Sisteme Tolerante la Defecte

Servicii - REST

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Implementări servicii

- SOAP – Simple Object Access Protocol
- RabbitMQ, ActiveMQ, JMS
- gRPC – google Remote Procedure Call
- WCF – Windows Communication Foundation
- REST

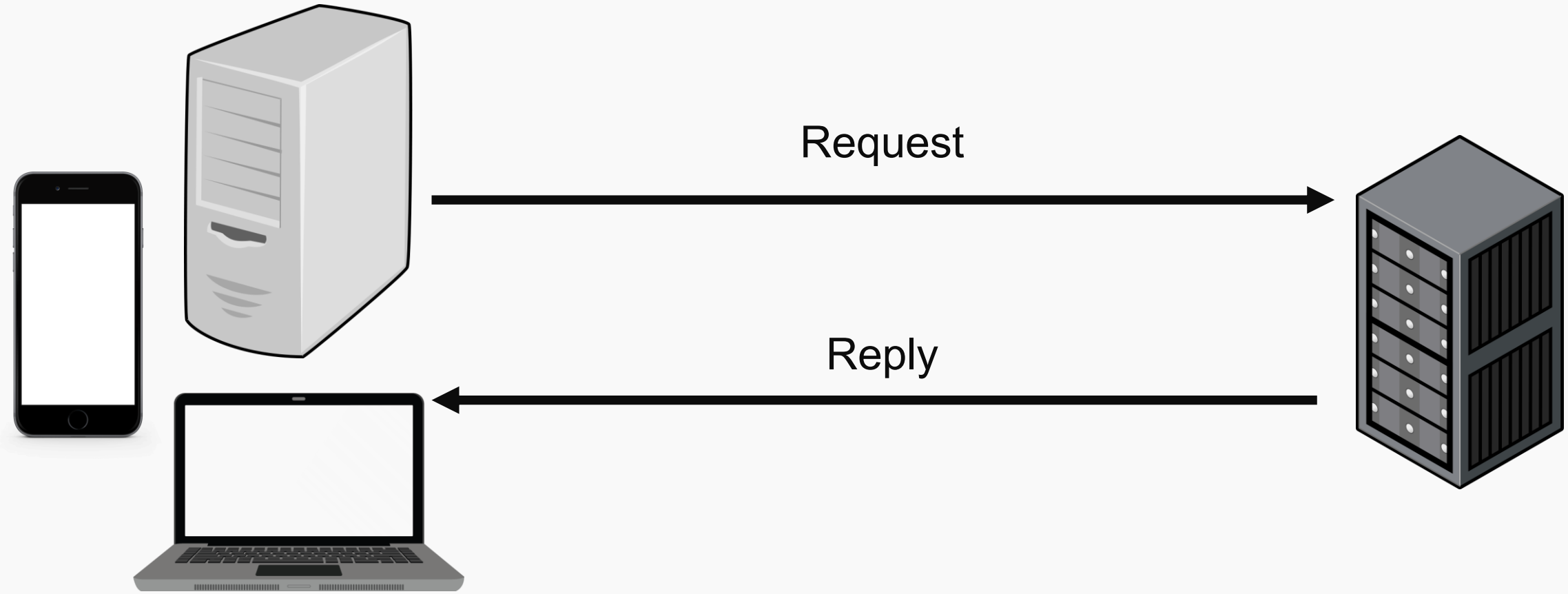
REpresentational State Transfer (REST)

CHAPTER 5
Representational State Transfer (REST)

This chapter introduces and elaborates the Representational State Transfer (REST) architectural style for distributed hypermedia systems, describing the software engineering principles guiding REST and the interaction constraints chosen to retain those principles, while contrasting them to the constraints of other architectural styles. REST is a hybrid style derived from several of the network-based architectural styles described in Chapter 3 and combined with additional constraints that define a uniform connector interface. The software architecture framework of Chapter 1 is used to define the architectural elements of REST and examine sample process, connector, and data views of prototypical architectures.

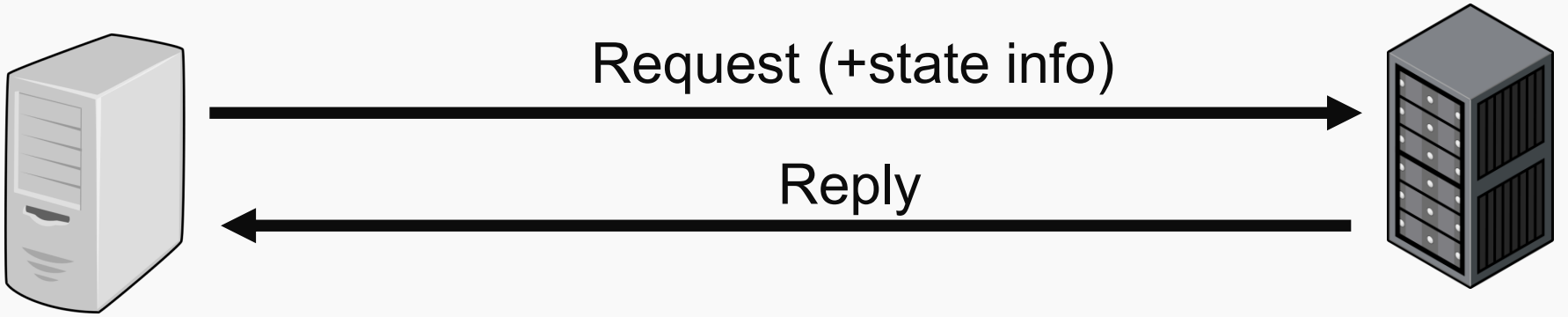
Roy Fielding

REST – Client-Server



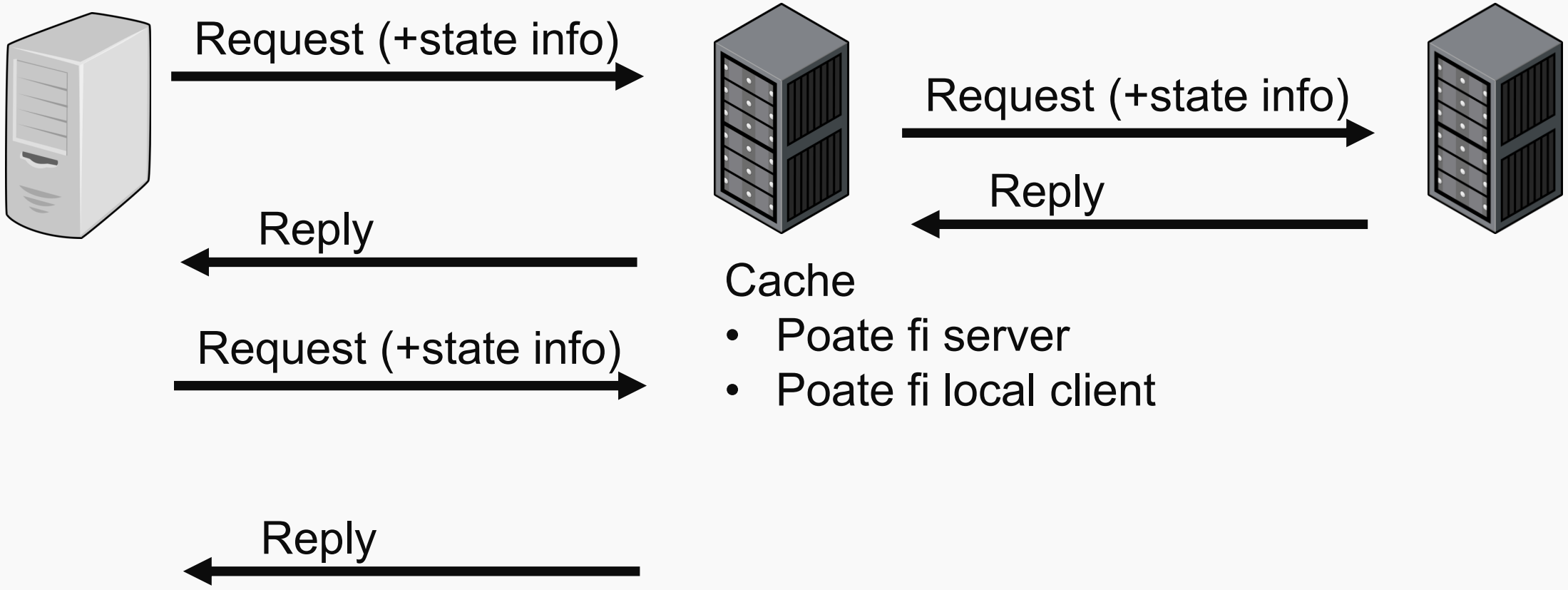
REST - Stateless

- Visibility
- Reliability
- Scalability



Fără informații de context pe server

REST - Cache



Cache

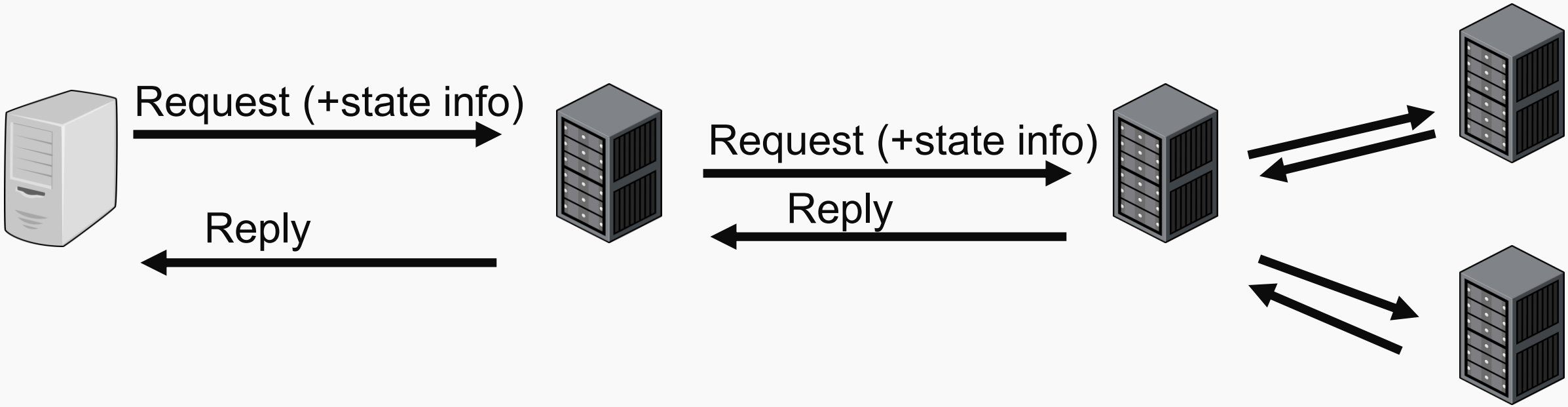
- Poate fi server
- Poate fi local client

REST – Uniform Interface

- Identification of resources
- Manipulation of resources
- Self-descriptive messages

REST – layered system

- Independence
- Permits load balancing



Microservicii

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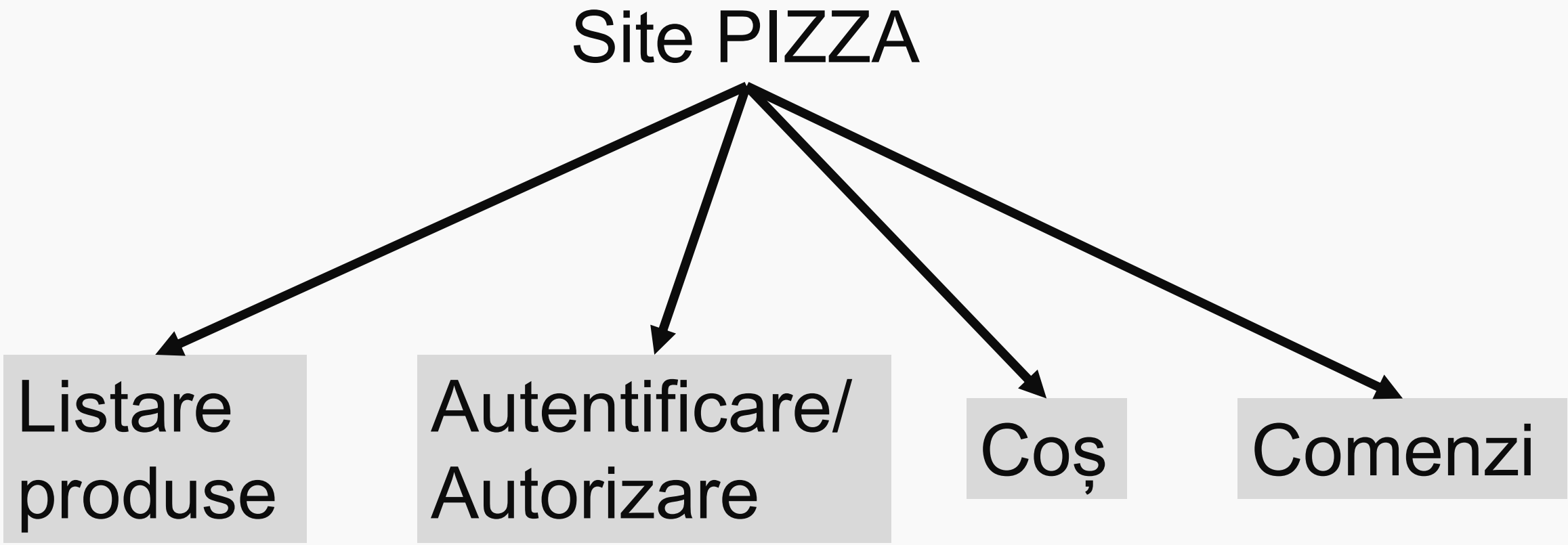
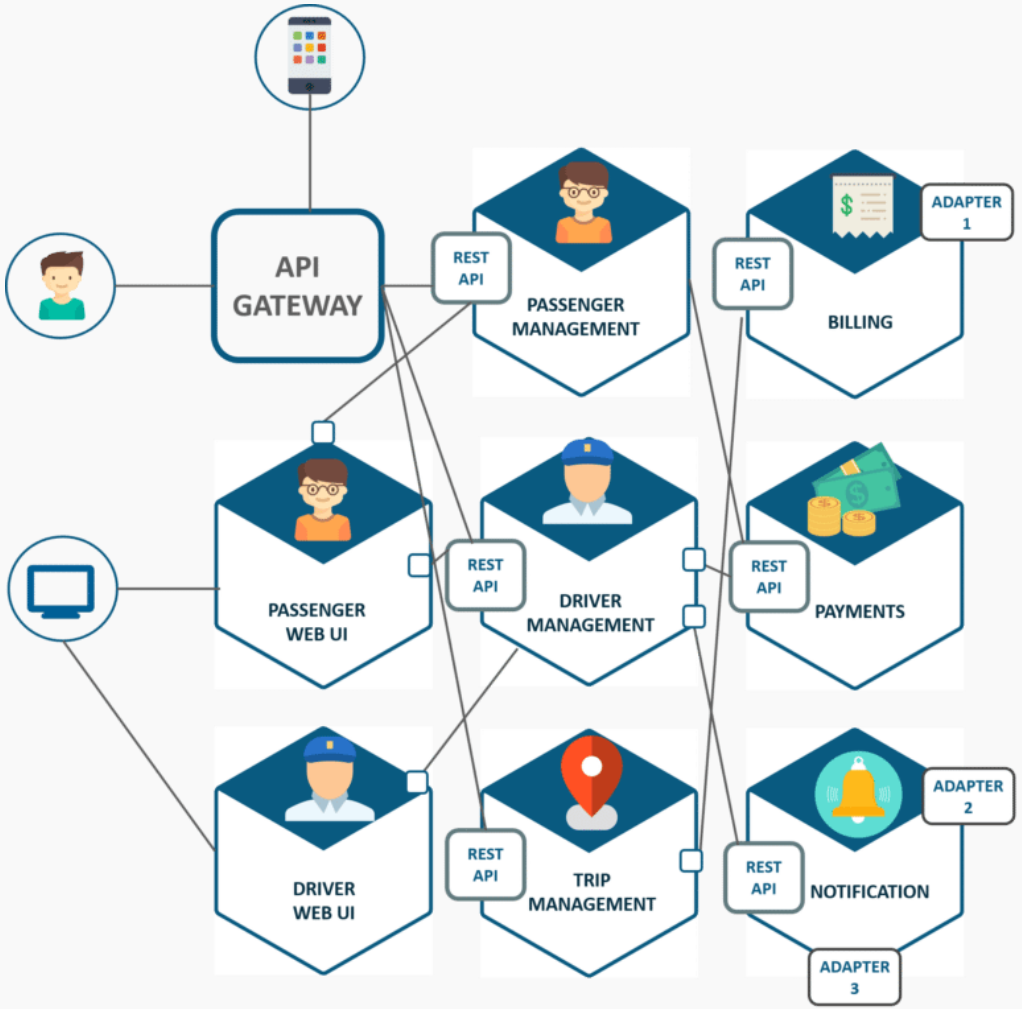
Containere + Servicii

Microservicii exemplu



Uber


API GATEWAY
REST API
PASSENGER MANAGEMENT
REST API
BILLING
ADAPTER 1
PASSENGER WEB UI
REST API
DRIVER MANAGEMENT
REST API
PAYMENTS
DRIVER WEB UI
REST API
TRIP MANAGEMENT
REST API
NOTIFICATION
ADAPTER 2
ADAPTER 3

Spotify


logelaskbfs-system
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partner 8
open-backend
rooms
pipeline-core 4
jumphost
Remote Playback
vip
droid
octopie 2
ditesting
logelaskendsong-realtime
swiftfeedback
inviter 2
datacatalog
analyticsweb
feedbackchannel
itpuppet 2
harvester 4
goldenpath
playlistsearch
hotdog 2
intranet
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songdb
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webcharts
optout 2
iosfeedback
activity 3
harbor
teamcity 3
data-test-cassandra-system
keyframes
keymaster 3
ckpages-system
datamon 4
hermes-java-lb-els
toranproxy 2
web-site-developer 2
dealer
devsite
collection 4
sendgrid-sink
concert 4
key
data-infrastructure
phonebook
iosinfrabot
taste-onboarding 3
storm
cloak
intstograveyard-system
audienceinsightsapi
spoticloud 2
headlines-system
keanufrontend
cartographer
http-router
webpayments
phabricator
keanuservice
yopass
personalradiotest-cassandra-system
personalpodTESTINGONLY
optimizer 2
premiumcodereportingester
navigationview
dmicheltest-system
ice-cream
hello
gcp-deloyment-manager
paymenttableaudb-system
bloatdata 2
temp-service
unishark-tools
playdemographics
hermes-java-lb-sim
bootcamp42db
kabloomstorm
playlist-sequencing-service
castle
dnsjenkins
core-catalog-jenkins
annotations
java 2
inclientnotifications 2
group-curation-system 2
portscanner
userdata 3
trial-ended-view
programmatic-reporting
logelaskplayback-system
itservices 2
cstools 2
netgiroproxy
echoprint
datawarehouse 4
hwp 2
datajenkins
bolton 3
logelaskcream
reportingdb
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gyron-hardware-checks
horus
Network 2
apollotest
discoverqueue-cassandra
alexeytest
bjorntest-system
presence 3
bacula-system
Bieber 2
musicbrainz-system
lambdadashboardsdb
tunigo
geolocation
npmjs
logelaskdeliverance
chromelaunchmon-system
relatedplaylistsview
customersupport 2
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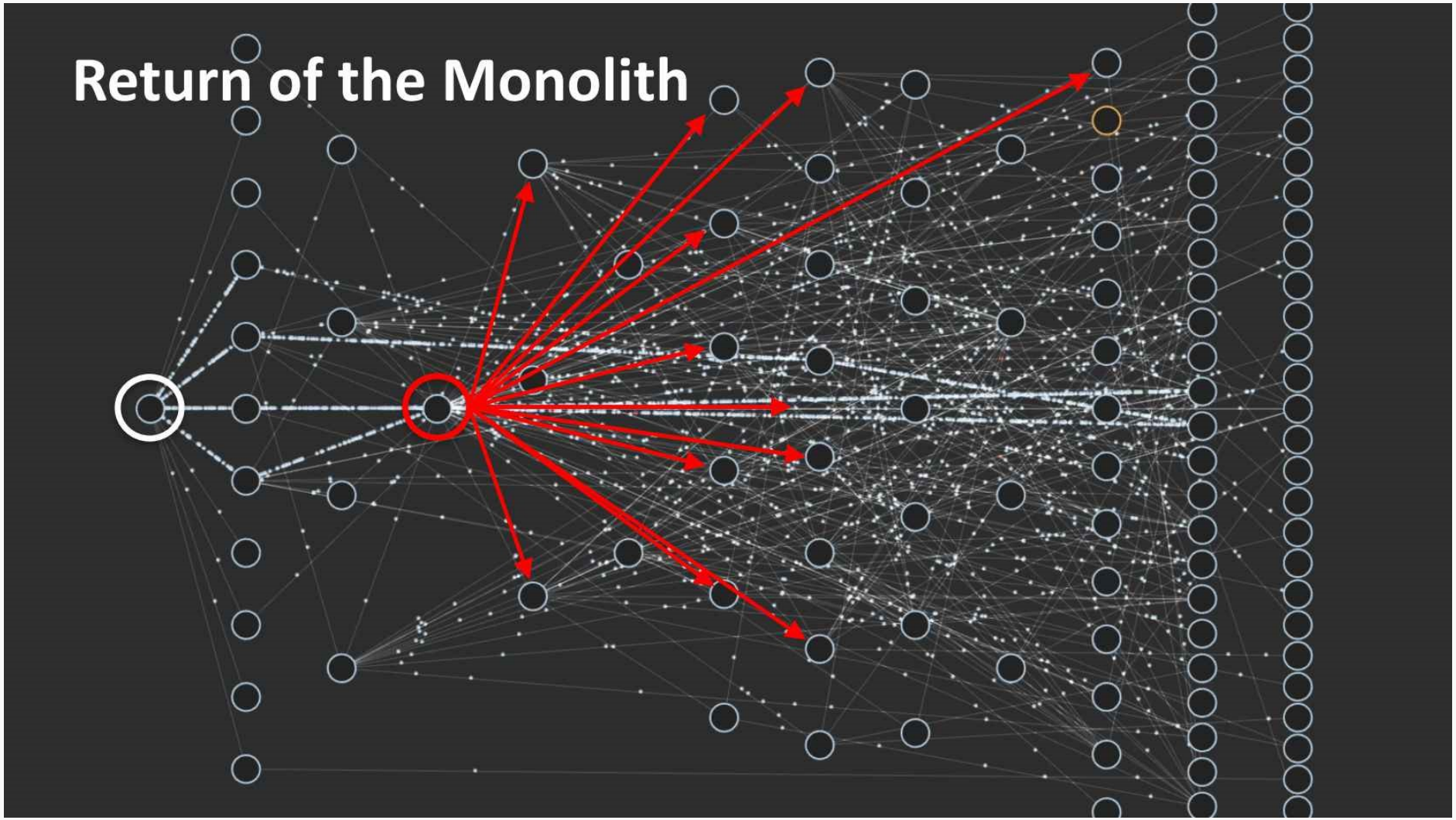
cronstash
marble 3
popcount 2
dns 2
playback-api
providerintegration 5
affinity

Netflix - 2016



Amazon