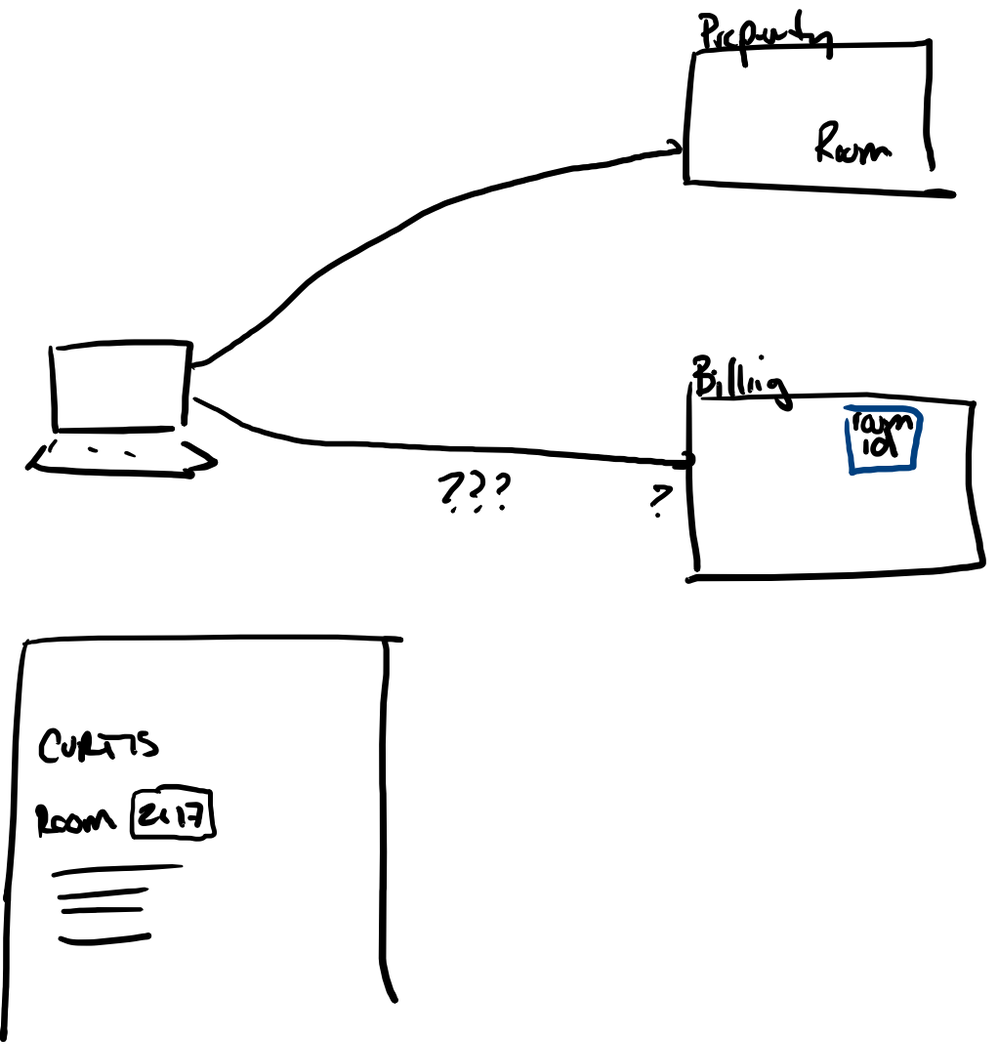
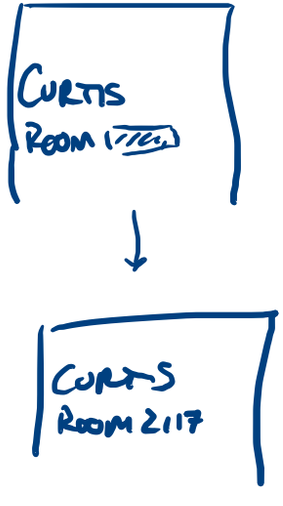


(simpler)

minimal info in n.s.

OPTION 1

2+ requests

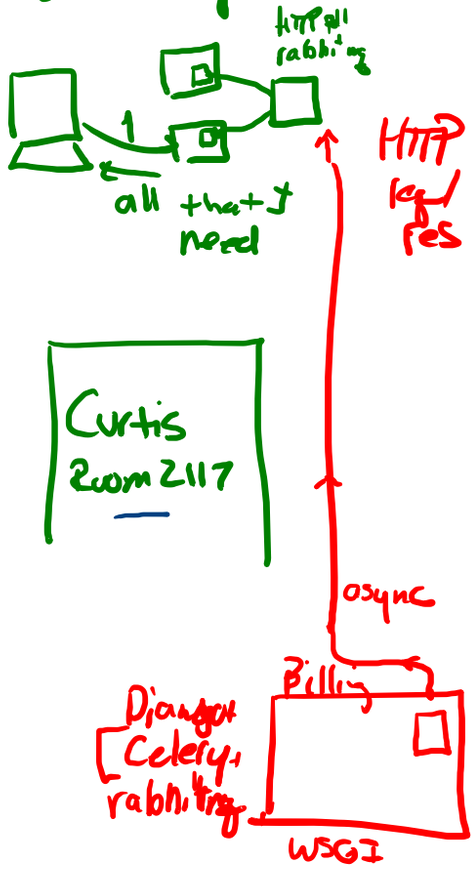


(complex)

Context maps

OPTION 2

client 1 rq

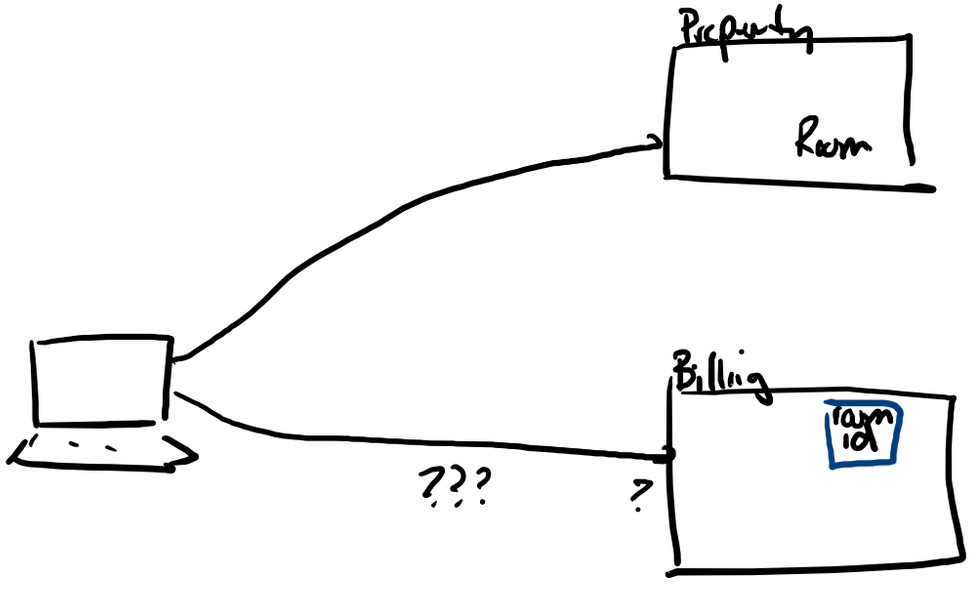


Just get data

OPTION 3

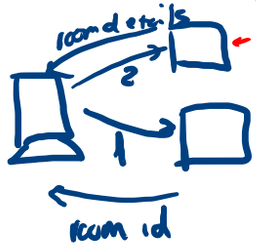
client 1 rq

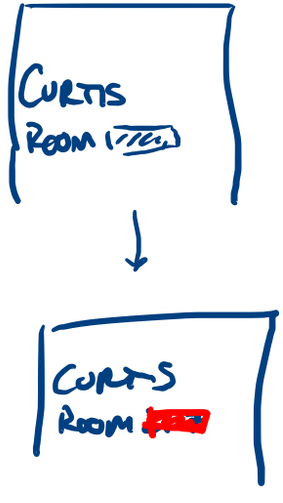
Property MS goes down



OPTION 1

Bill, room # gone



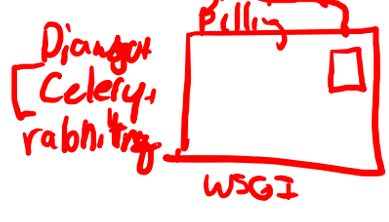


OPTION 2

Billing are indep.
eventual consistency

HTTP req/res

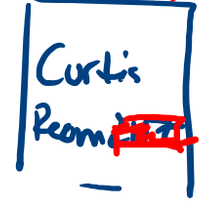
async

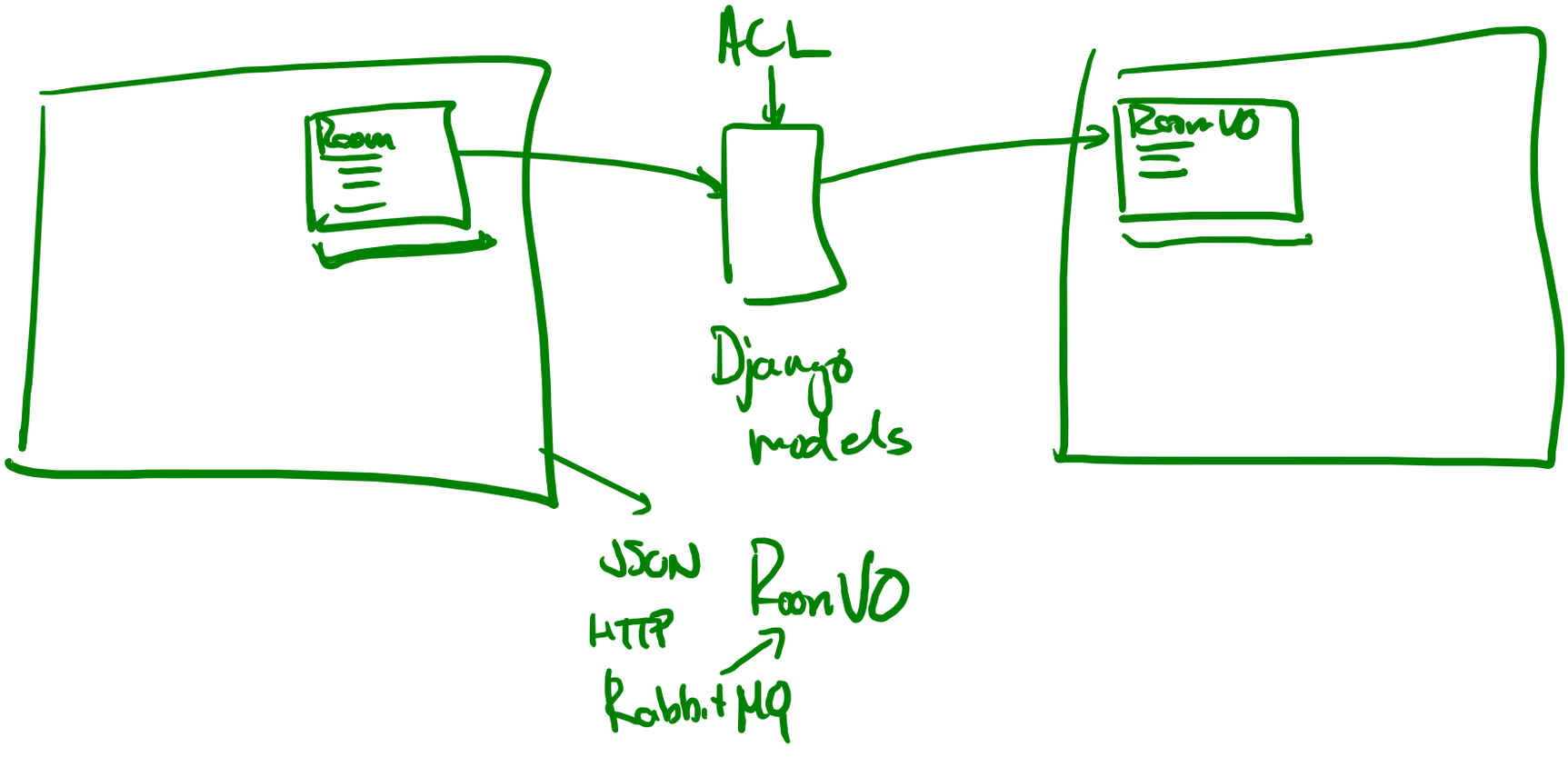


OPTION 3

Bill, room # gone takes "loser"

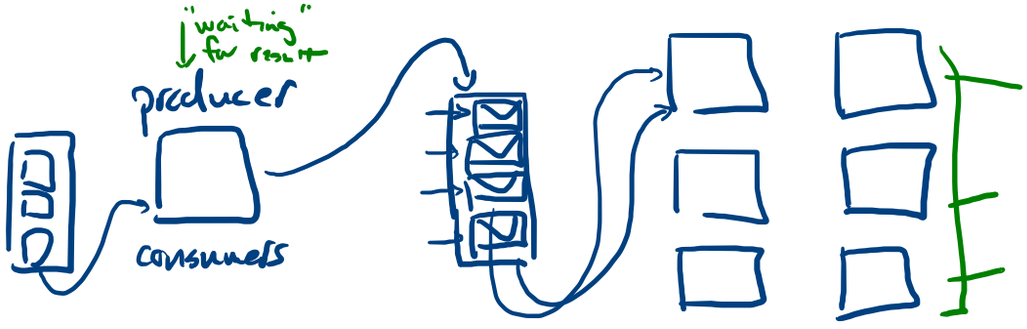
- Circuit breaker
- Bulkhead




ACL
Room
RoomVO
Django
models
JSON
HTTP
RoomVO
RabbitMQ

IPC

- Work queues

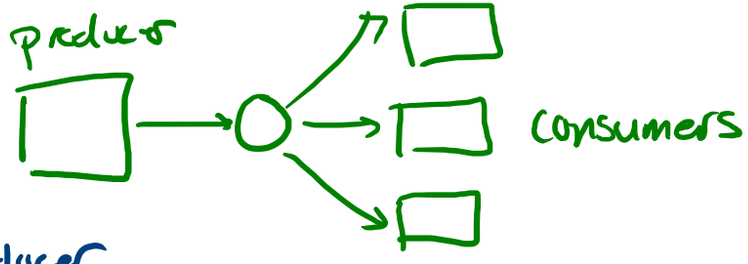


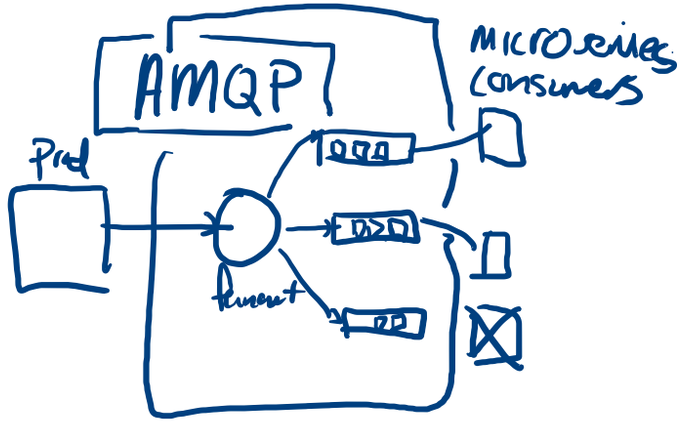
Fire & forget

ACLs

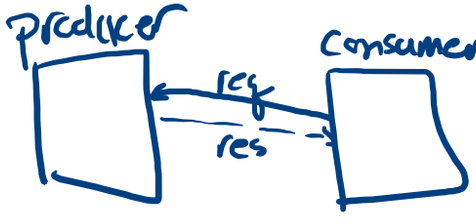
Solve the same problem

- Pub/Sub



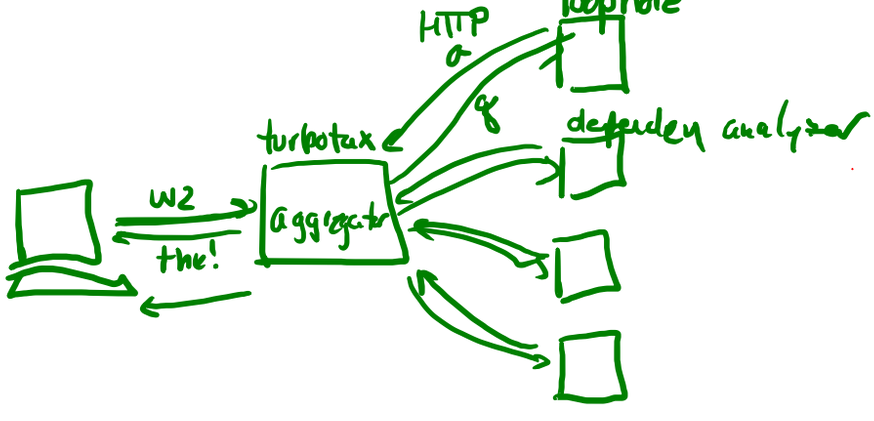


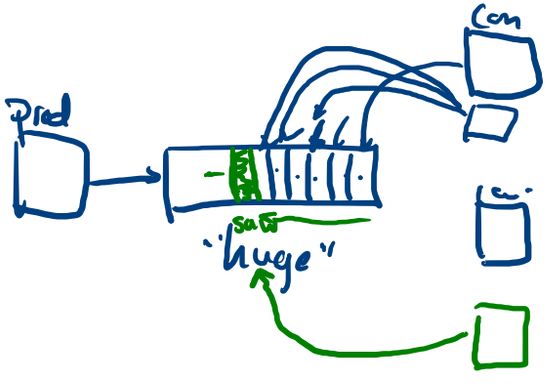
- (HTTP) Polling



Service-oriented

Stateless

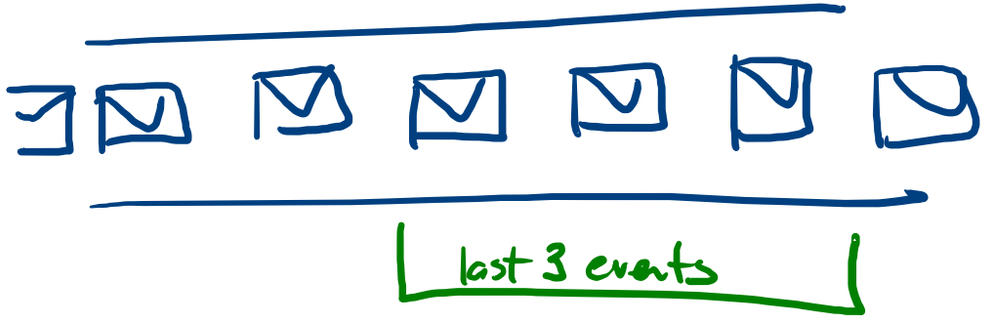


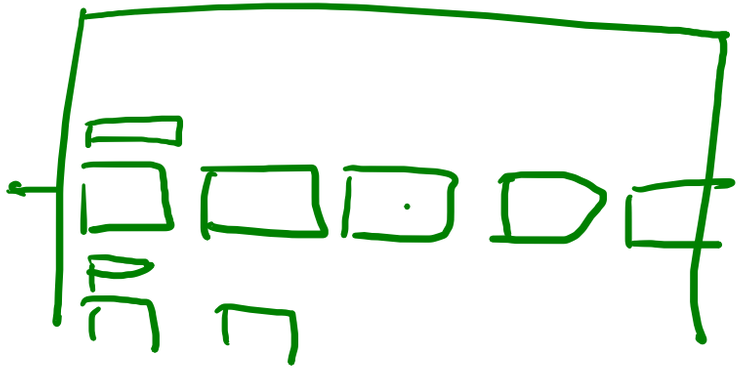


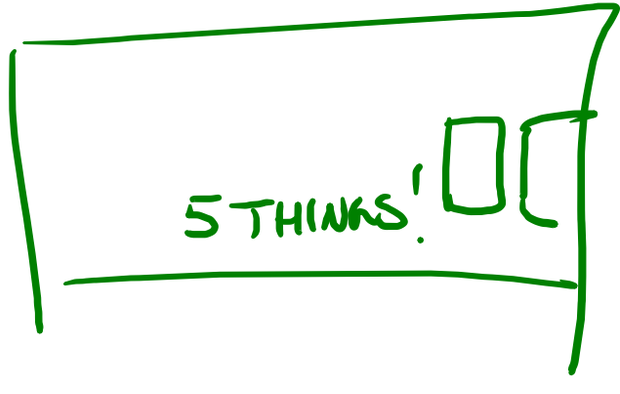
Complex event processing | Event sourcing

Kafka one of many

Oracle CEP engine
+Java

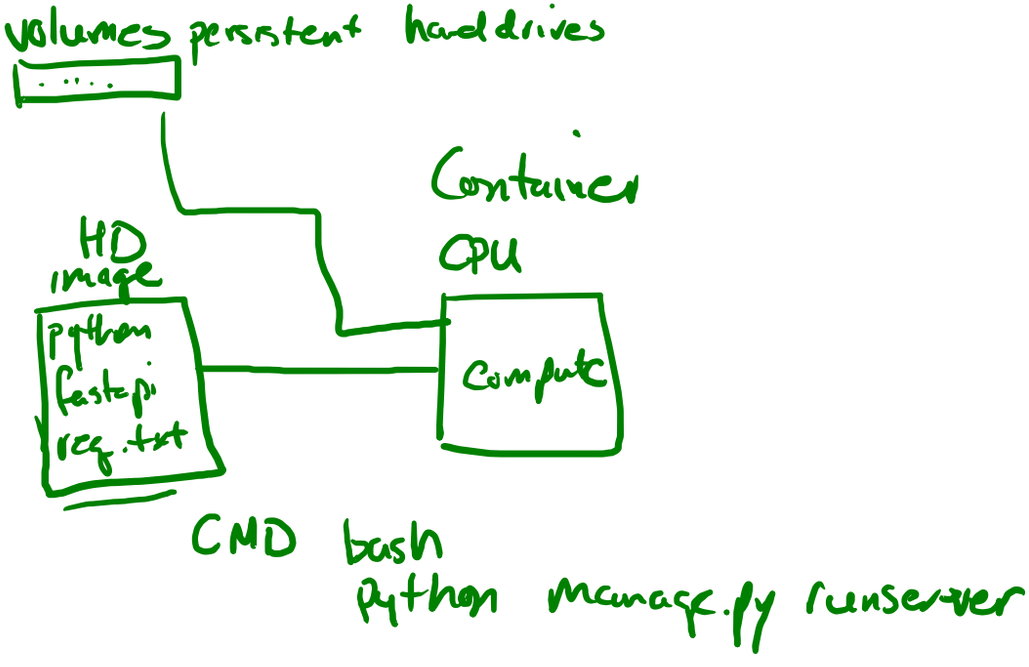






Docker image

transient hard-drive used to boot a container



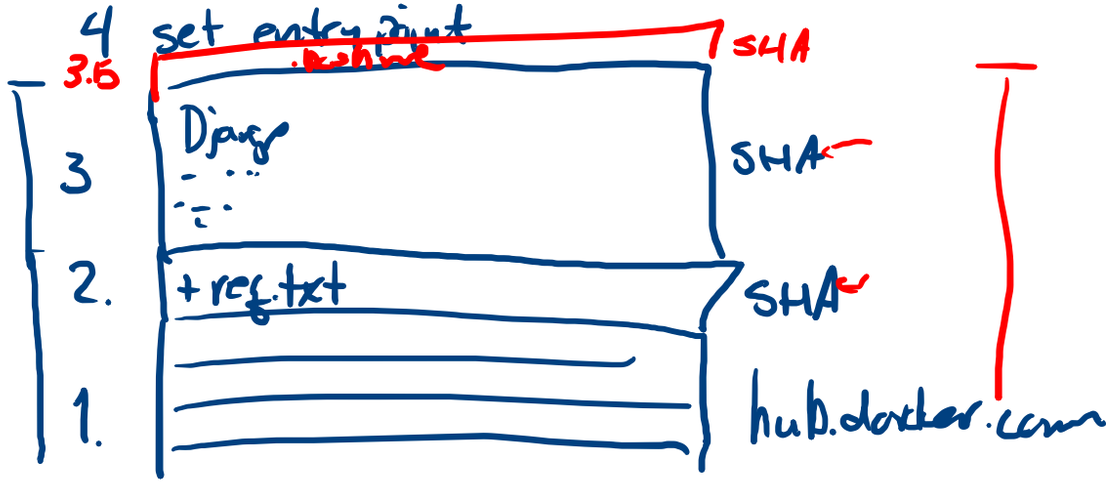
1 FROM python] 1.

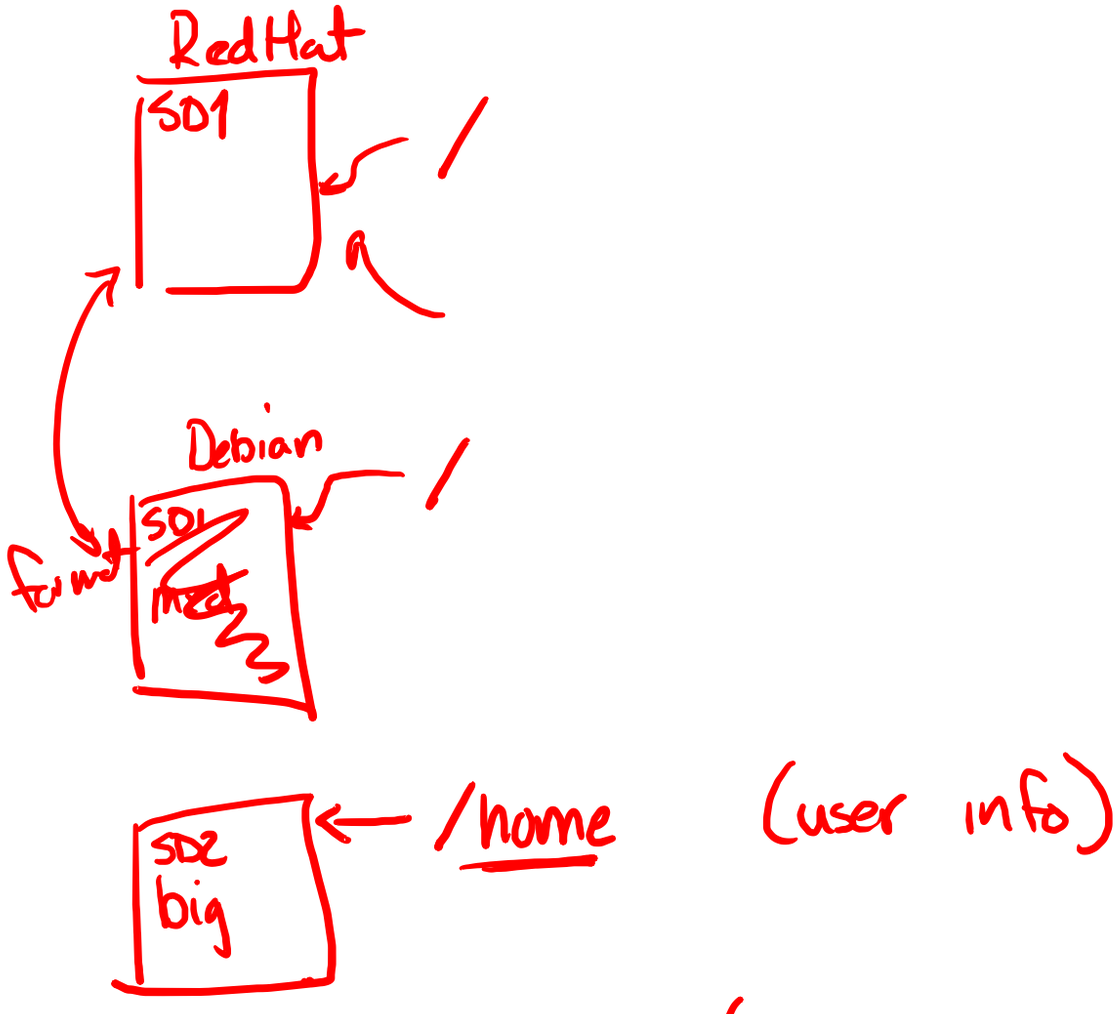
2 COPY req.txt req.txt] 3.

3 RUN pip install -r req.txt] 3.

3.5 RUN echo "curtis" >> .bash-me

4 CMD python manage.py runserver] 4.




RedHat
SD1
/
a
Debian
/
format
SD1
mkdir
3
SD2
big
/home
(user info)
cd /home
↳ SD2:/

Networking TCP/IP

Application HTTP SMTP DNS

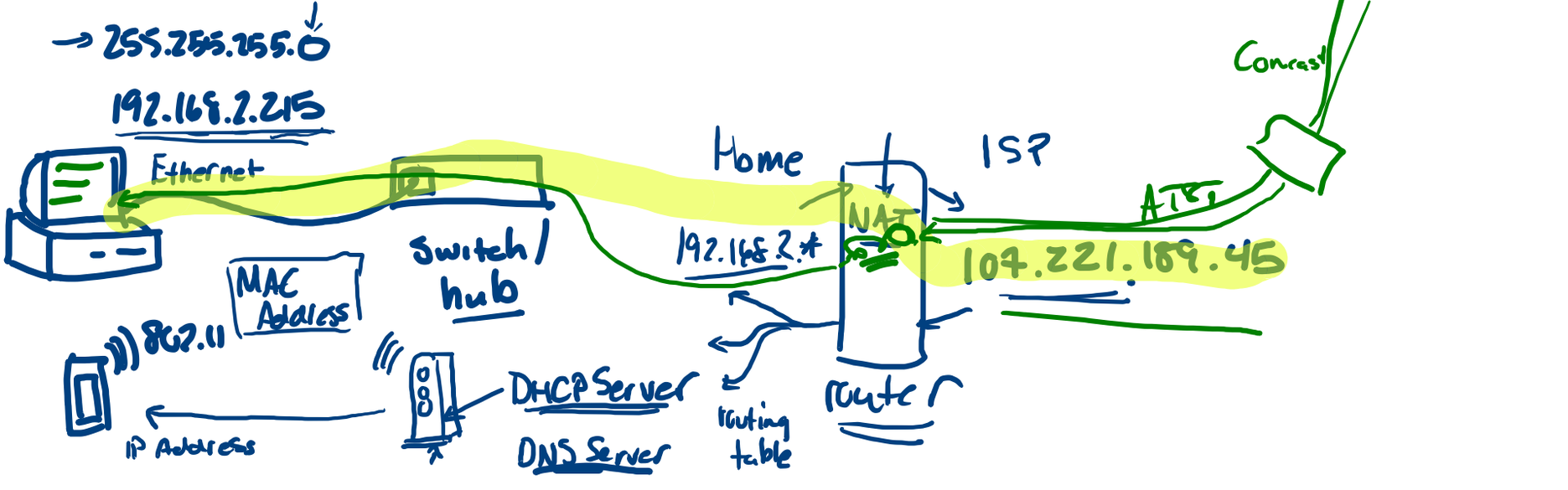
Transport → TCP UDP (ports) — fire-and-forget — data

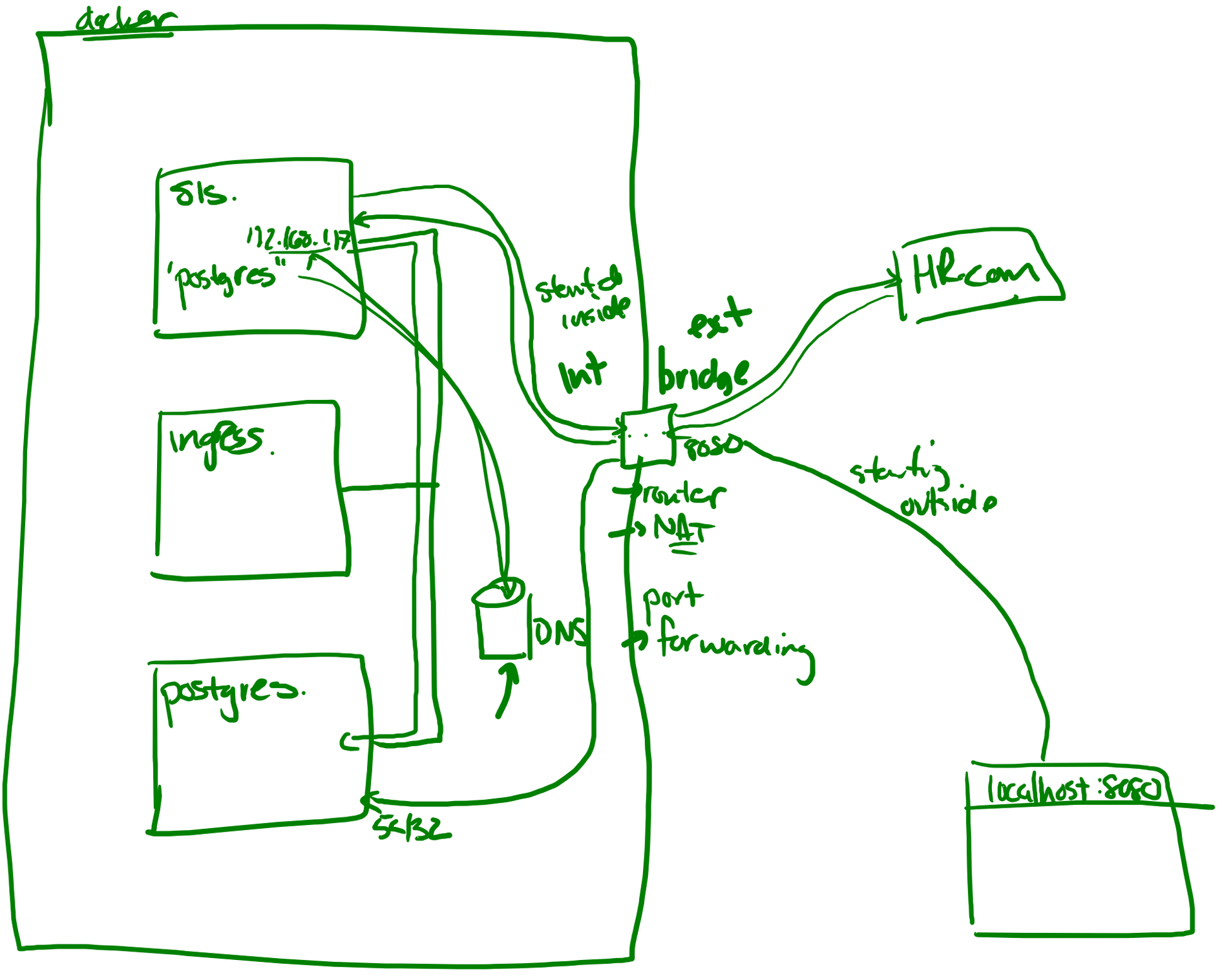
Internet → Addressing (IP Address) — local Network — data

Link/Physical → Addressing (MAC Address)

IPv4: X.X.X.X ← 255^4

IPv6: HUGE




docker
sis.
172.168.1.17
"postgres"
ingress.
postgres.
5432
DNS
started inside
int
ext
bridge
8080
router
NAT
port
forwarding
HR.com
starting outside
localhost:8080