

Things Databases Don't Do

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“Forewarned, forearmed; to be prepared is half the victory.”

Miguel de Cervantes

We'll talk about Things DBs don't do But...



... they say they do



... we all need



... software engineers need



... are cool and cutting edge

**Databases don't do,
but sometimes claim to do...**

1



Everything

**“A Database can’t do
everything
but a data platform could”**

--Sriram Subraminian,
Nile Platform, CEO

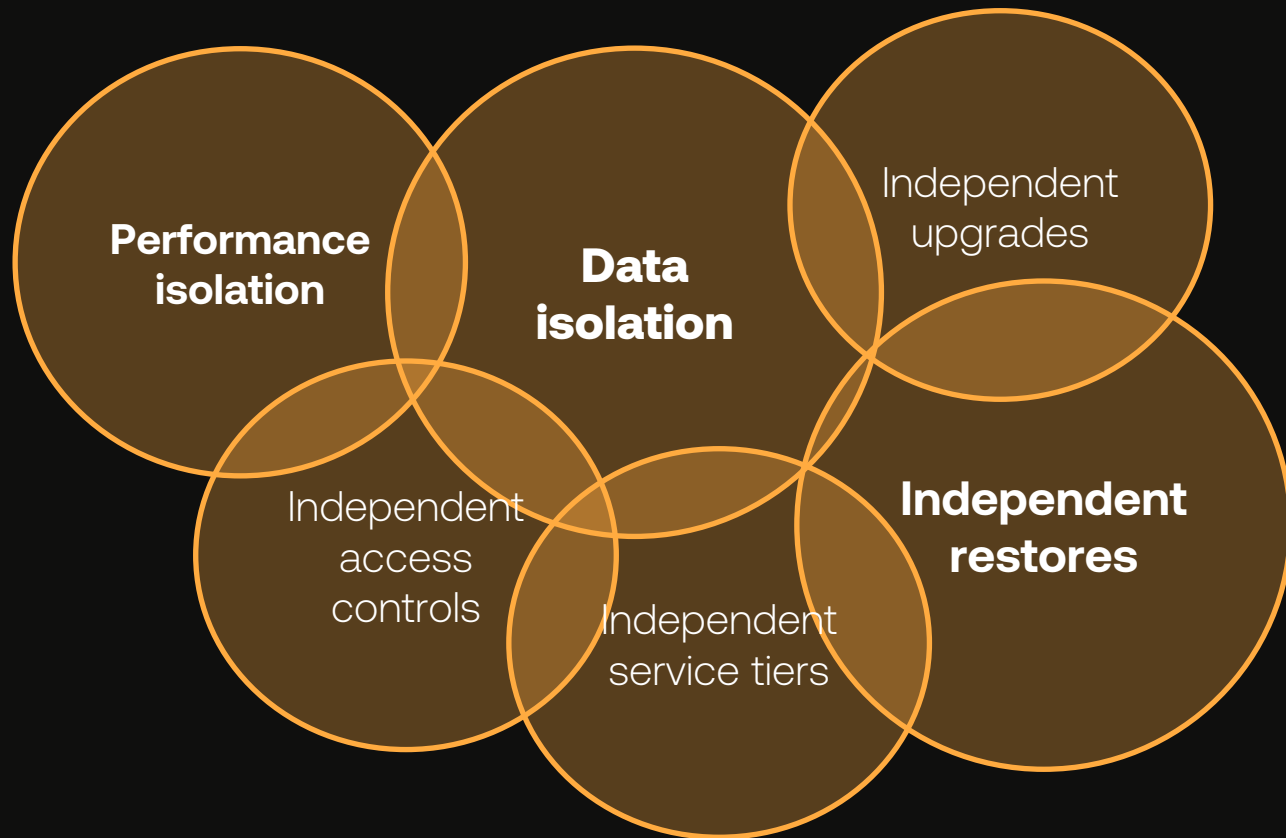
**Things we all need
DBs to do**

2

Soft Deletes

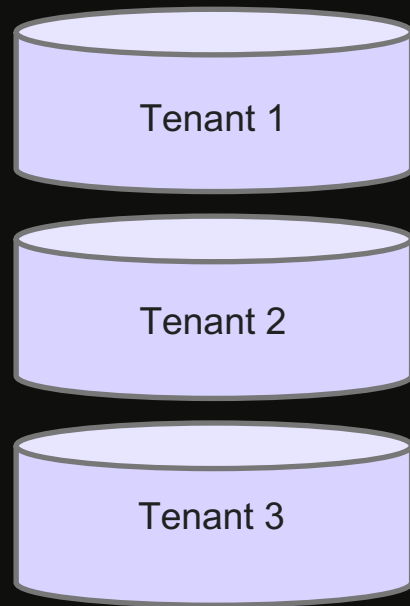
3

Tenant-awareness





Pool model



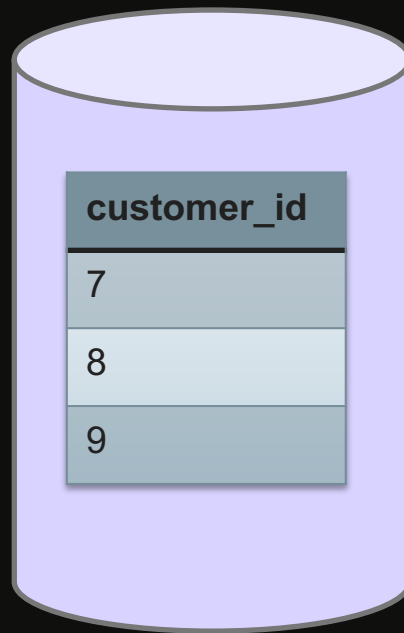
Isolated model



DB Shard A



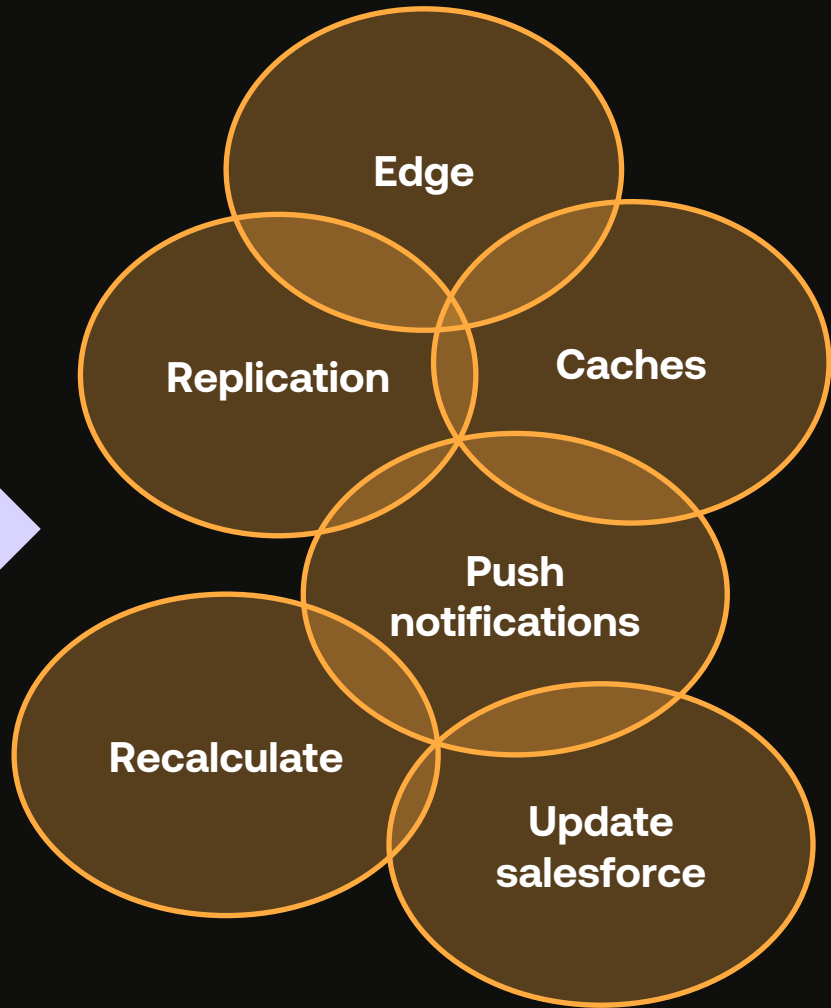
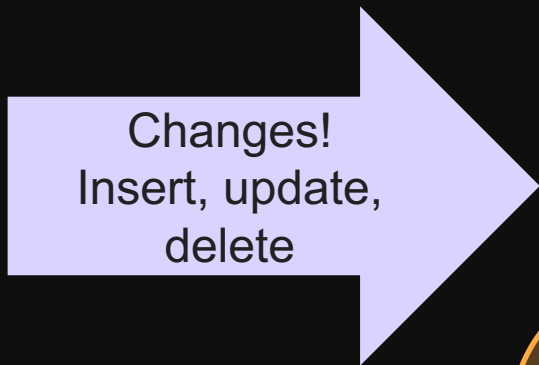
DB Shard B

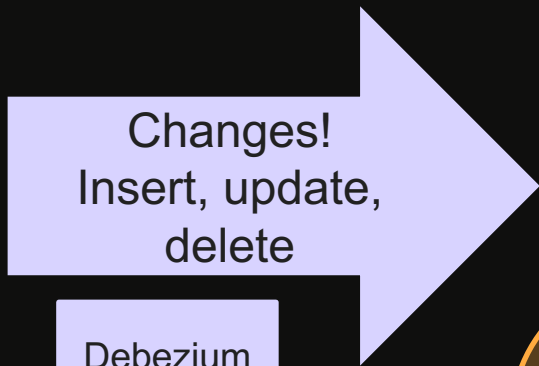


DB Shard C

4

**Easy way to get
change history**





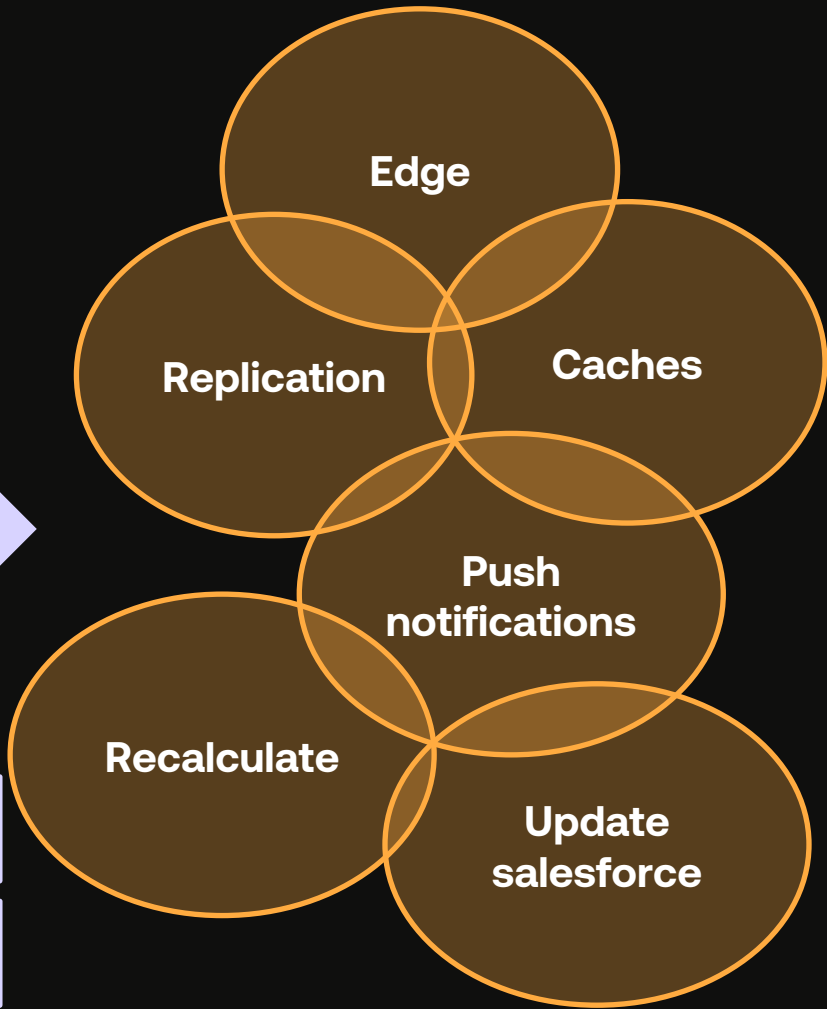
Debezium

Kafka

Streams

Connect

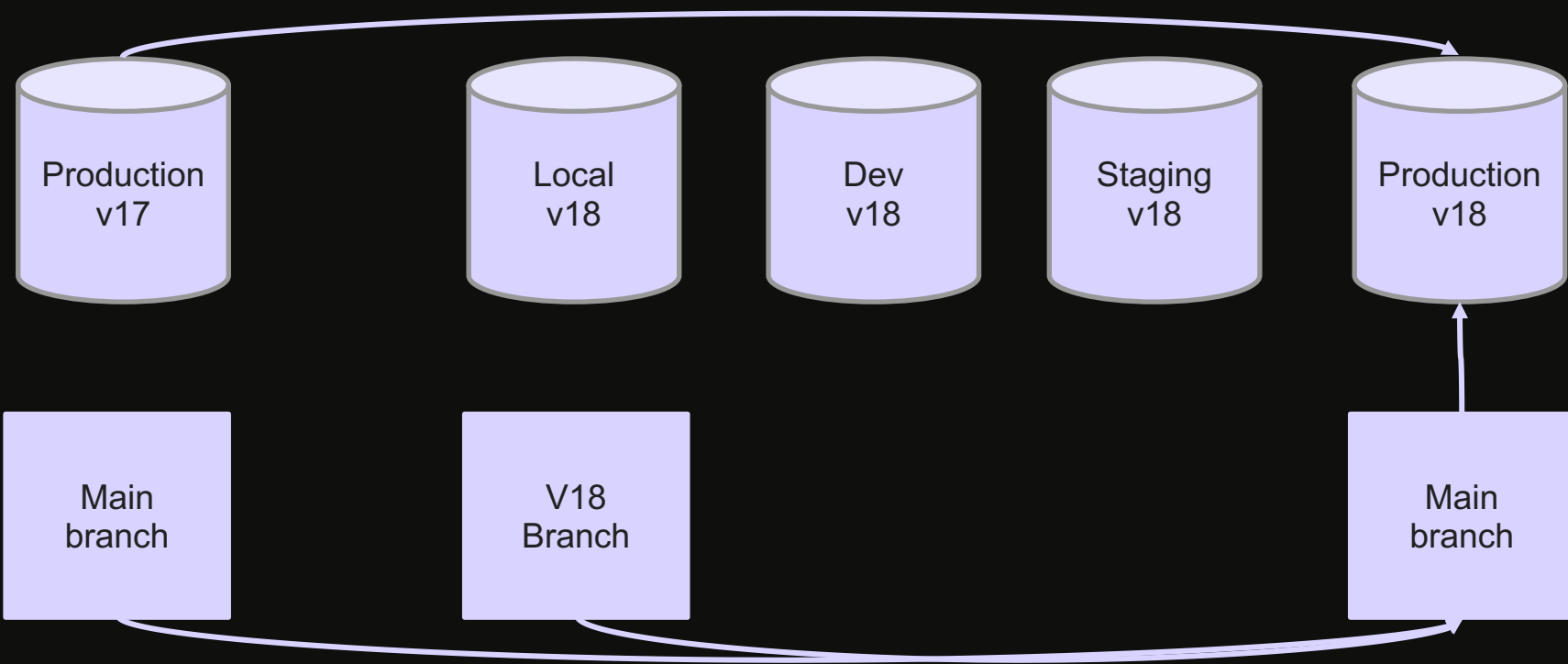
Clients



**Things software engineers
need DBs to do**

5

Version Control for Schema Changes



6

SQL + APIs

```
Select age, count()  
from people  
Group by age
```

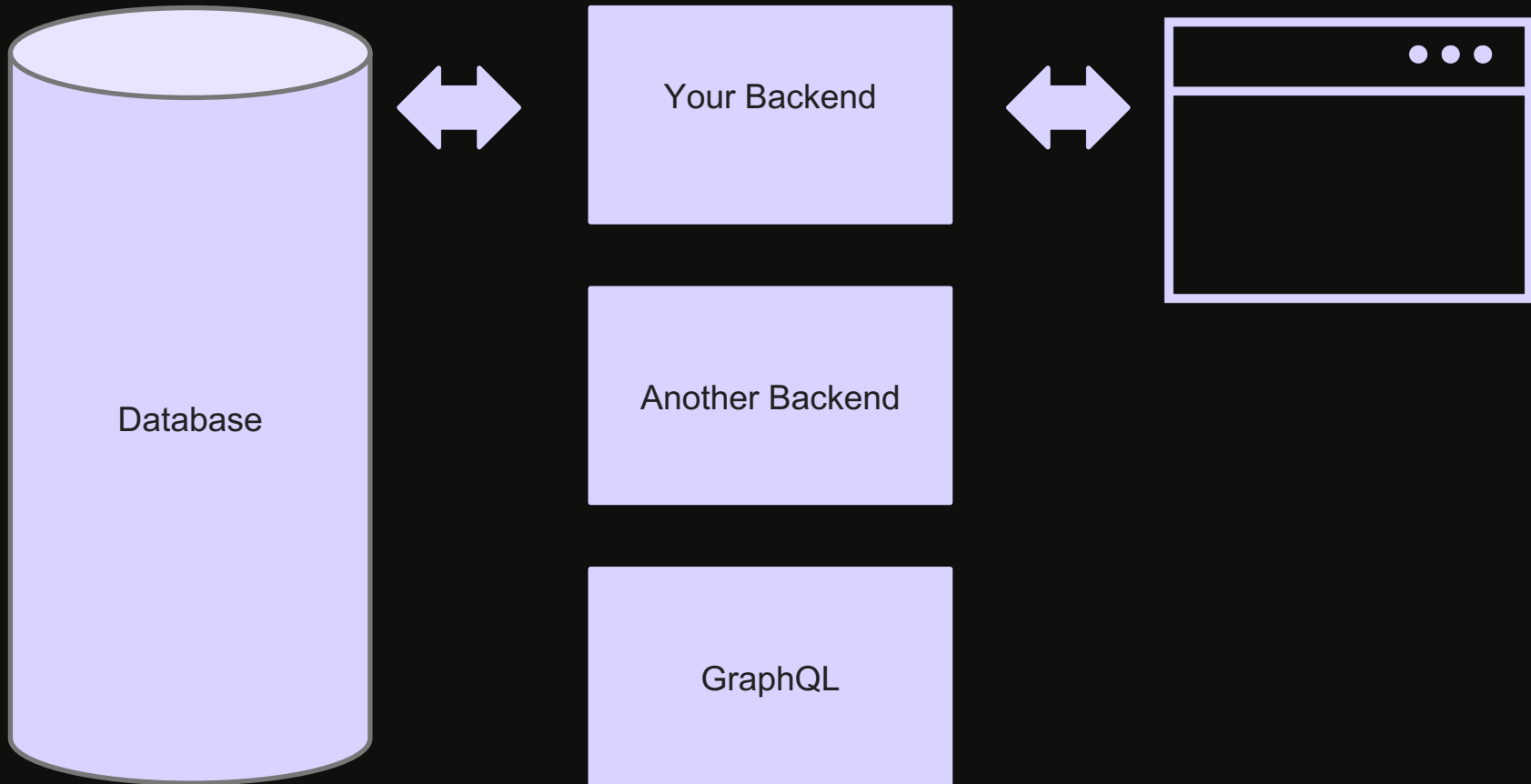
```
ageGroup =  
    dfPpl.groupBy("age")  
Print(ageGroup.count())
```

```
Select age, count()  
from people  
Where gender = "female"  
Group by age
```

```
ageGroup =  
    dfPpl.groupBy("age")  
  
fOnly = ageGroup.filter(  
    col("gender")  
        .like("female"))  
  
Print(ageGroup.count())  
Print(fOnly.count())
```

7

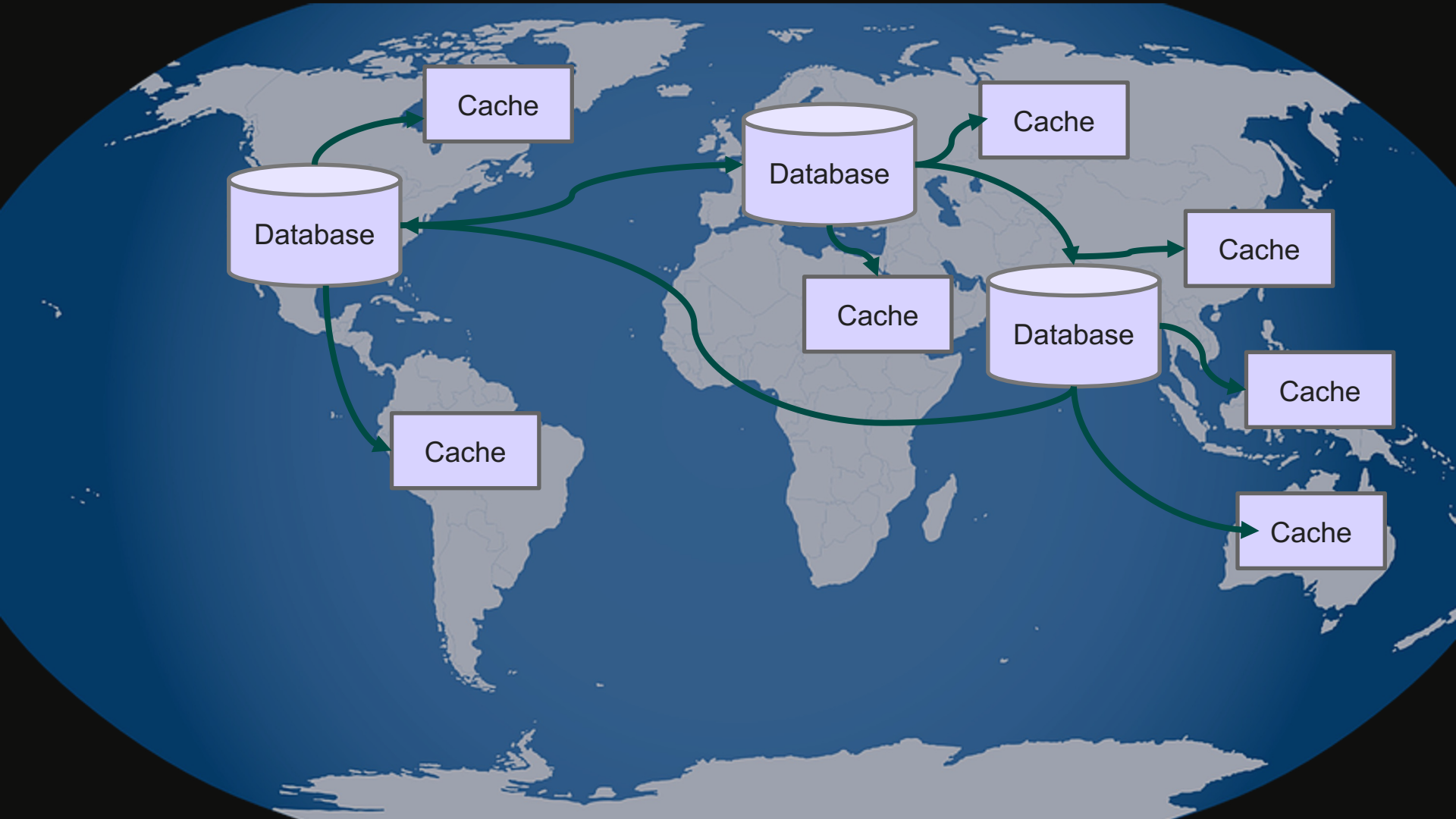
Modern Protocols



DB Features of the Future

8

Global



Intelligent and Adaptive

Summary



Don't expect DBs to do everything



Do keep in mind all the things DBs don't do – and do the needful



Do keep an eye for DBs that do more for you.



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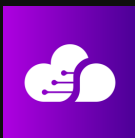
Thank you for attending!



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<https://www.youtube.com/@saas-dev>