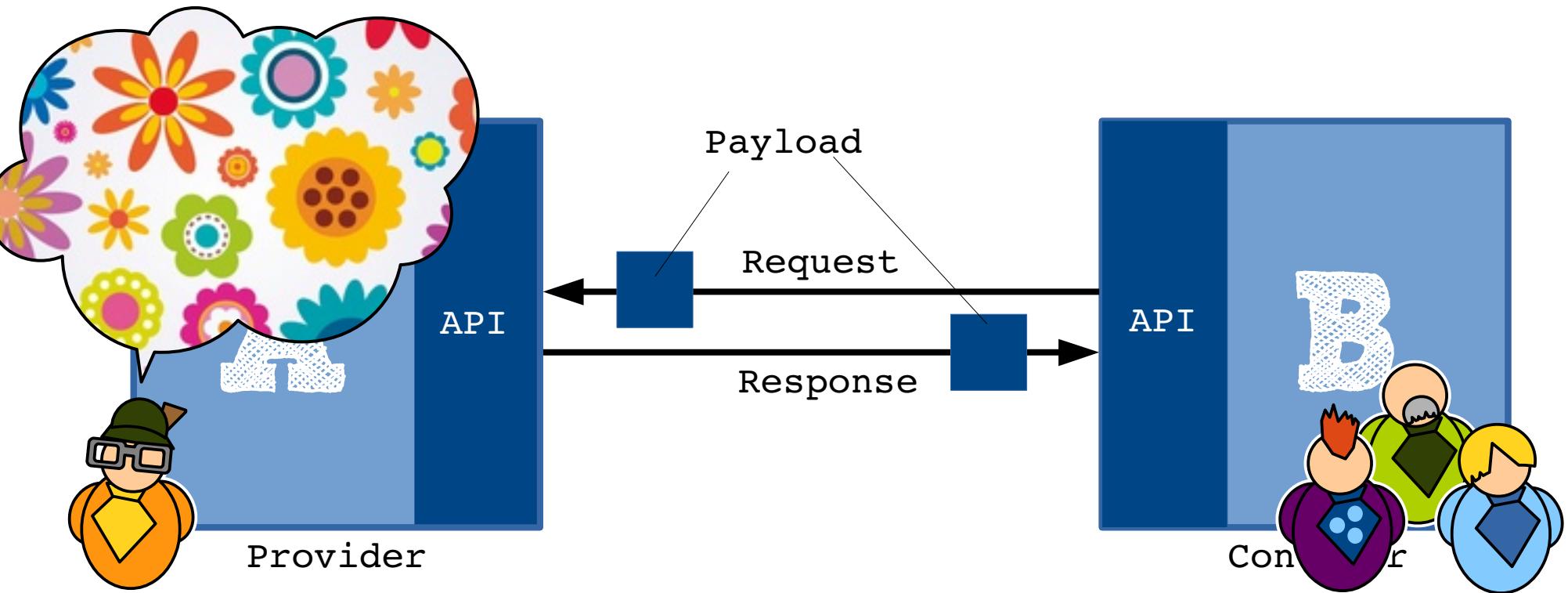
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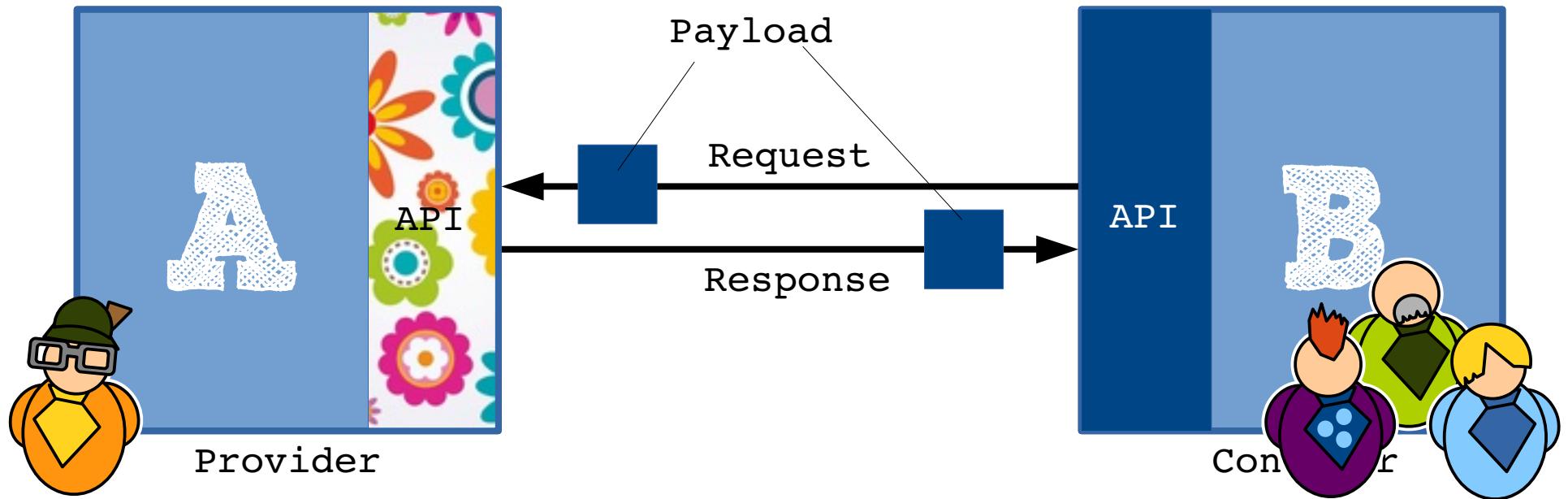


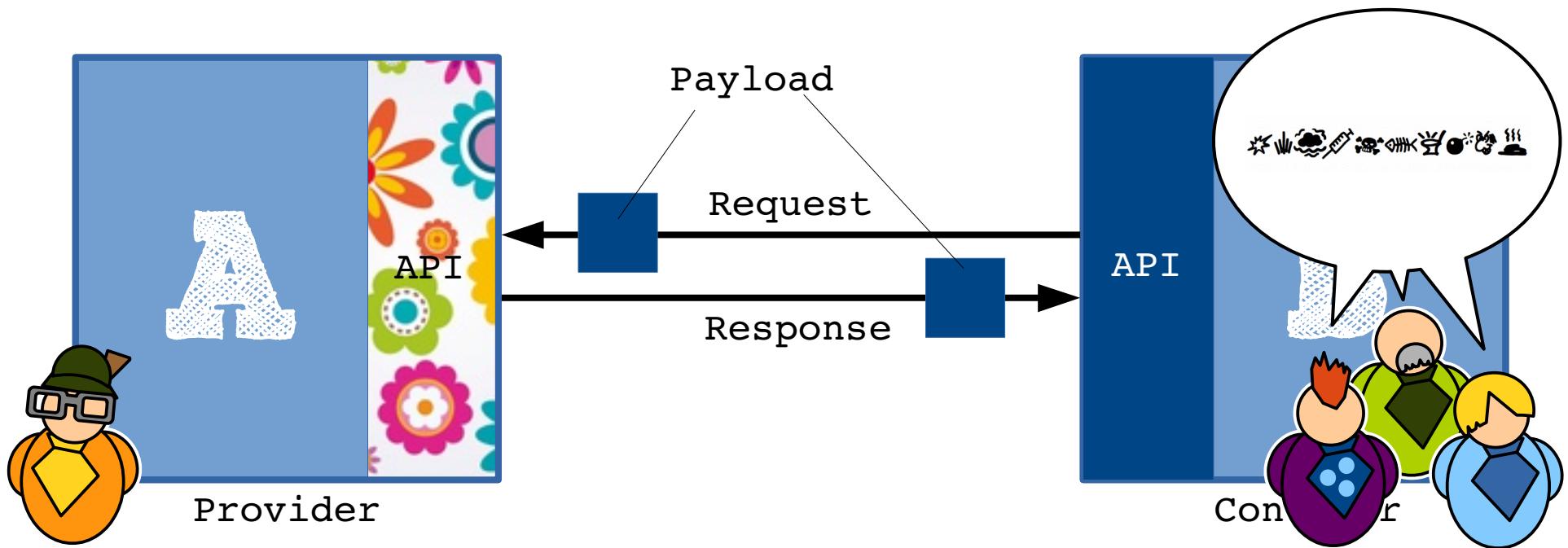


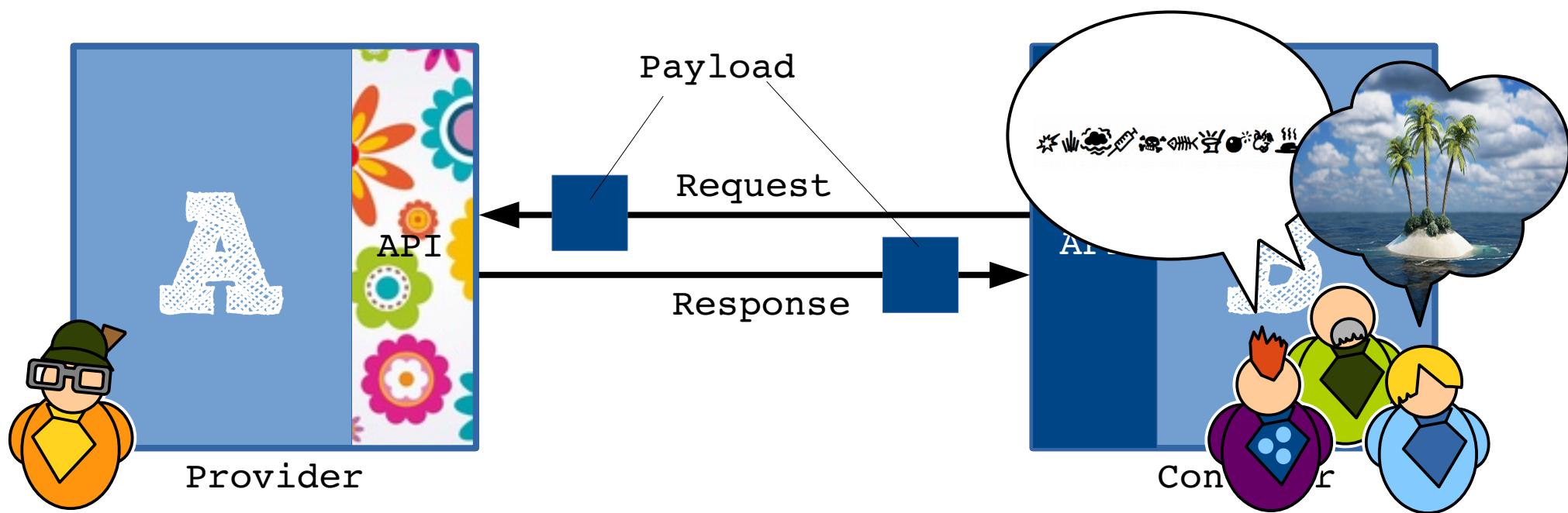


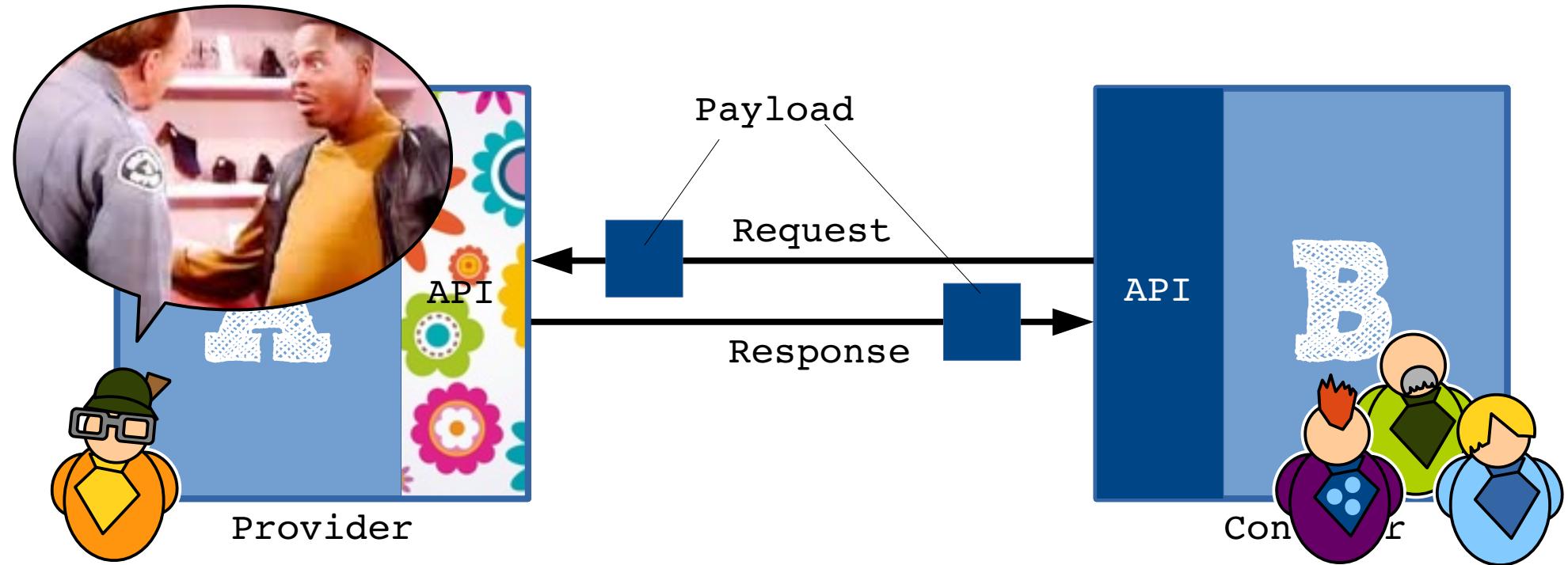


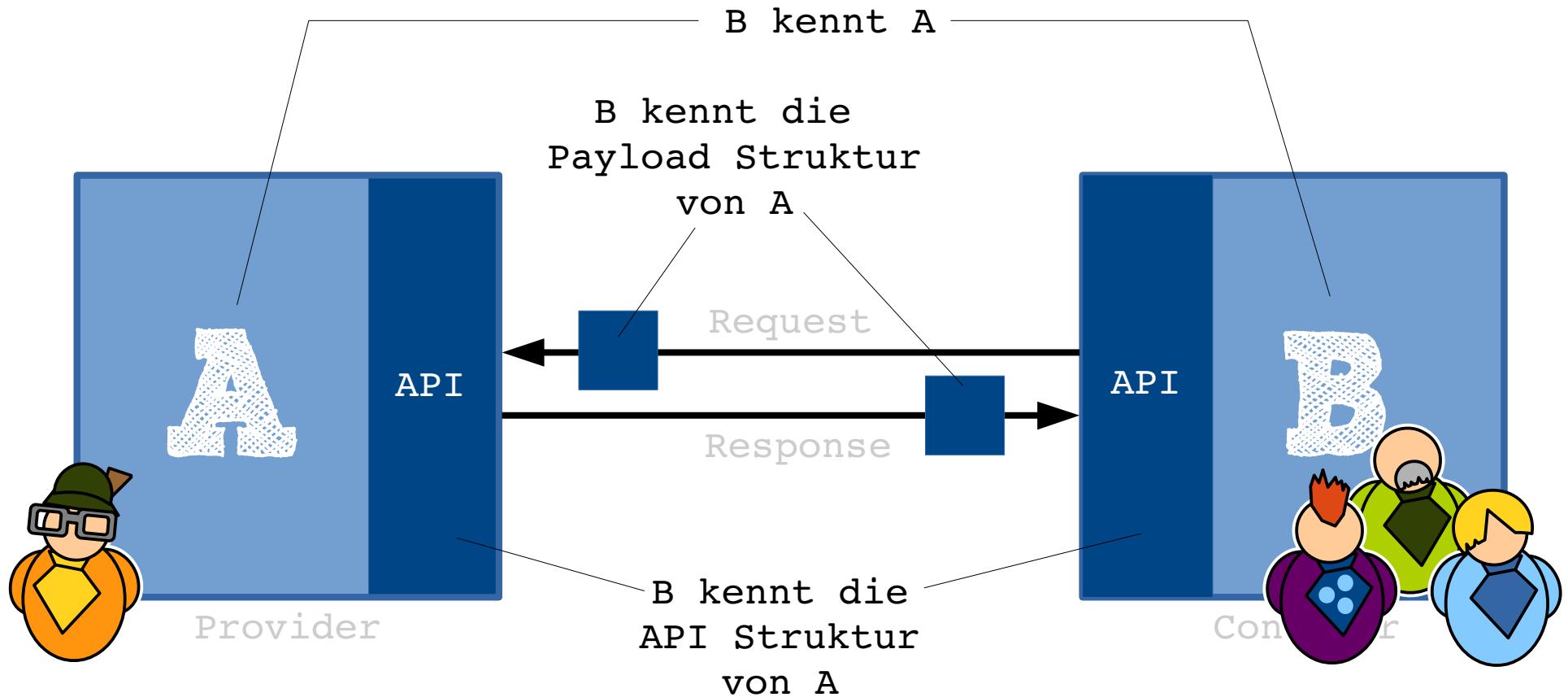






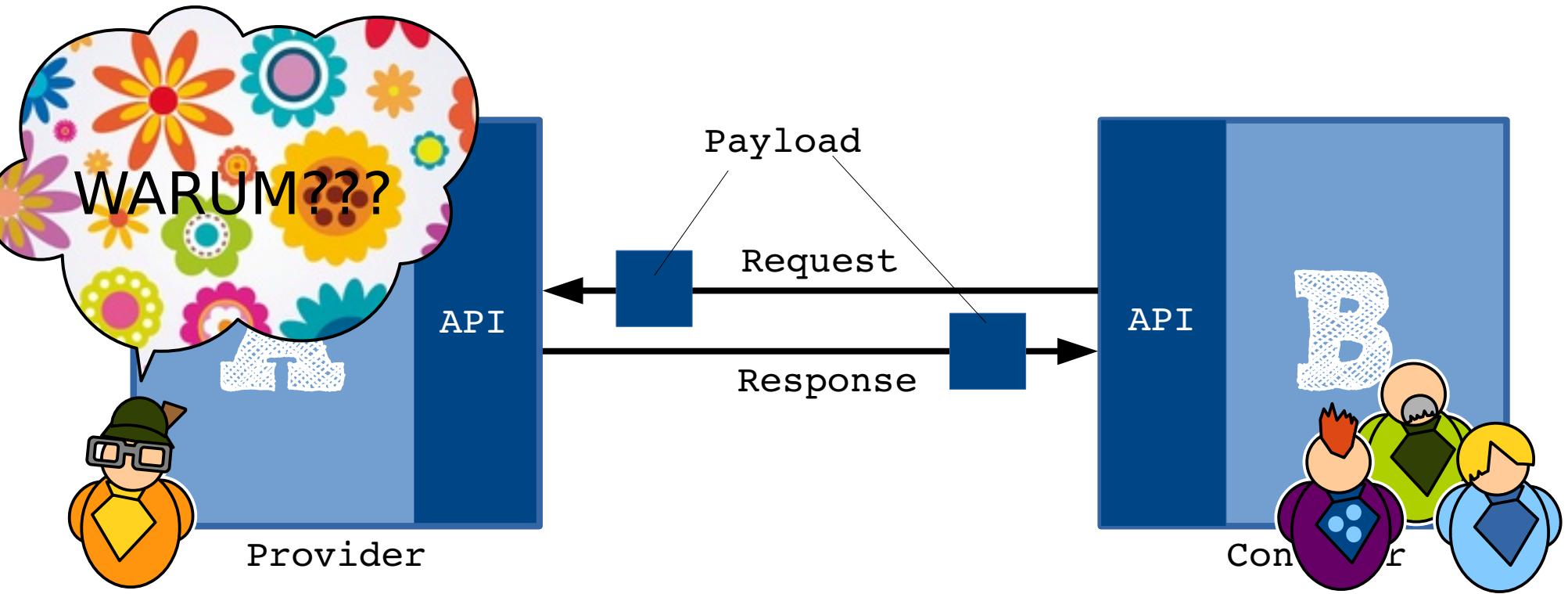


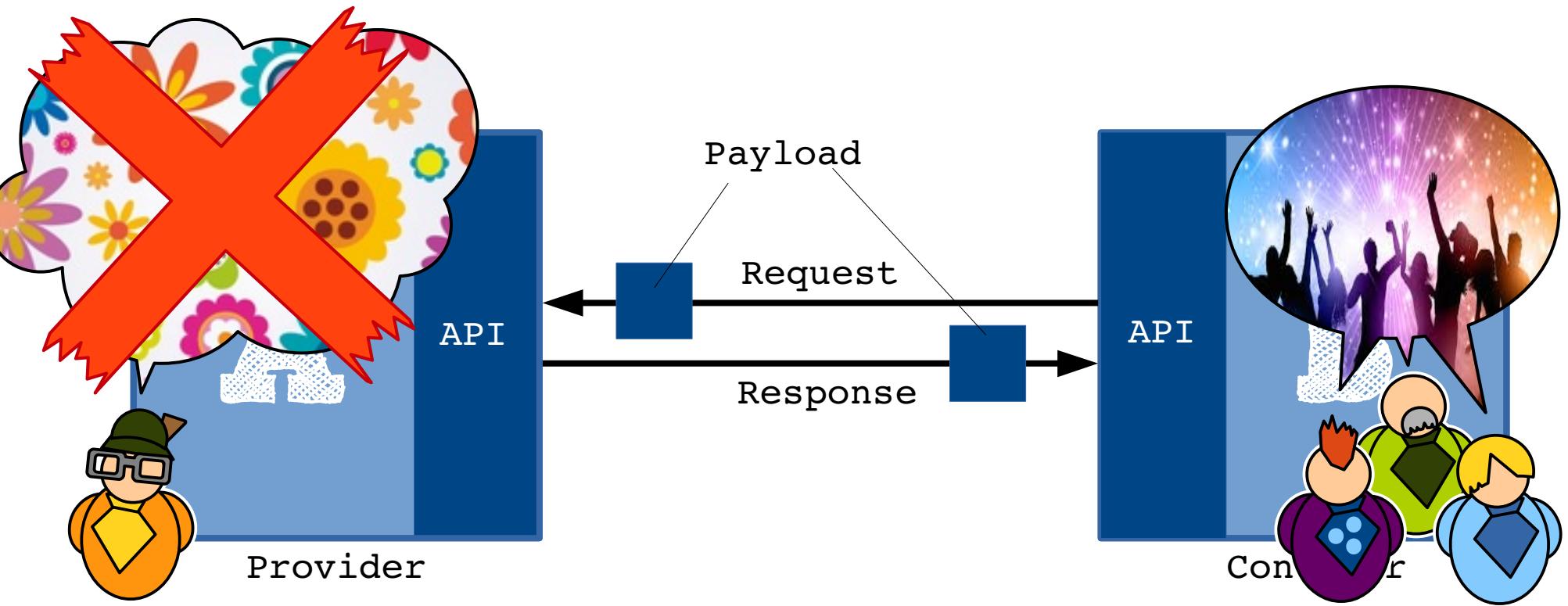




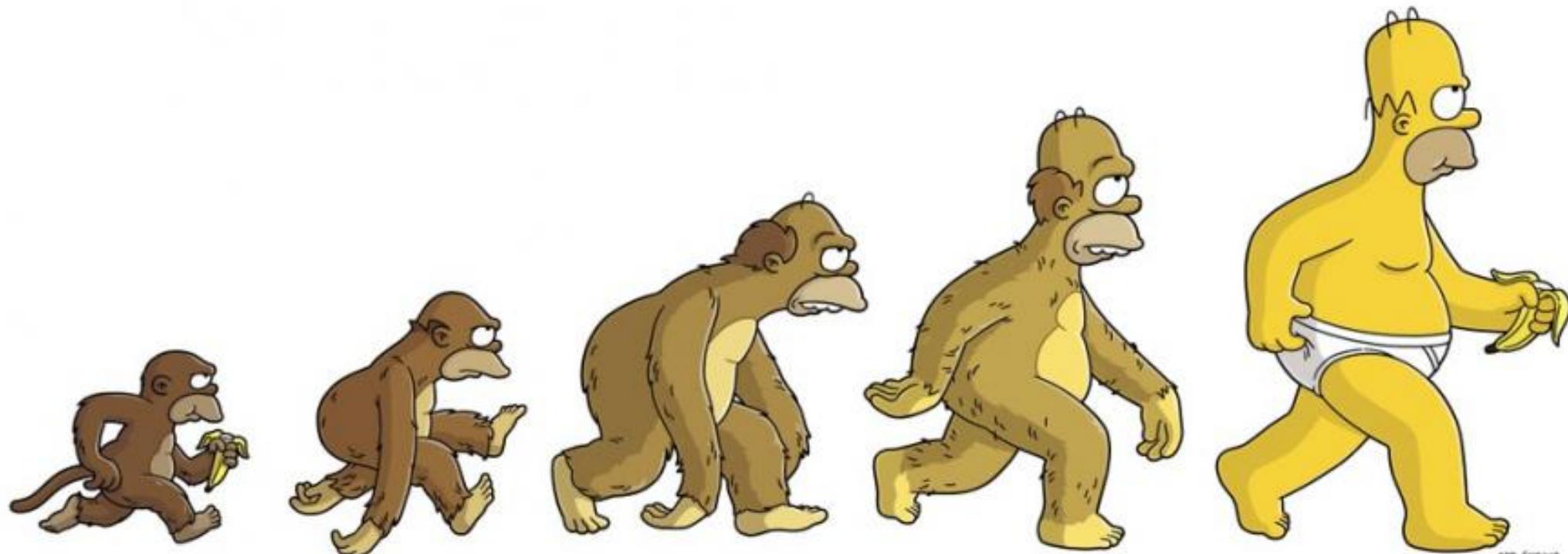
System **B** muss ziemlich viel von System

A kennen, damit die Kommunikation funktioniert!





EVOLUTION



MONKIUS EATALOTIS

CHIMPUS IMBECILUS

APEIS STUPIDIUS

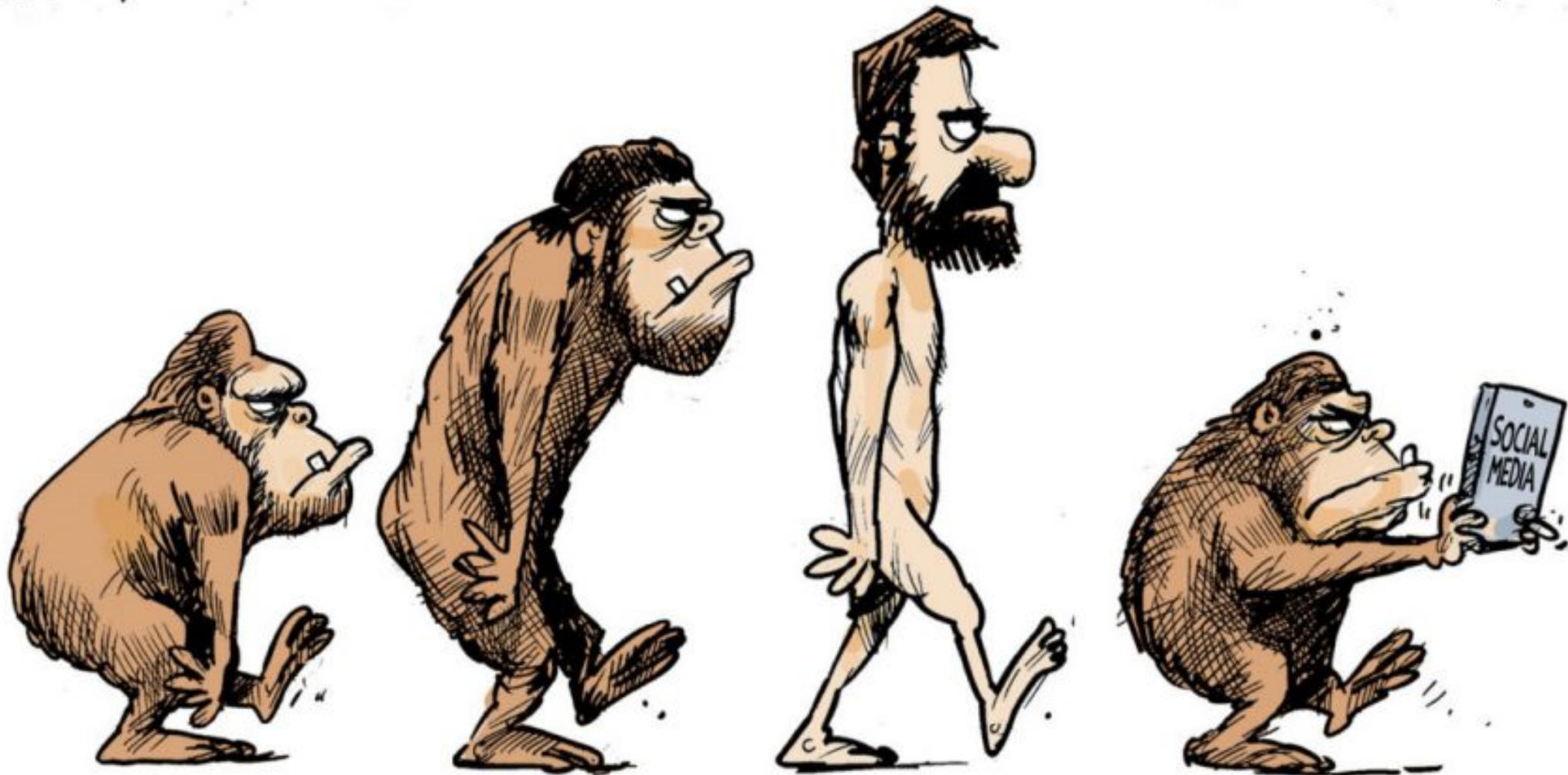
NEANDERSLOB

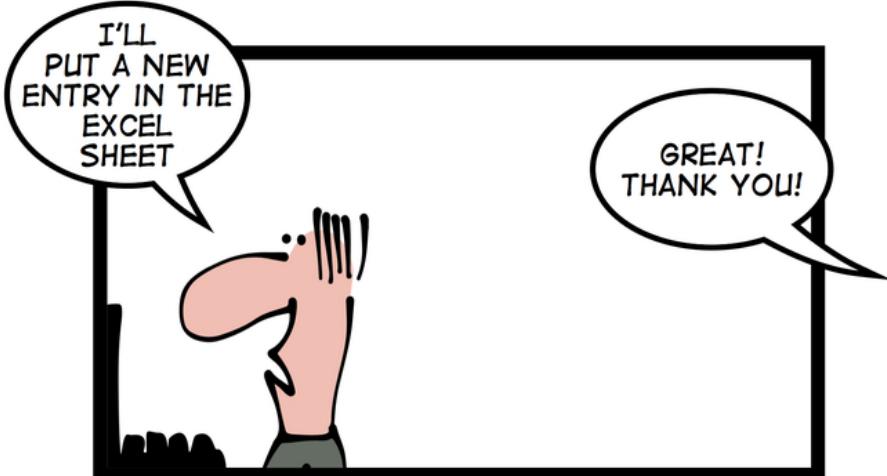
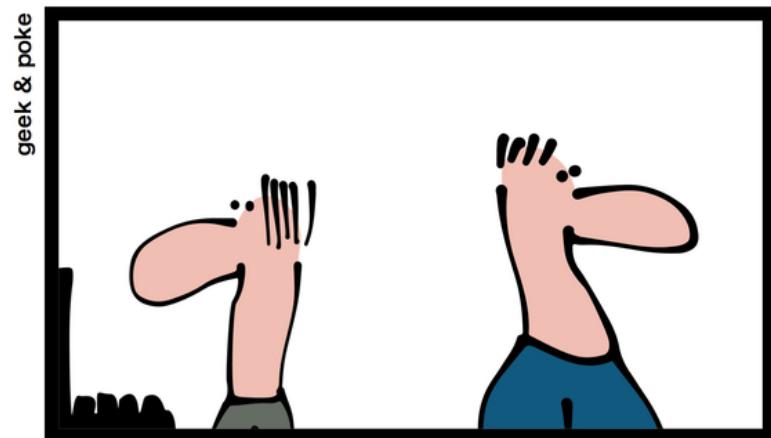
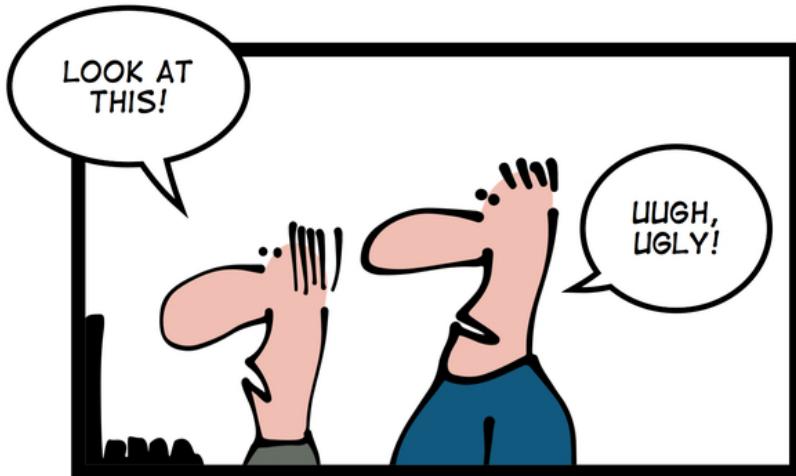
HOMERSAPIEN

HOMERSAPIEN

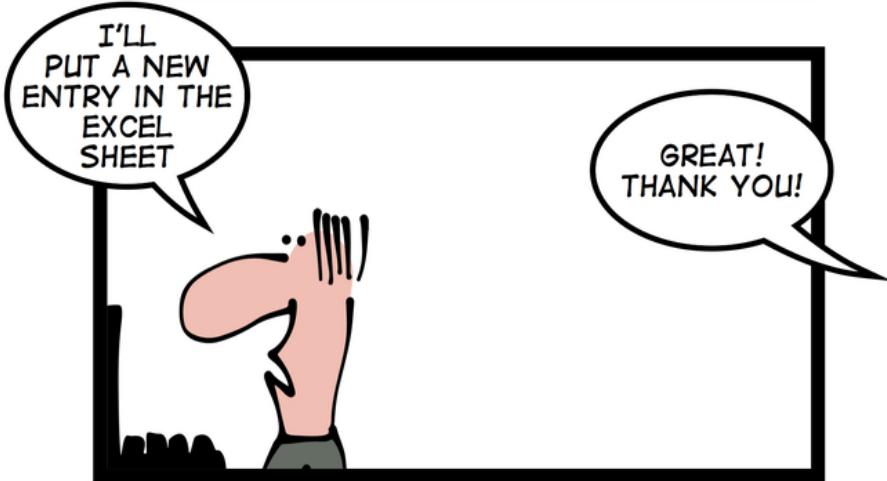
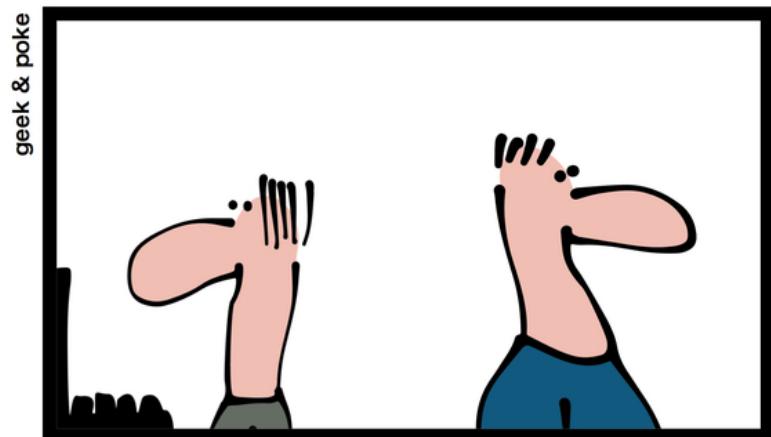
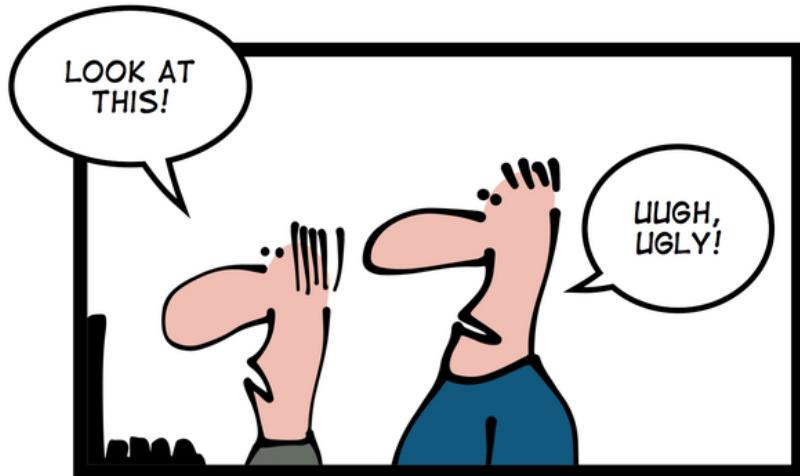
GREG
PERKES

EVOLUTION 2.0



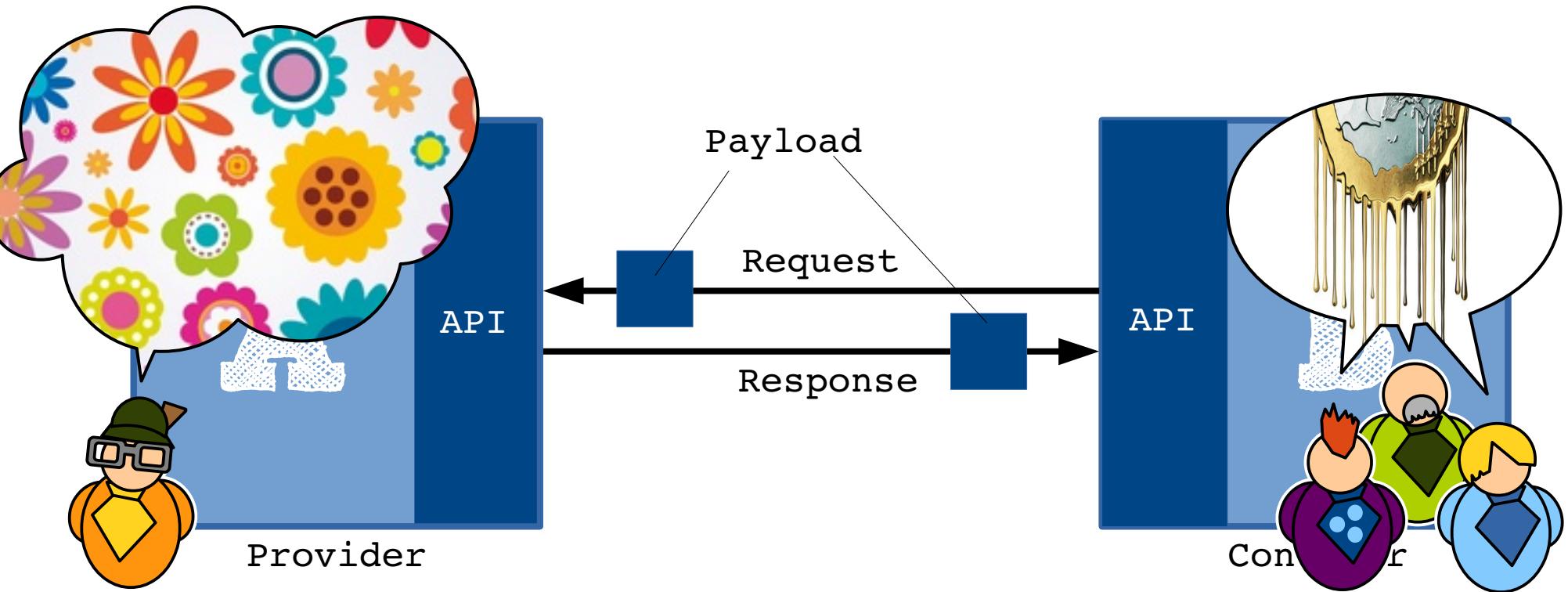


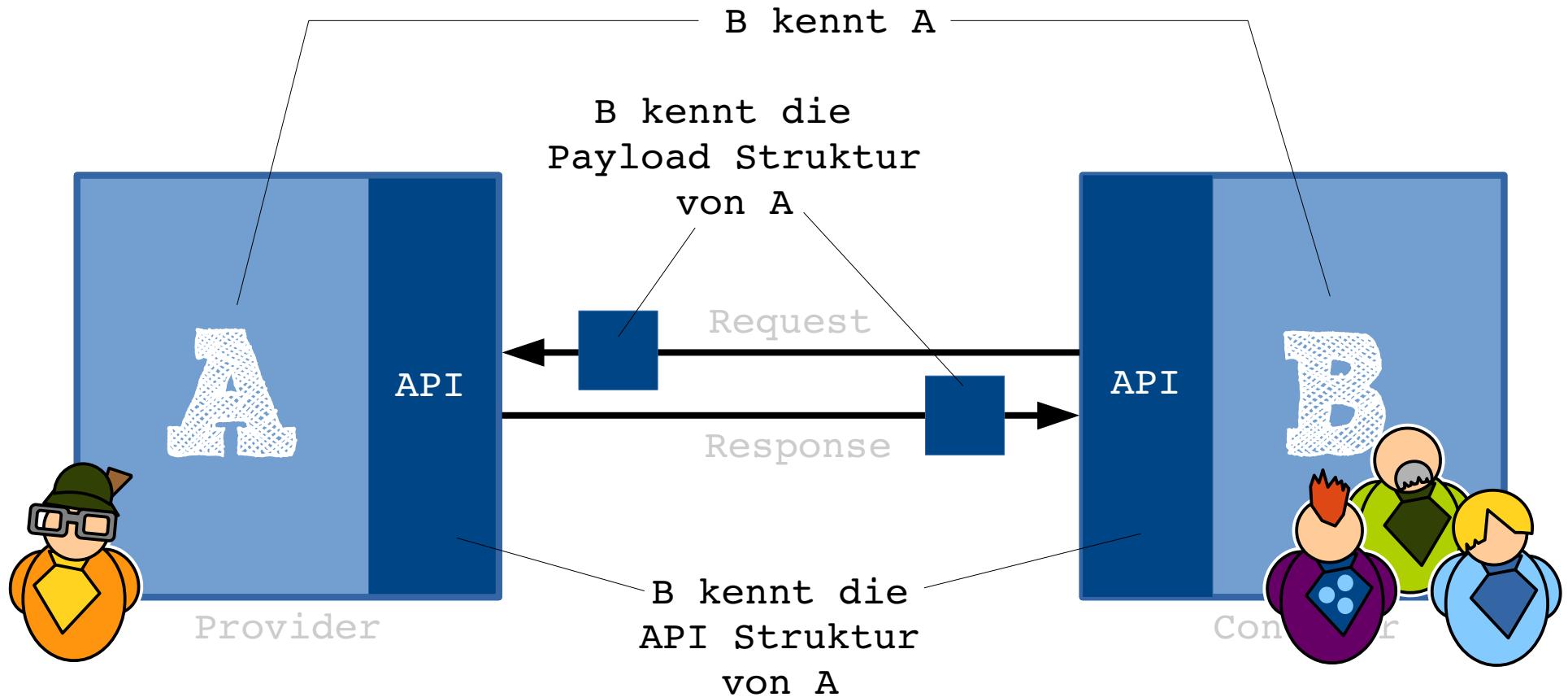
technicalDebts.xls

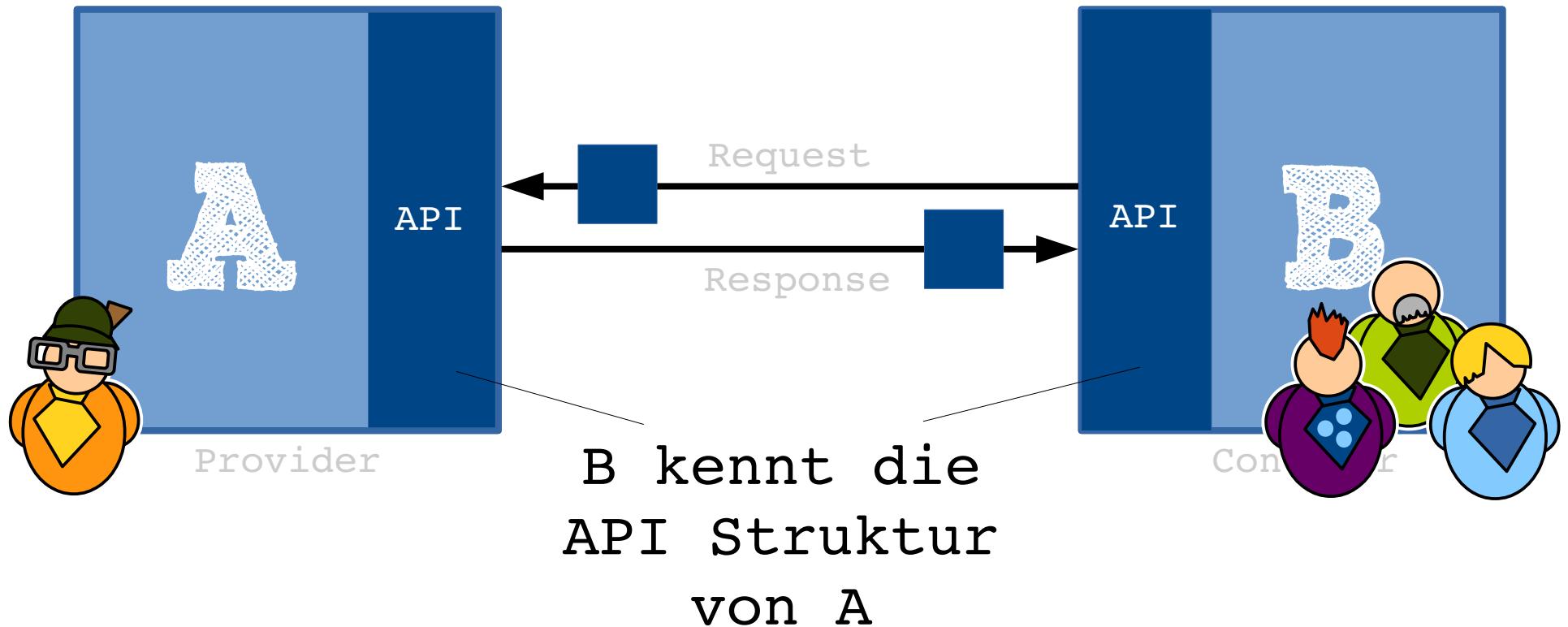


technicalDebts.xls

TECHNICAL DEPT







RESTBUCKS, THE SAMPLE

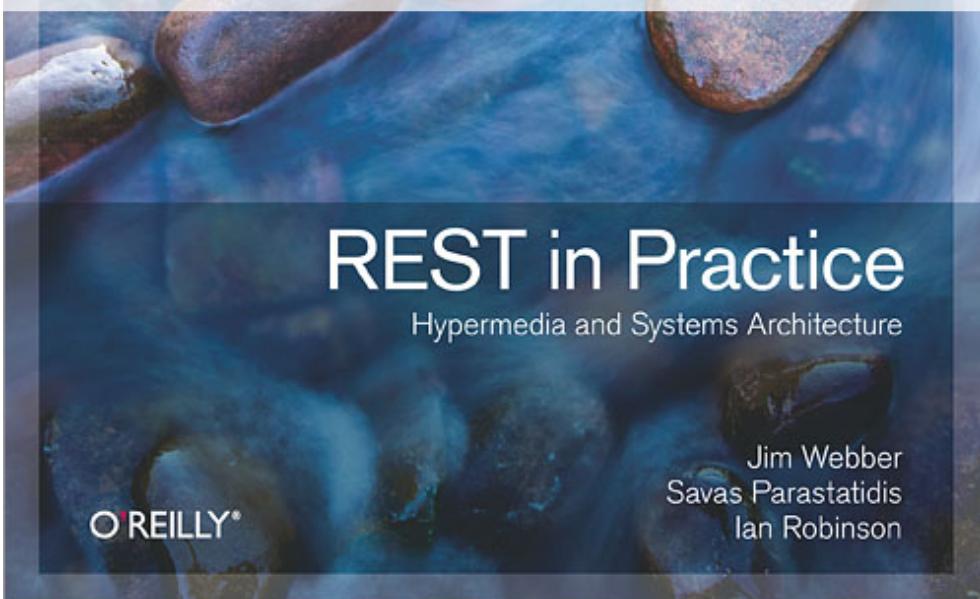


<http://codebetter.com/glenngblock/2011/06/06/rest-in-practice-the-book-restbucks-the-sample>

<https://github.com/olivergierke/spring-restbucks>

<https://speakerdeck.com/olivergierke>

<http://olivergierke.de/2016/04/benefits-of-hypermedia/>





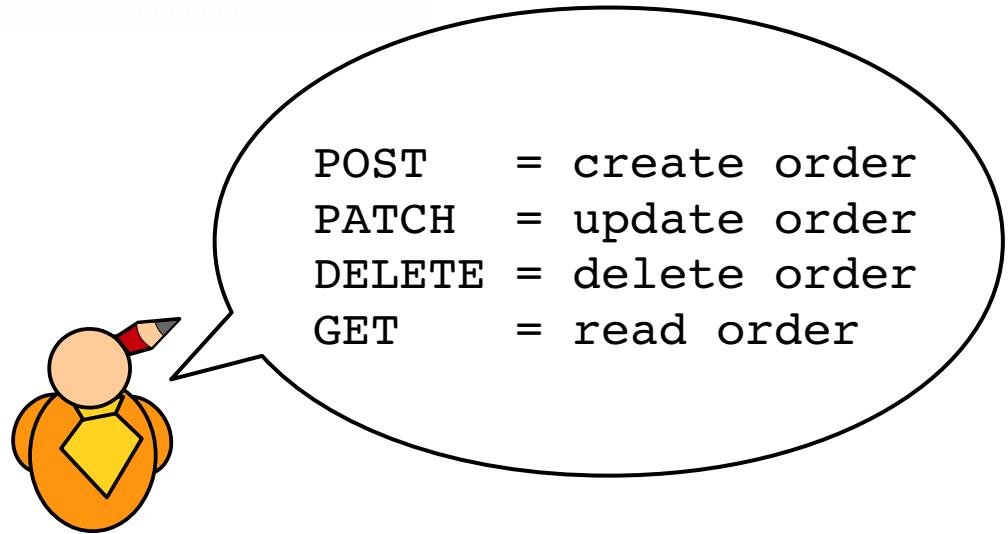
[**https://RESTBUCKS.IO/V1/CREATE_ORDER**](https://RESTBUCKS.IO/V1/CREATE_ORDER)

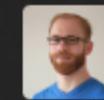


[**https://RESTBUCKS.IO/V2/CREATE_ORDER**](https://RESTBUCKS.IO/V2/CREATE_ORDER)



[https://**RESTBUCKS.IO/V2/ORDER/{ID}**](https://RESTBUCKS.IO/V2/ORDER/{ID})





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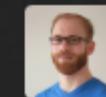
Speaker Deck Published on Apr 19, 2016

Method	URI	Action	Step
POST	/orders	Create new order	1
POST/PATCH	/orders/{id}	Update the order (only if "payment expected")	2
DELETE	/orders/{id}	Cancel order (only if "payment expected")	3
PUT	/orders/{id}/payment	Pay order (only if "payment expected")	4

Barista preparing the order

GET	/orders/{id}	Poll order state	5
GET	/orders/{id}/receipt	Access receipt	
DELETE	/orders/{id}/receipt	Conclude the order process	6

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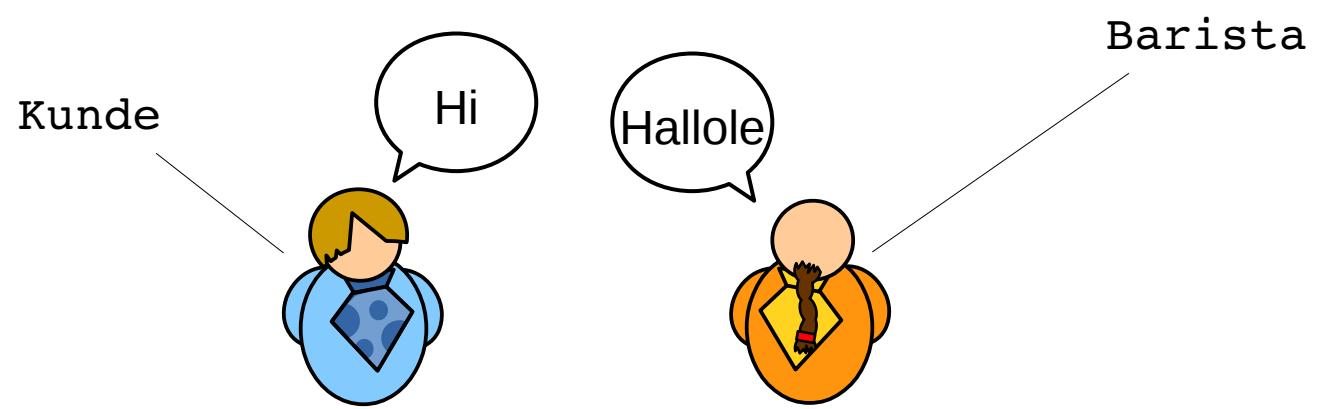
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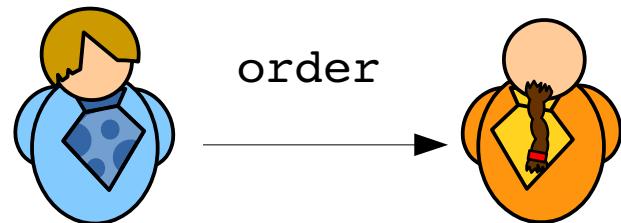
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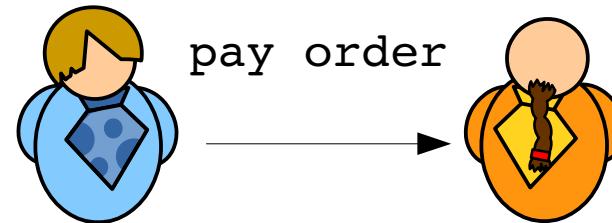
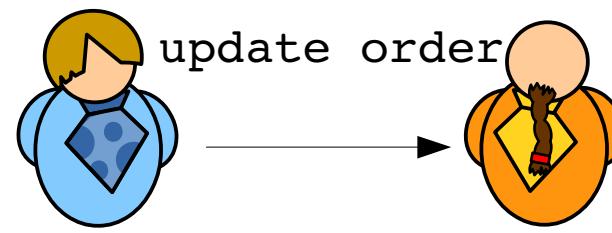
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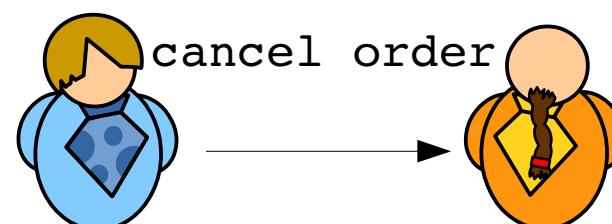
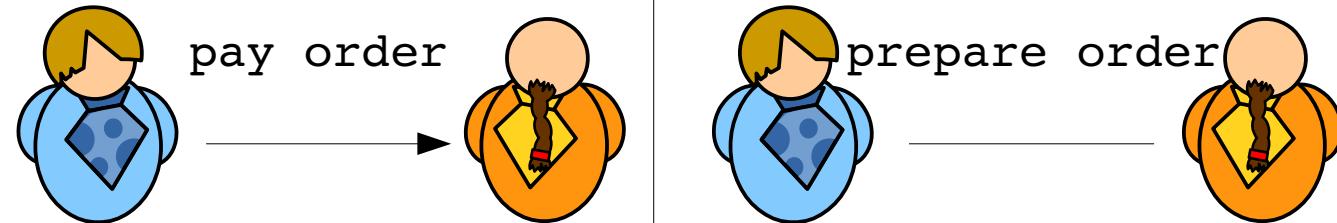
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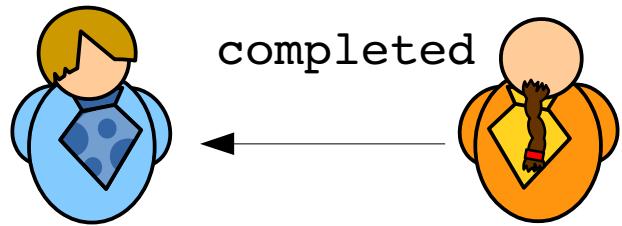
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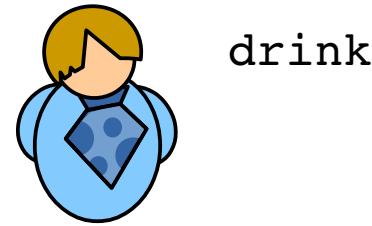
SCHRITT 3



SCHRITT 4



SCHRITT 5



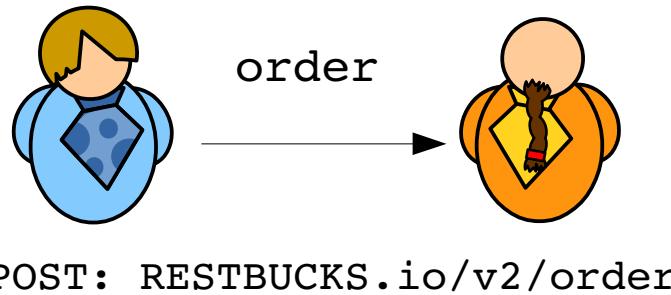
HATEOAS

Hypermedia
As
The
Engine
Of
Application
State

SCHRITT 1

Request

Response

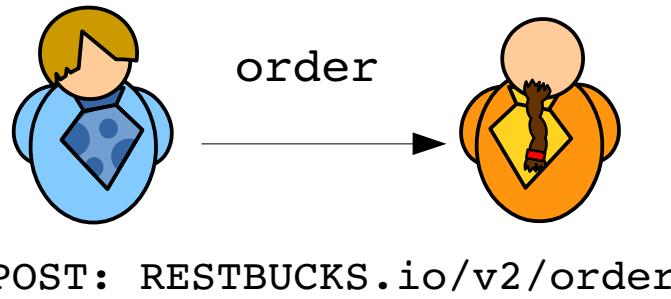


self	
GET:	RESTBUCKS.io/v2/order/1 RESTBUCKS.io/v2/order/{id}
update_order	
POST/PATCH:	RESTBUCKS.io/v2/order/1 RESTBUCKS.io/v2/order/{id}
cancel_order	
DELETE:	RESTBUCKS.io/v2/order/1 RESTBUCKS.io/v2/order/{id}
pay_order	
PUT:	RESTBUCKS.io/v2/order/1/payment RESTBUCKS.io/v2/order/{id}/payment

SCHRITT 1

Request

Response



self

GET:
RESTBUCKS.io/v2/order/1
RESTBUCKS.io/v2/order/{id}

update_order

POST/PATCH: RESTBUCKS.io/v2/order/1
RESTBUCKS.io/v2/order/{id}

cancel_order

DELETE:
RESTBUCKS.io/v2/order/1
RESTBUCKS.io/v2/order/{id}

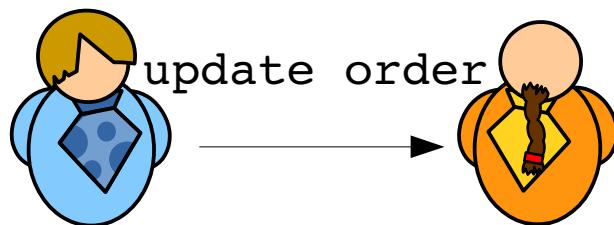
pay_order

PUT:
RESTBUCKS.io/v2/order/1/payment
RESTBUCKS.io/v2/order/{id}/payment

SCHRITT 2

Request

Response

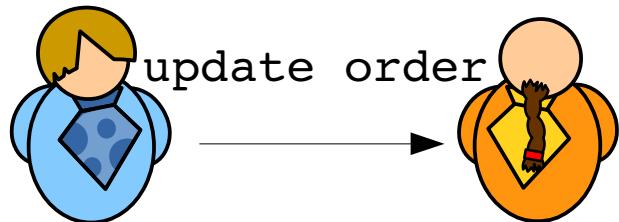


PATCH: RESTBUCKS.io/v2/order/1
RESTBUCKS.io/v2/order/{id}

SCHRITT 2

Request

Response



PATCH: RESTBUCKS.io/v2/order/1
RESTBUCKS.io/v2/order/{id}

self

GET:
RESTBUCKS.io/v2/order/1
RESTBUCKS.io/v2/order/{id}

update_order

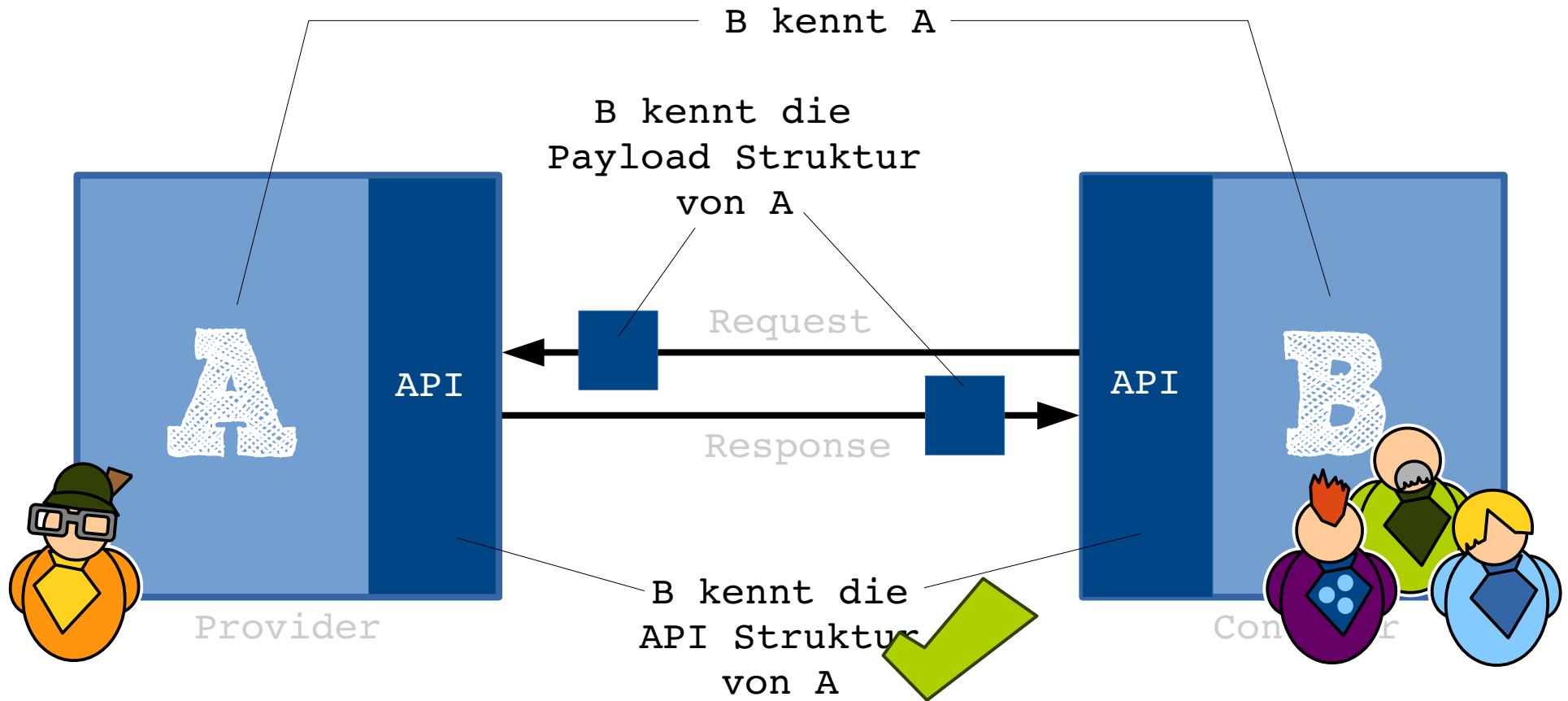
POST/PATCH: RESTBUCKS.io/v2/order/1
RESTBUCKS.io/v2/order/{id}

cancel_order

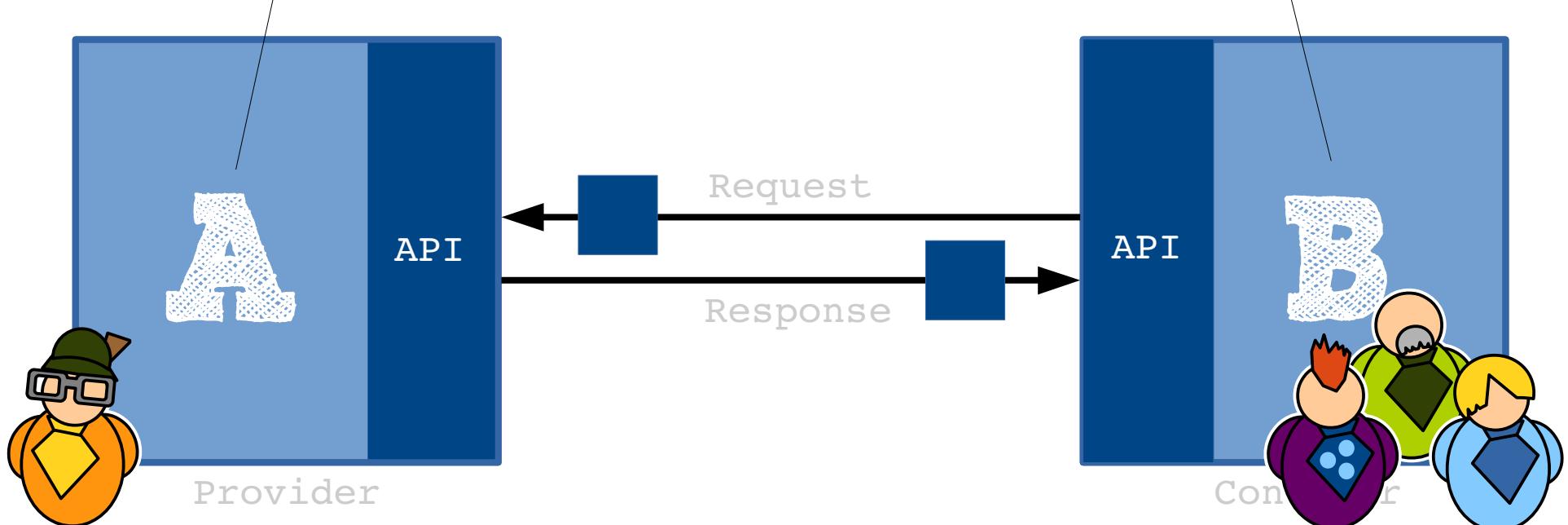
DELETE:
RESTBUCKS.io/v2/order/1
RESTBUCKS.io/v2/order/{id}

pay_order

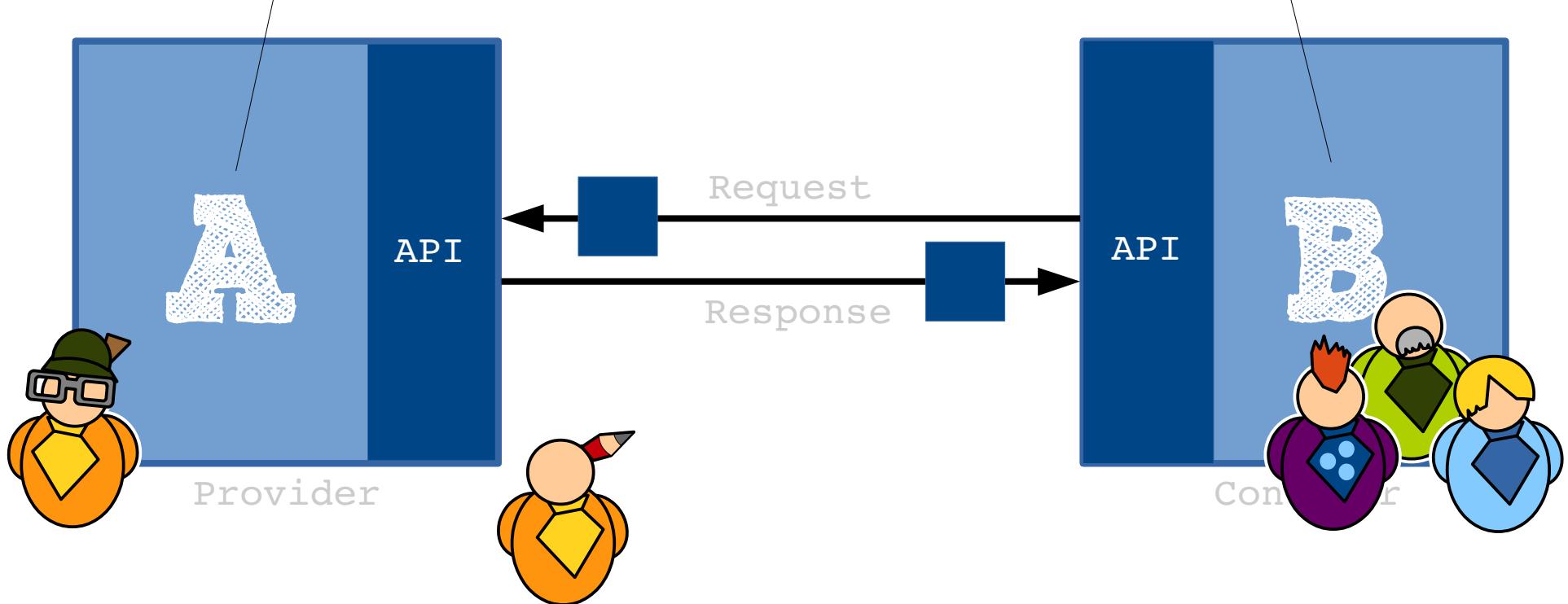
PUT:
RESTBUCKS.io/v2/order/1/payment
RESTBUCKS.io/v2/order/{id}/payment

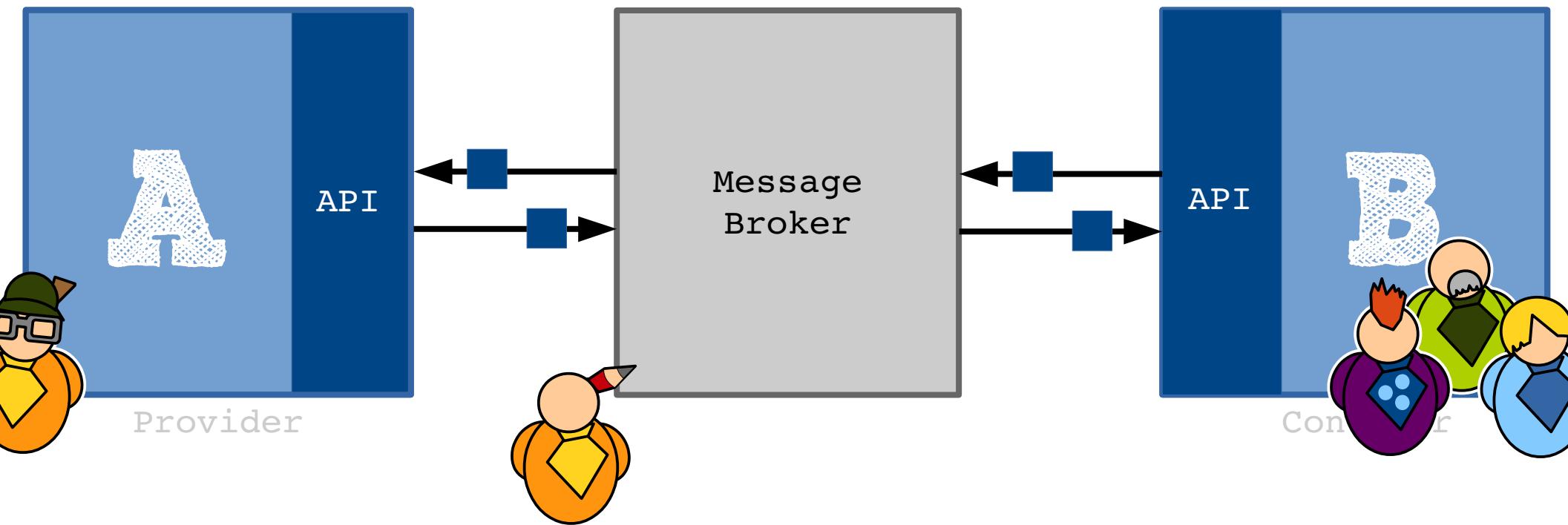


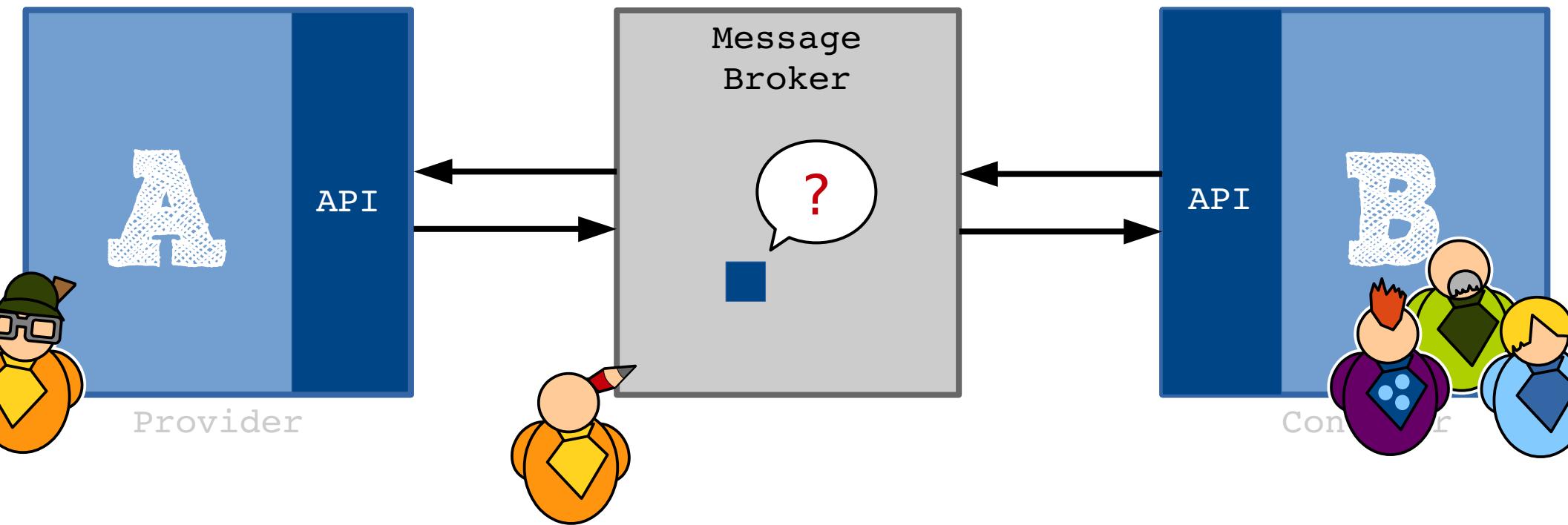
B kennt A



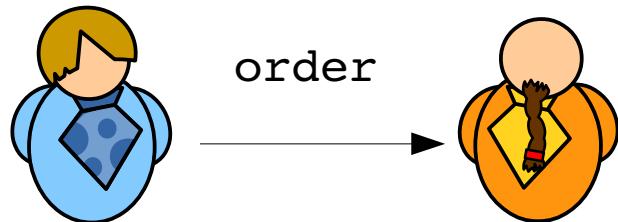
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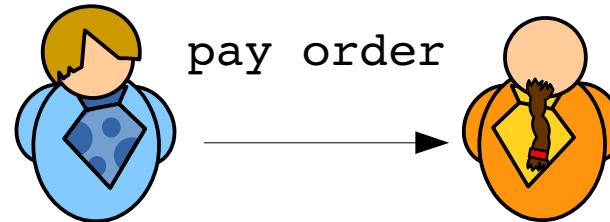
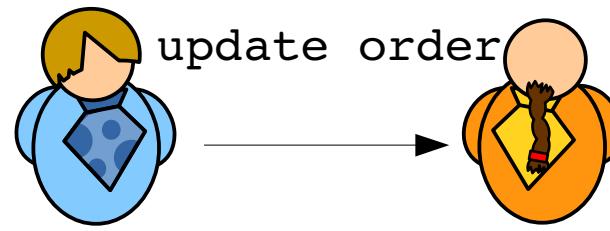




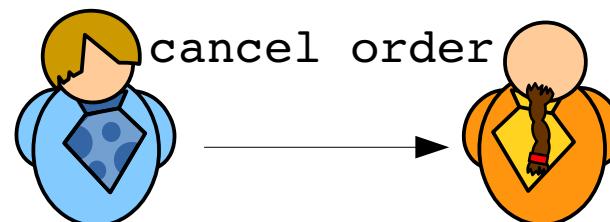
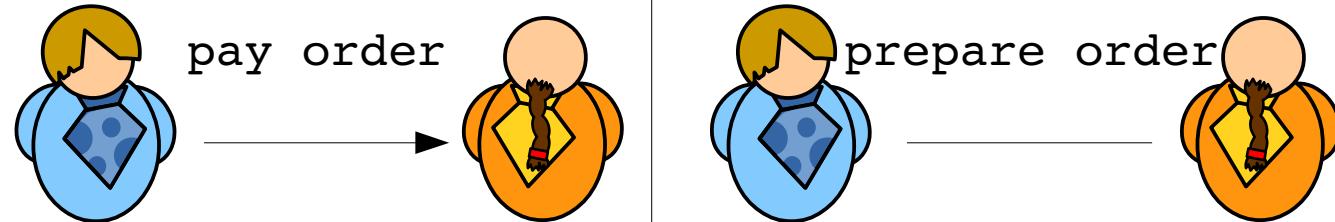
SCHRITT 1



SCHRITT 2



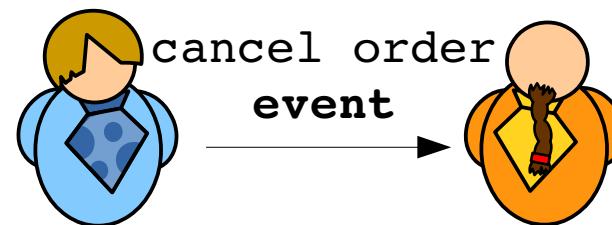
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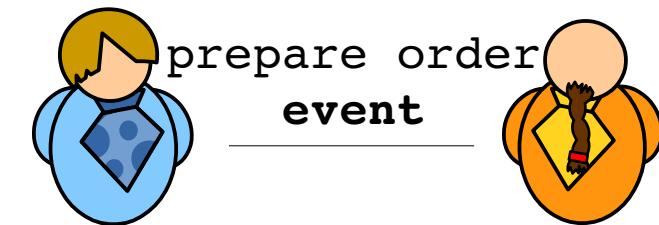
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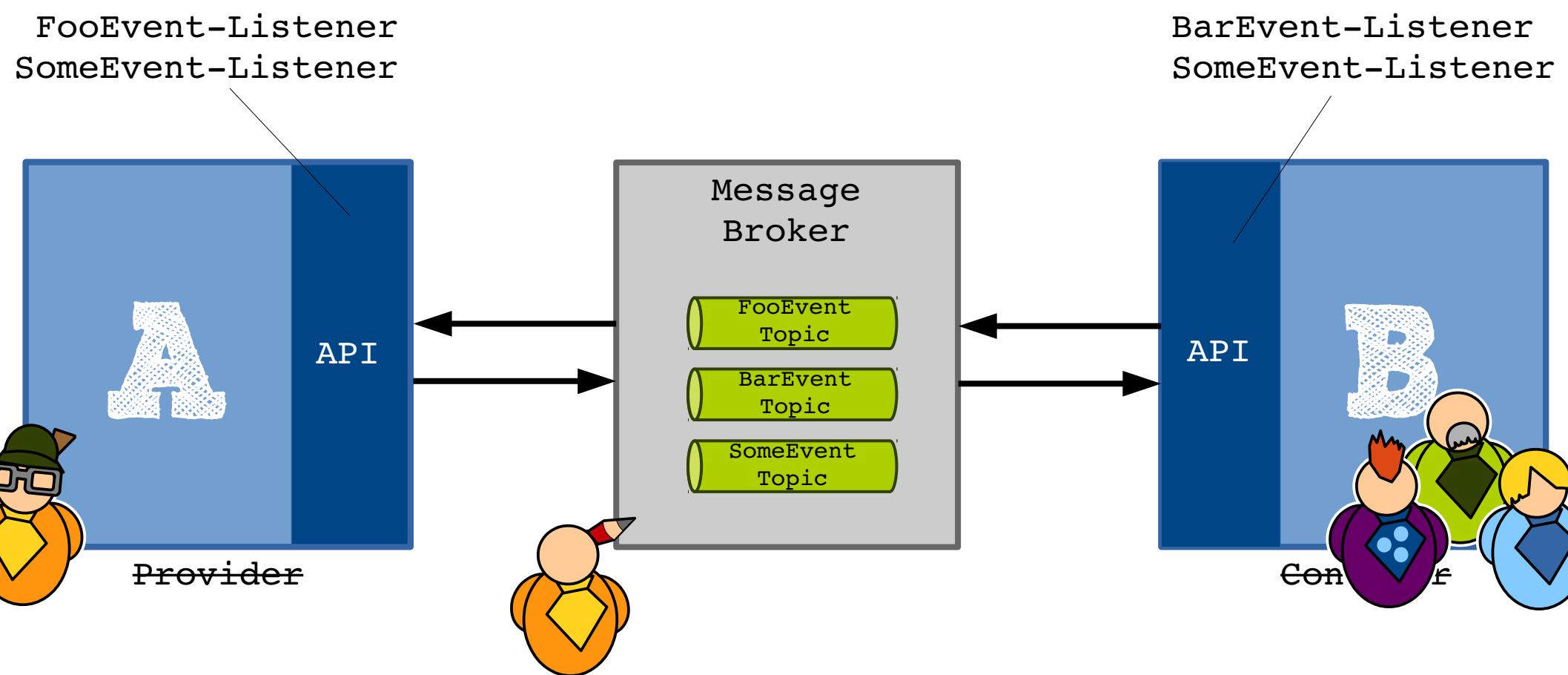


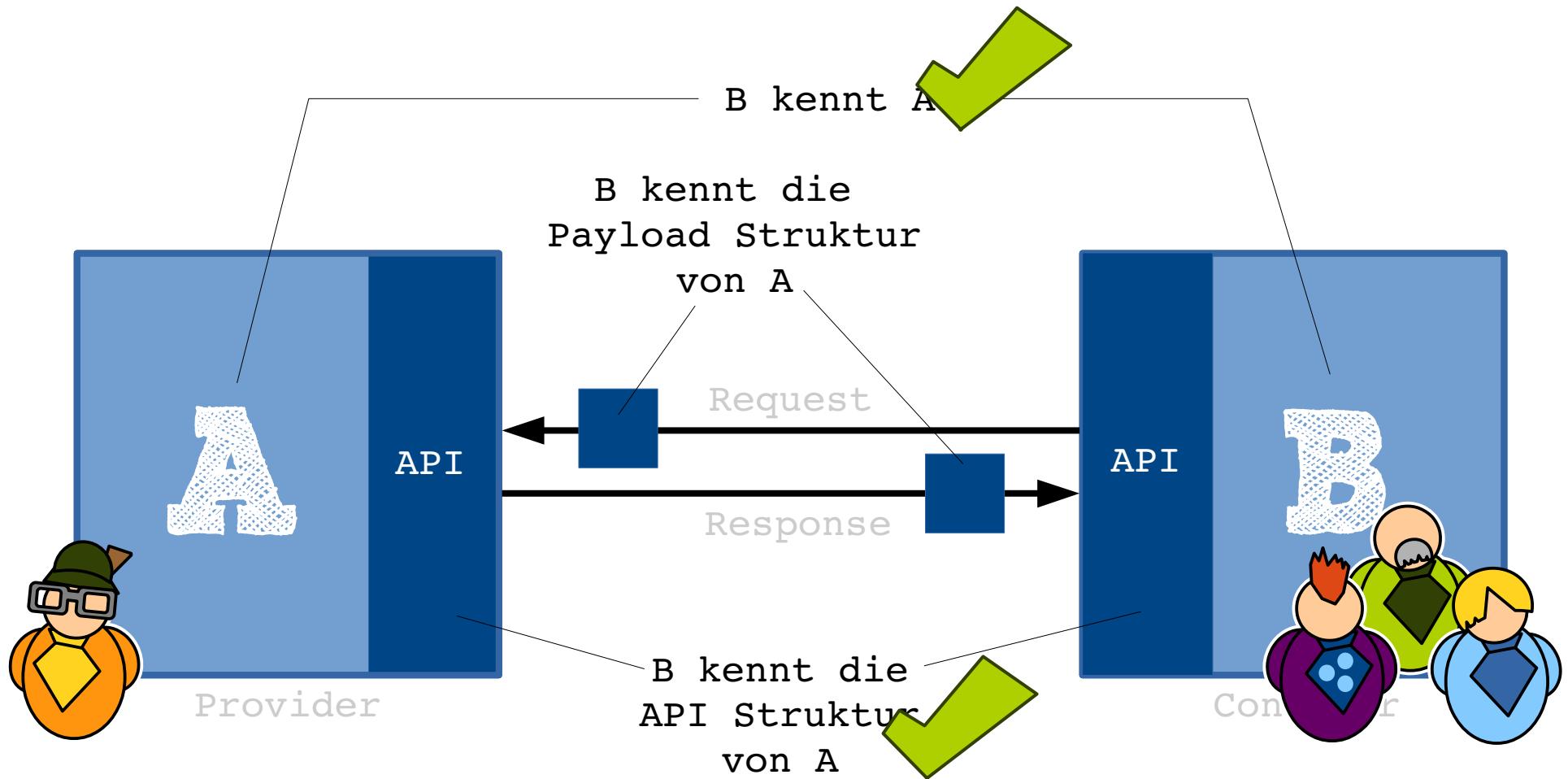
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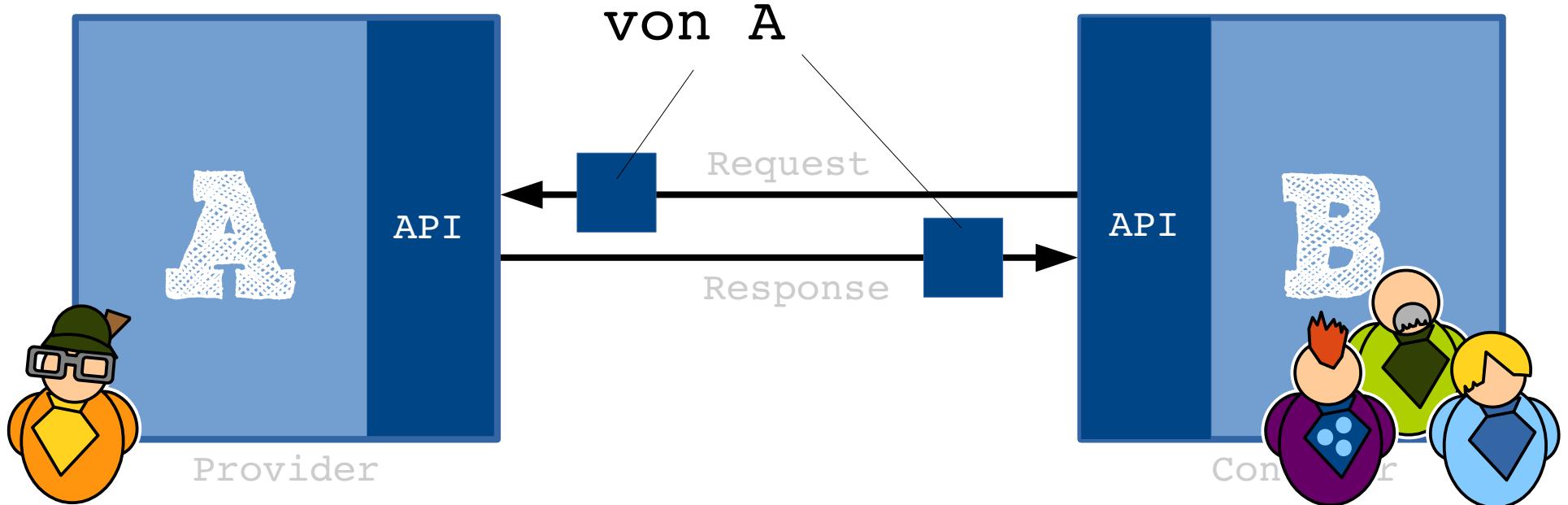
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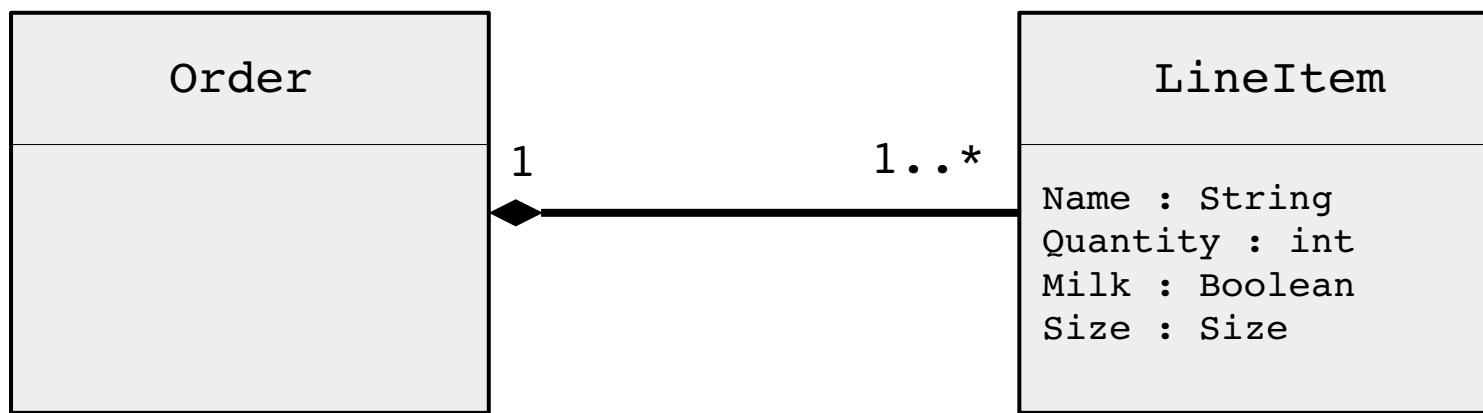
B kennt die
Payload Struktur





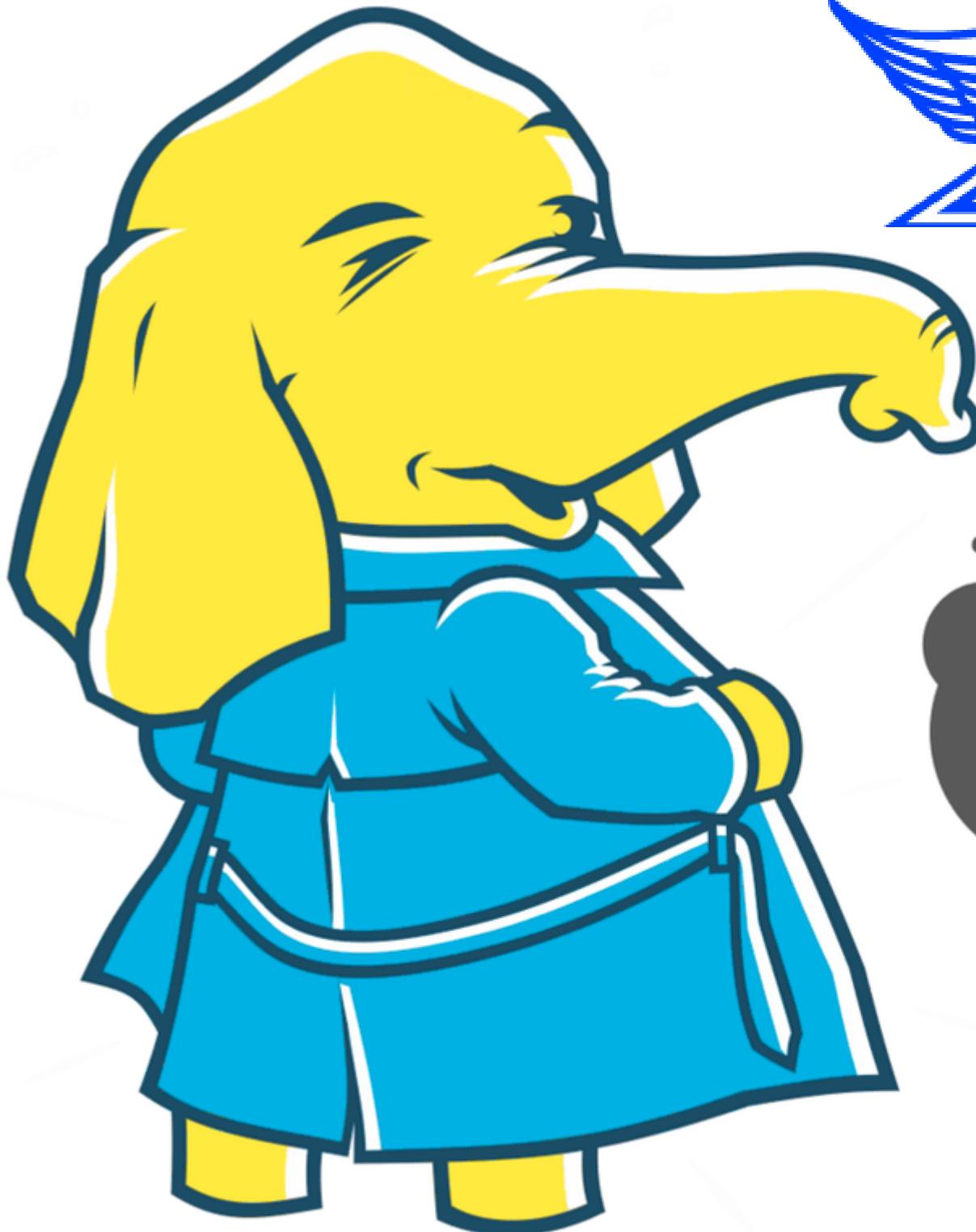
1 Kaffee ohne Milch
2 Kaffee mit Milch





SCHEMA EVOLUTION



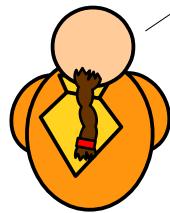


MY HADOOP
IS BIGGER
THAN YOURS...

Writer

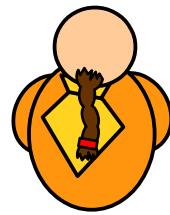


Reader

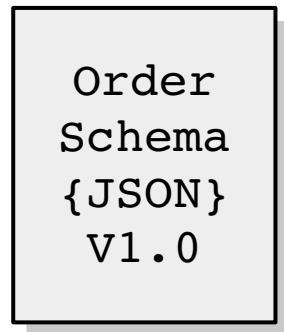


Writer

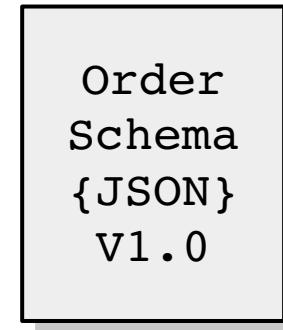
Order
Schema
{JSON}
v1.0



Writer



Reader



Version 1.0

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    "name": "LineItem",  
    "fields": [  
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       "default": "coffee"},  
      {"name": "quantity", "type": "int",  
       "default": "1"},  
      {"name": "milk", "type": "boolean",  
       "default": "false"}  
    ]  
  },  
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]
```

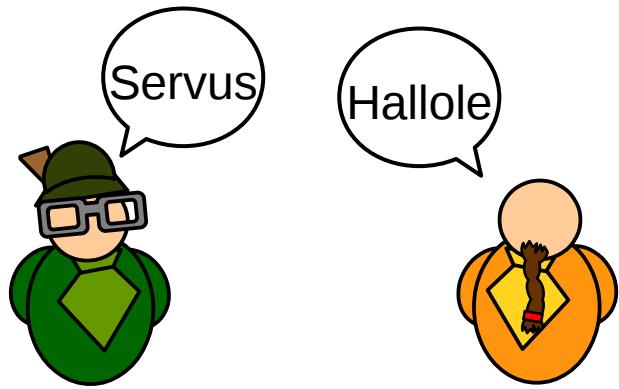
Version 1.0

```
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    "fields": [  
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      {"name": "quantity", "type": "int",  
       "default": "1"},  
      {"name": "milk", "type": "boolean",  
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    ]  
  },  
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    "type": "record",  
    "name": "Order",  
    "fields": [  
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    ]  
  }]  
  
LineItem Type
```

Version 1.0

```
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```

Order Type

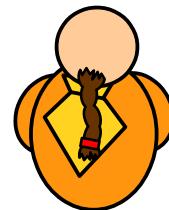


Servus

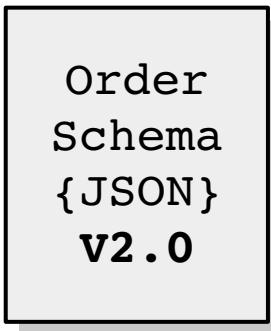
Halbole

Writer

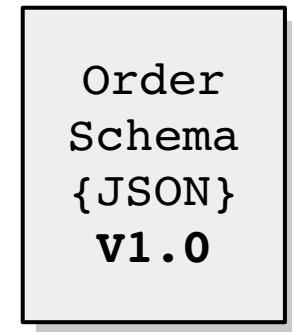
Order
Schema
{JSON}
v2.0



Writer



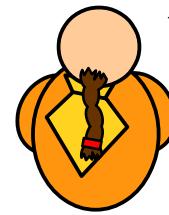
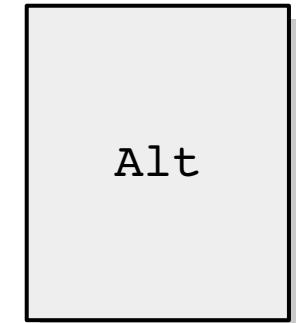
Reader



Writer

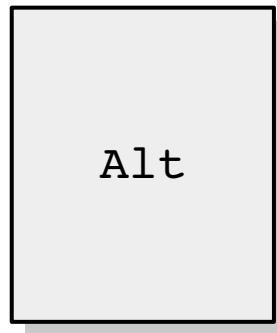


Reader

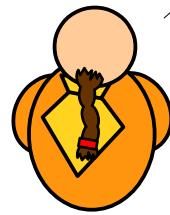


Vorwärtskompatibilität

Writer



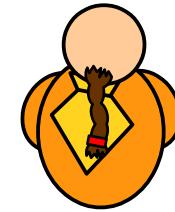
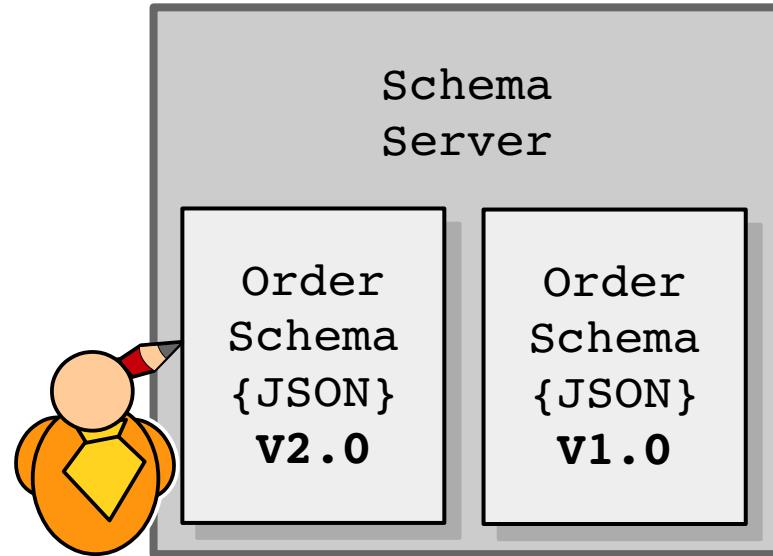
Reader

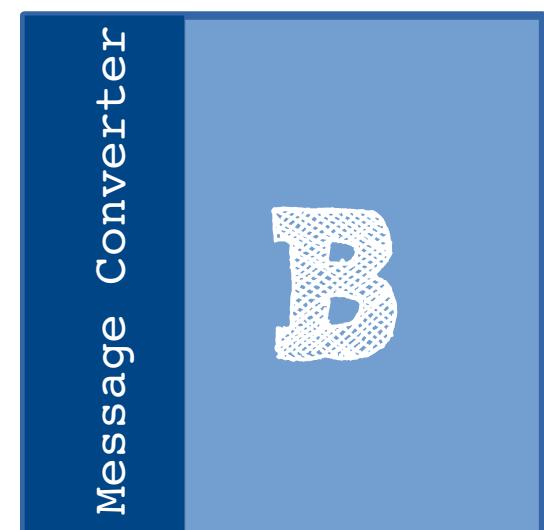
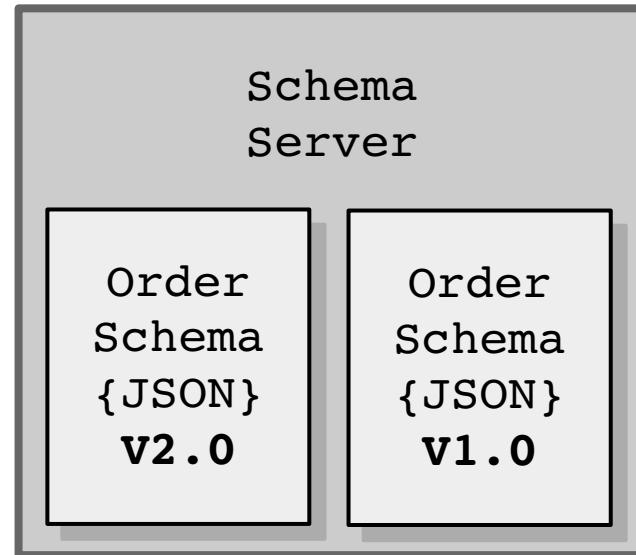


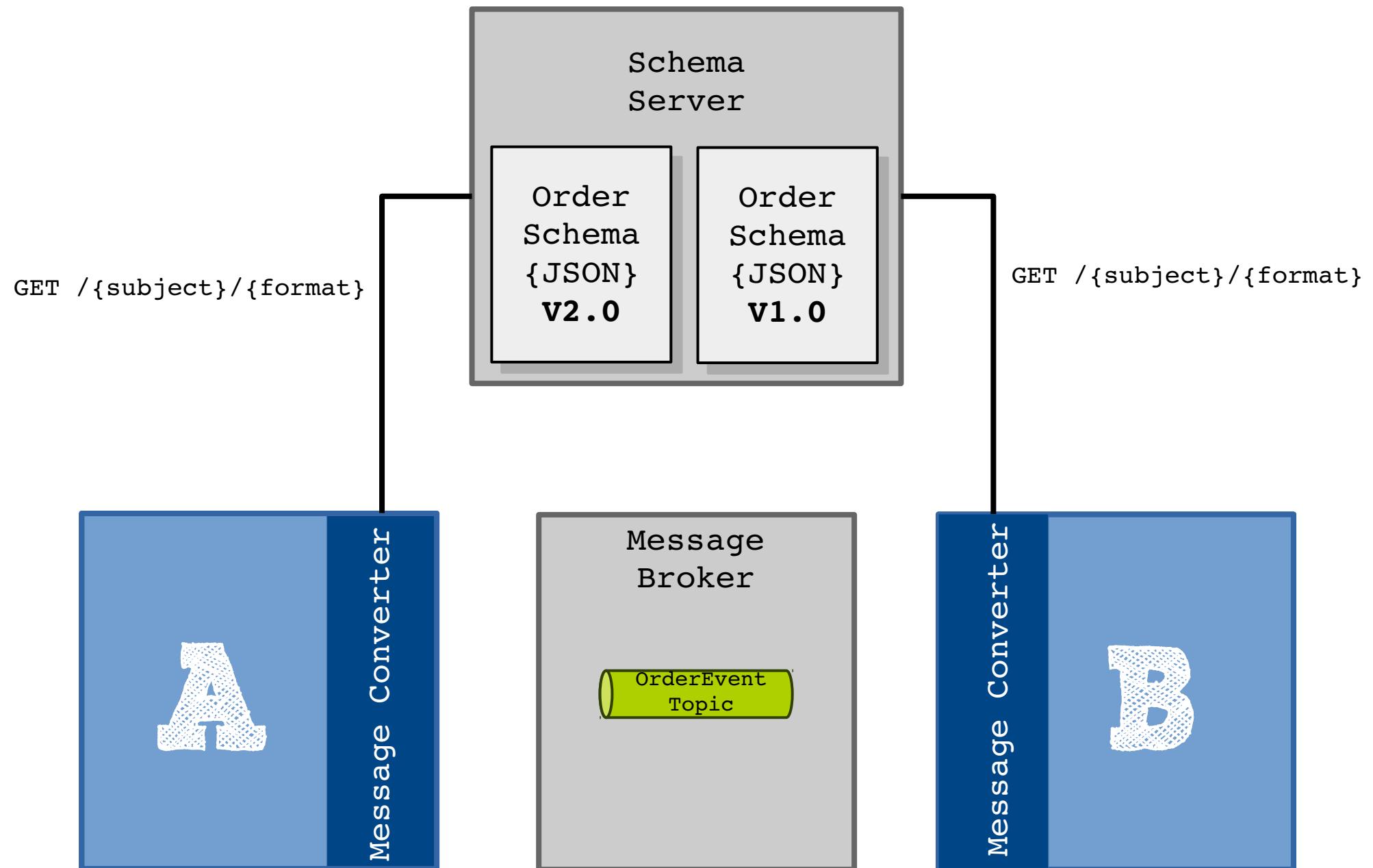
Rückwärtskompatibilität

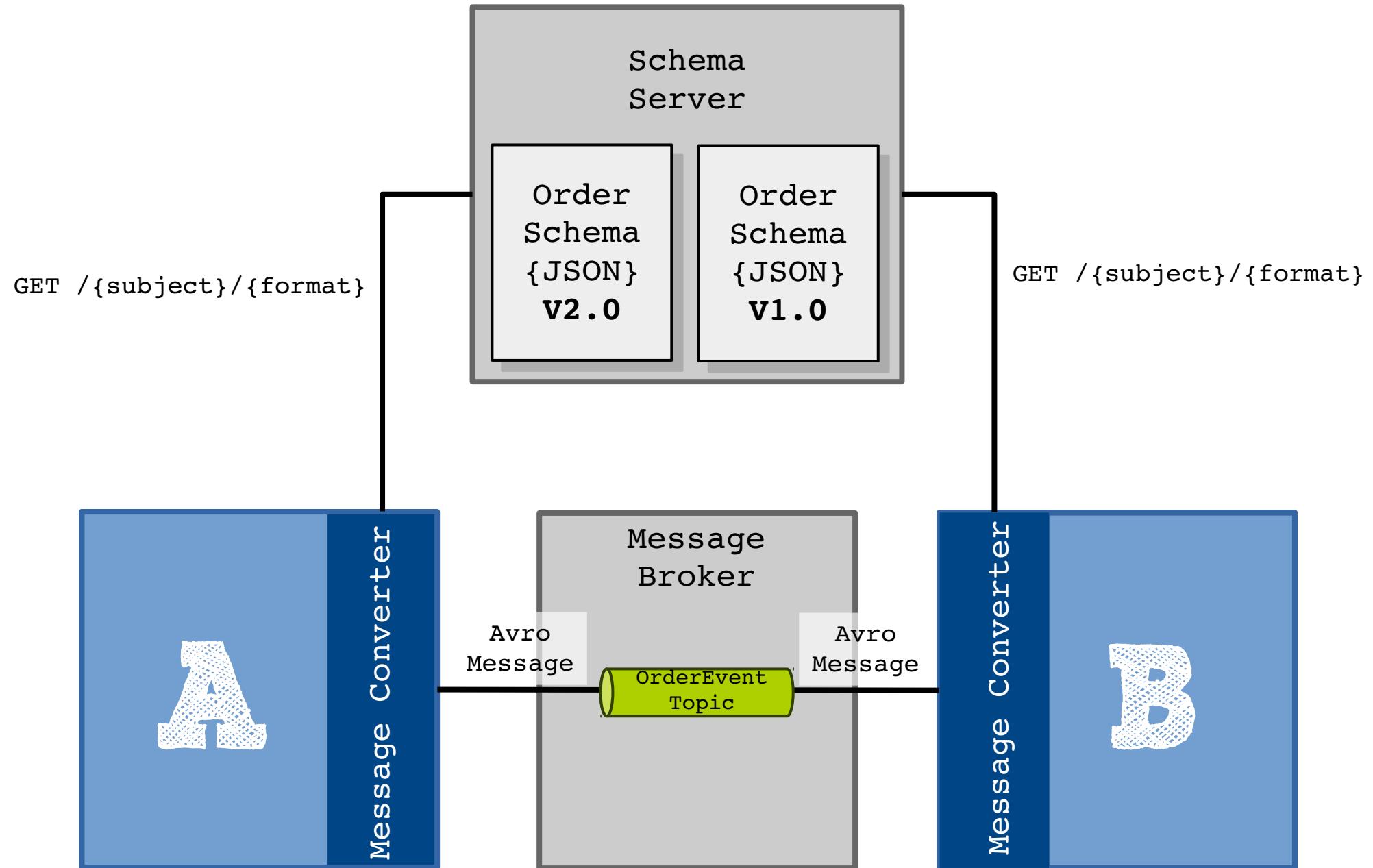
Version 2.0

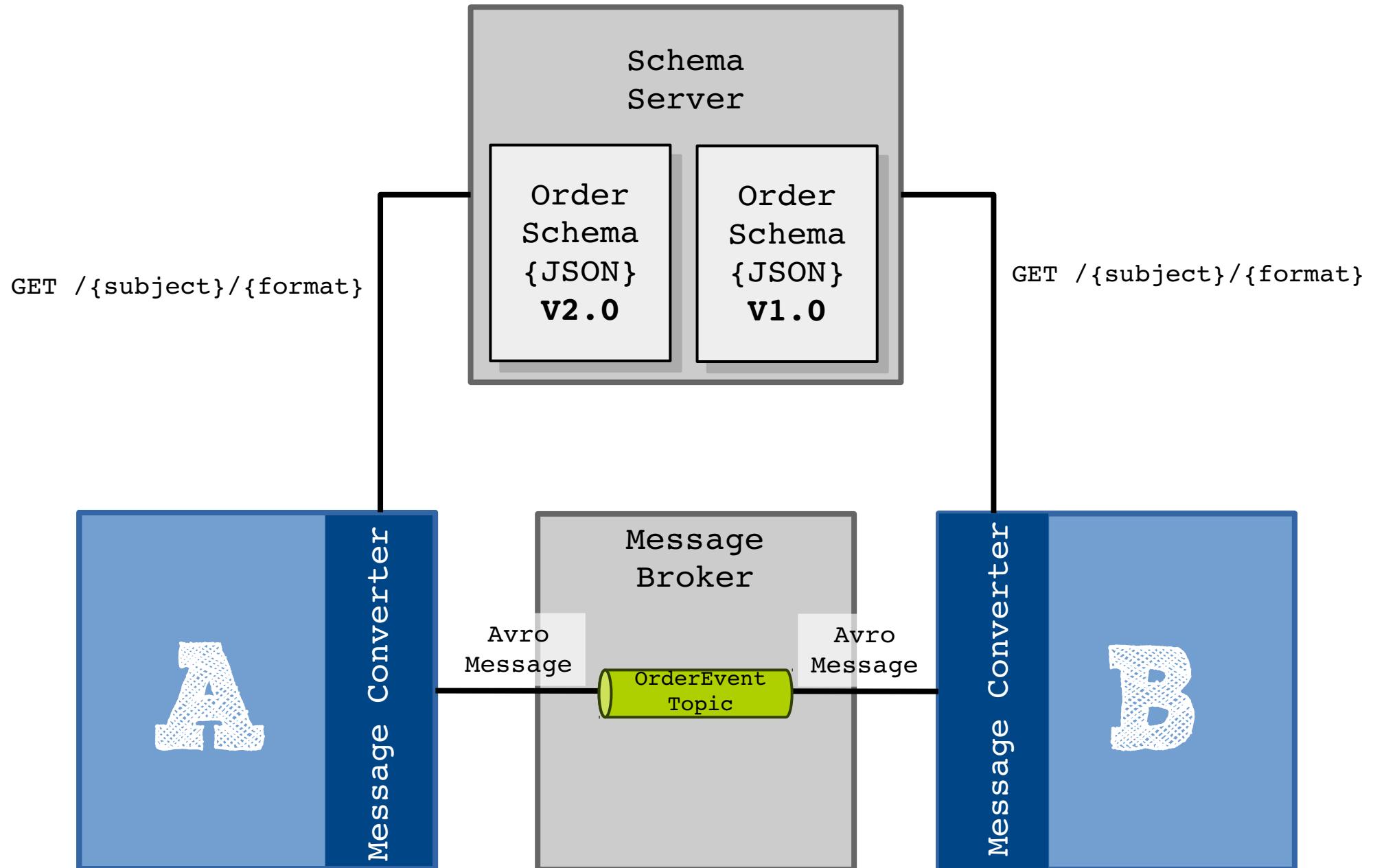
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<https://cloud.spring.io/spring-cloud-stream/>

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DEMO

https://github.com/xdo0/schema_evolution_demo

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FUR DIE
AUFMERKSAMHEIT !**

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