



KSQL

ARCHITECTURE
& PLATFORM!



ARQUINAUTAS

TUS METAS NUESTRA
AVVENTURA TECNOLÓGICA

>BCP>

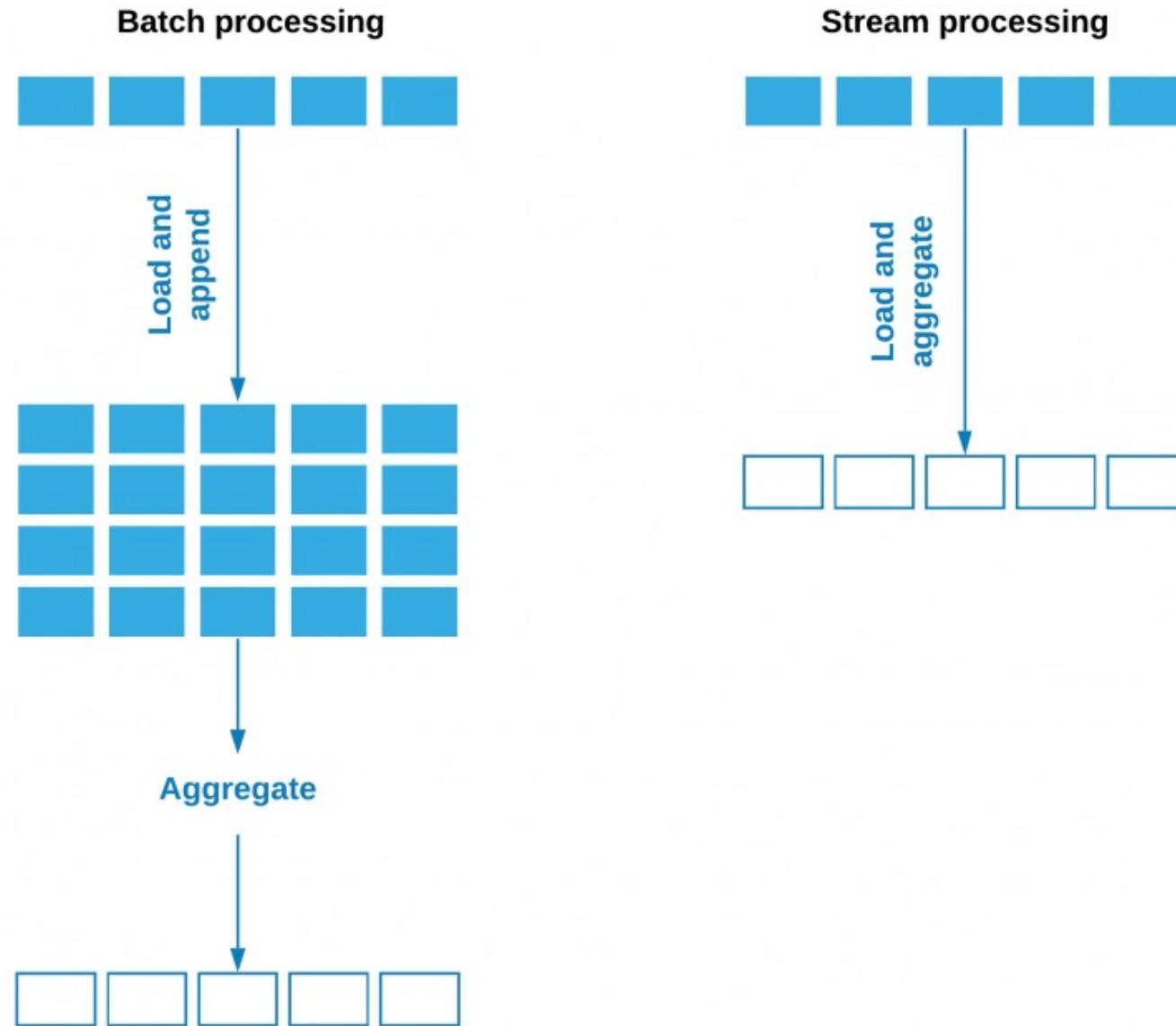


CONTENIDO

-  *Batch vs Stream*
-  *Eventos*
-  *Stream / Table*
-  *Kafka streams vs ksqlDB*
-  *Demo*

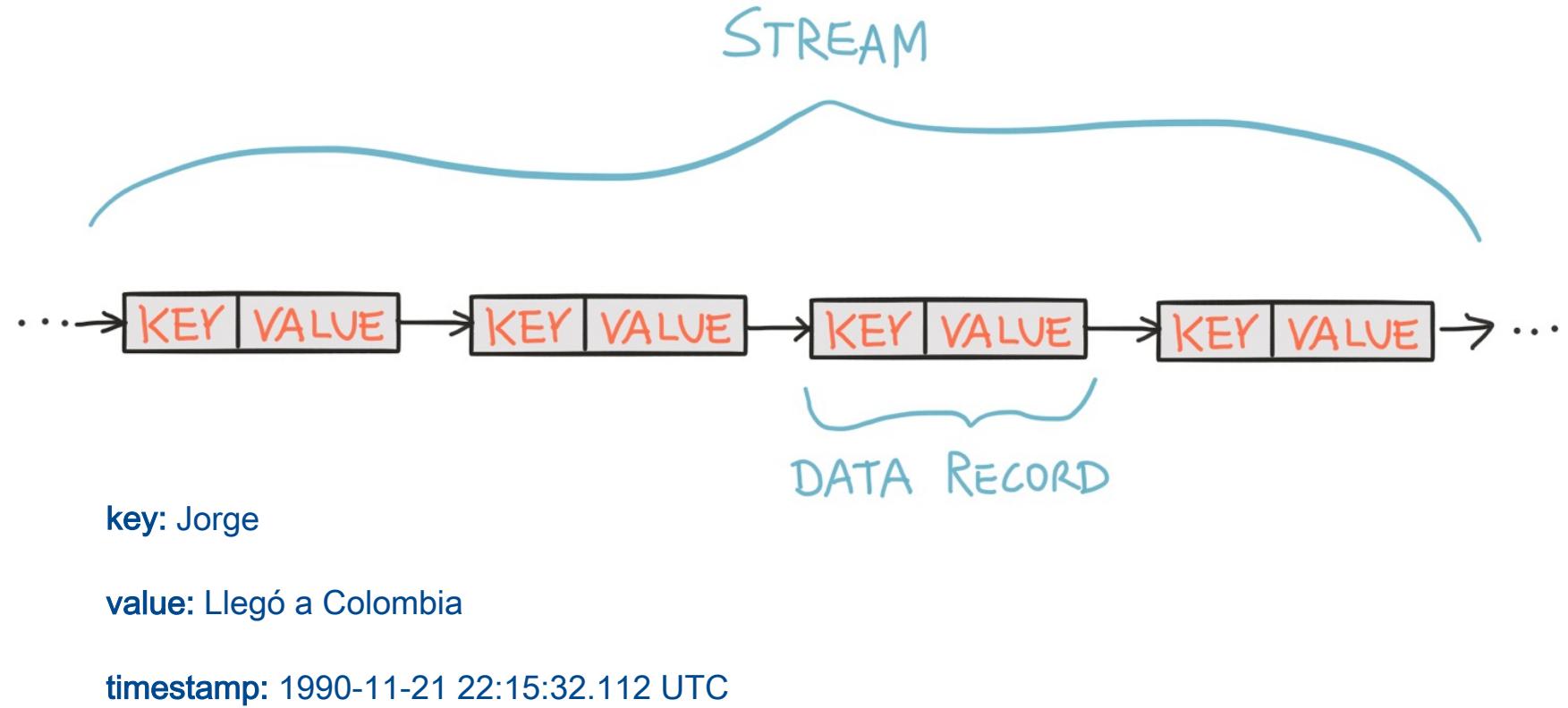


Batch vs Stream





Events



Event Stream: Registra la historia de lo que paso en el mundo como un secuencia de eventos

Stream / Table



OLD

NOW

STREAM

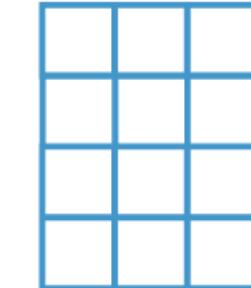
Persona	Ciudad
Jorge	Francia
Dennis	España
Jorge	Portugal
Angel	Italia
Dennis	Belgica
Angel	Holanda
Dennis	Polonia



Historia

TABLE

Persona	Ciudad
Jorge	Portugal
Dennis	Polonia
Angel	Holanda



Estado Actual



Temperaturas

STREAM

001	15.5	004	13.7	002	18.3	003	15.7	004	15.7
-----	------	-----	------	-----	------	-----	------	-----	------

TABLE

Station	Temp								
001	15.5	001	15.5	001	15.5	001	15.5	001	15.5
				002	18.3	002	18.3	002	18.3
						003	15.7	003	15.7
		004	13.7	004	13.7	004	13.7	004	15.7

OLD

NOW

Transacciones



OLD

NOW

STREAM

CTA 191001, + 11.50

CTA 191002, + 12.50

CTA 191001, - 2.50

CTA 191003, + 5.00

CTA 191003, + 2.25

CTA 191002, - 1.00

CTA 191003, - 1.25

CTA 191001, + 1.00

TABLE

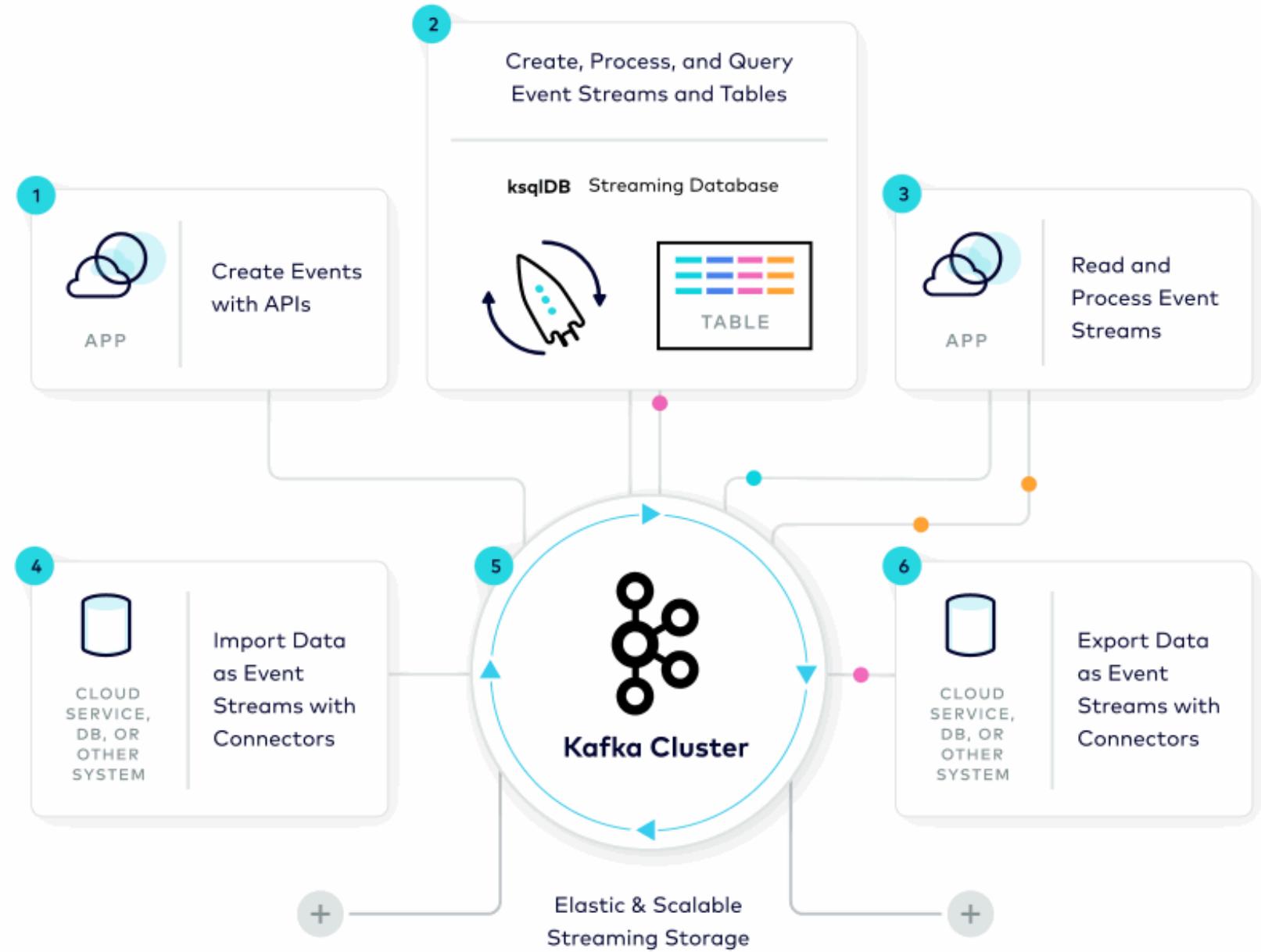
CTA 191001, + 10.00

CTA 191003, + 6.00

CTA 191002, + 11.50



Architecture





Kafka Streams

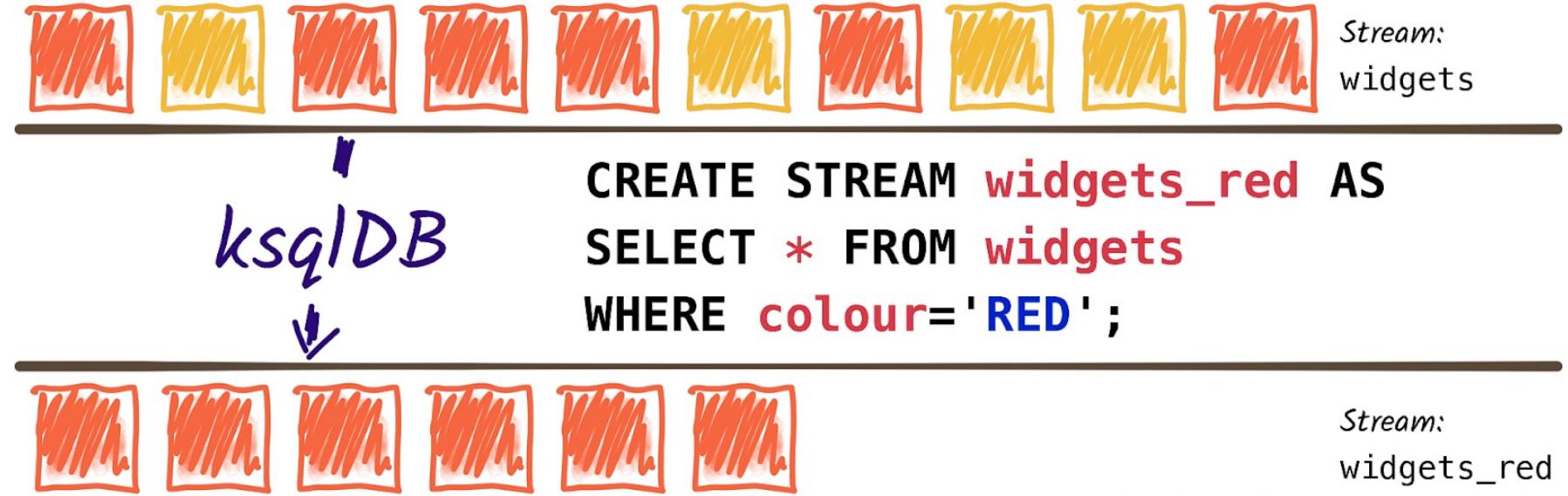


```
final StreamsBuilder builder = new StreamsBuilder()  
    .stream("widgets", Consumed.with(stringSerde, widgetsSerde))  
    .filter( (key, widget) -> widget.getColour().equals("RED") )  
    .to("widgets_red", Produced.with(stringSerde, widgetsSerde));
```





ksqldb





Kafka Streams vs ksqldb



```
final StreamsBuilder builder = new StreamsBuilder()  
    .stream("widgets", Consumed.with(stringSerde, widgetsSerde))  
    .filter( (key, widget) -> widget.getColour().equals("RED") )  
    .to("widgets_red", Produced.with(stringSerde, widgetsSerde));
```



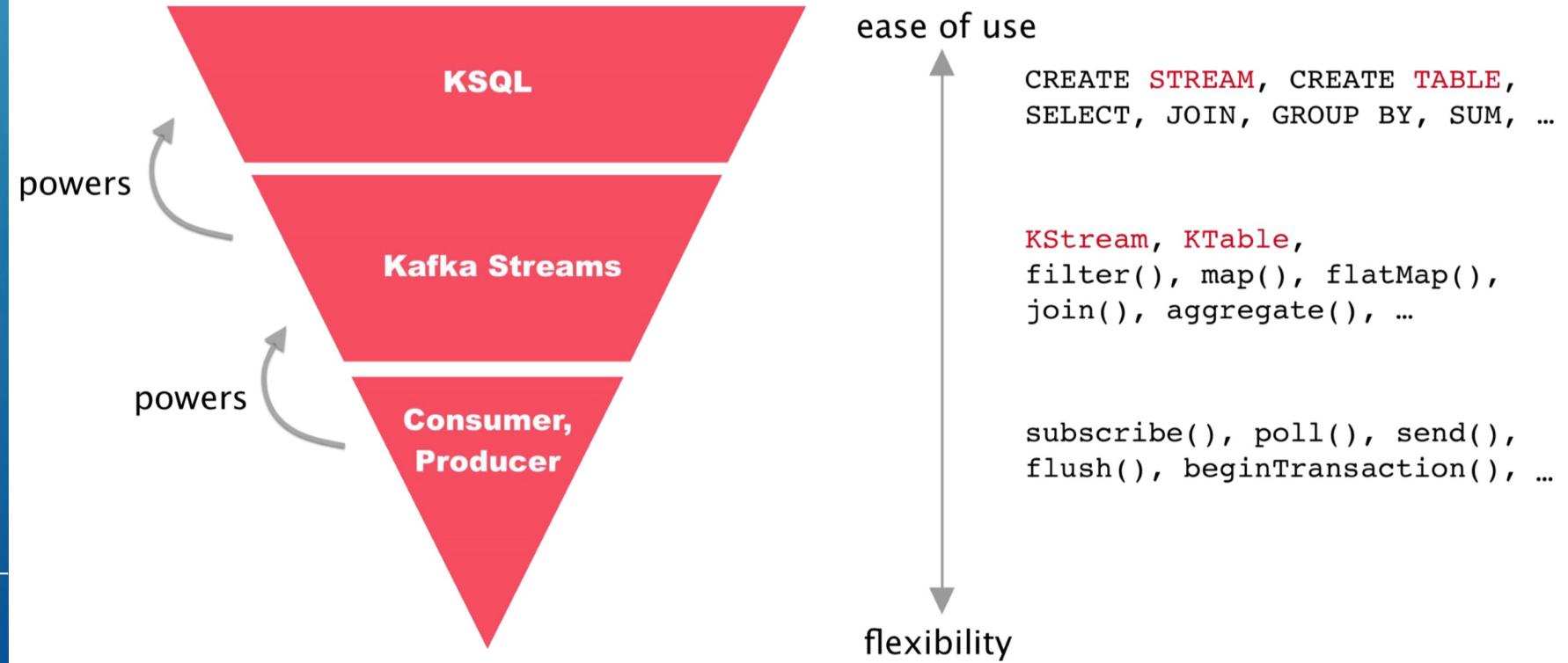
ksqldb
↓

```
CREATE STREAM widgets_red AS  
SELECT * FROM widgets  
WHERE colour='RED';
```





VERSUS



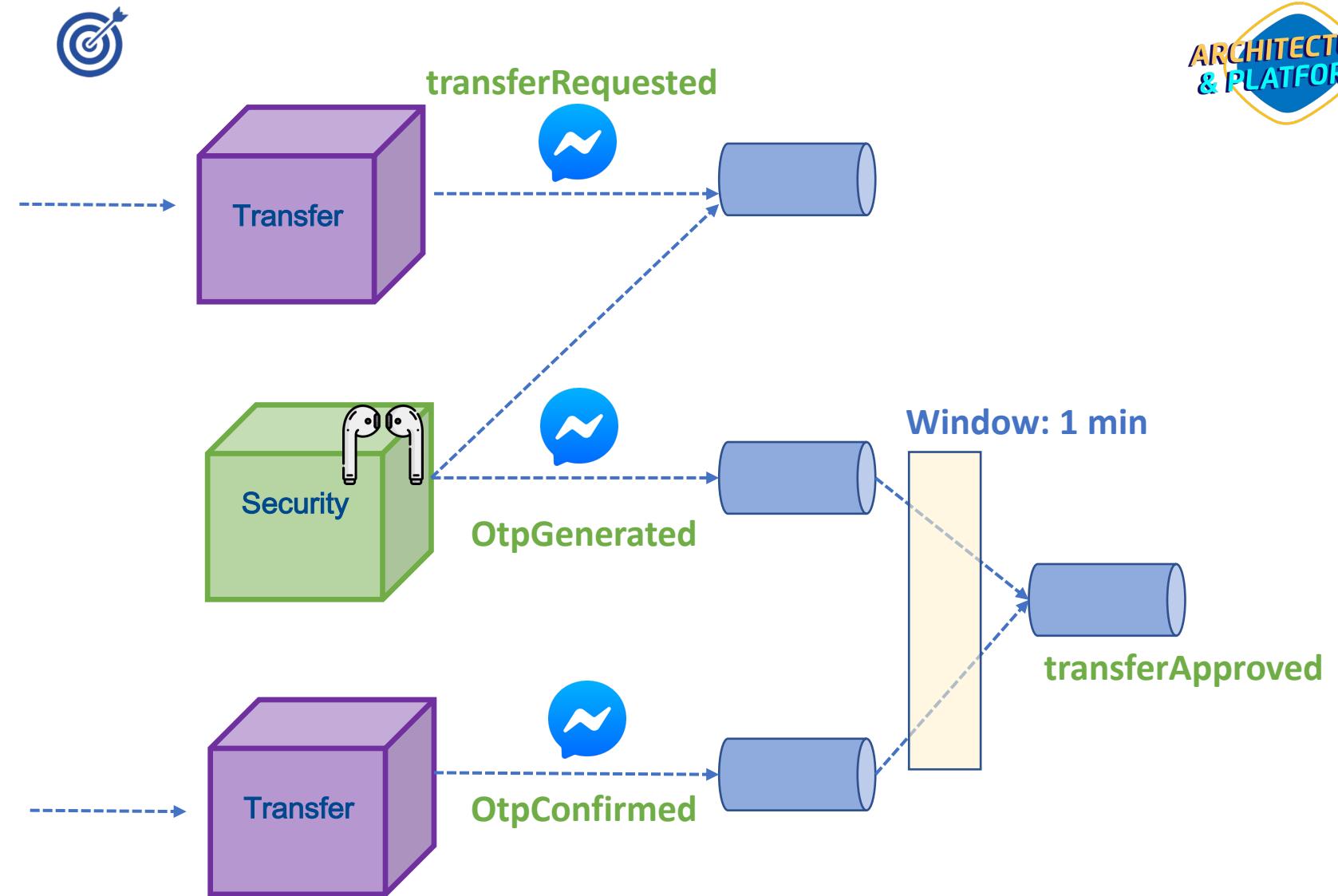
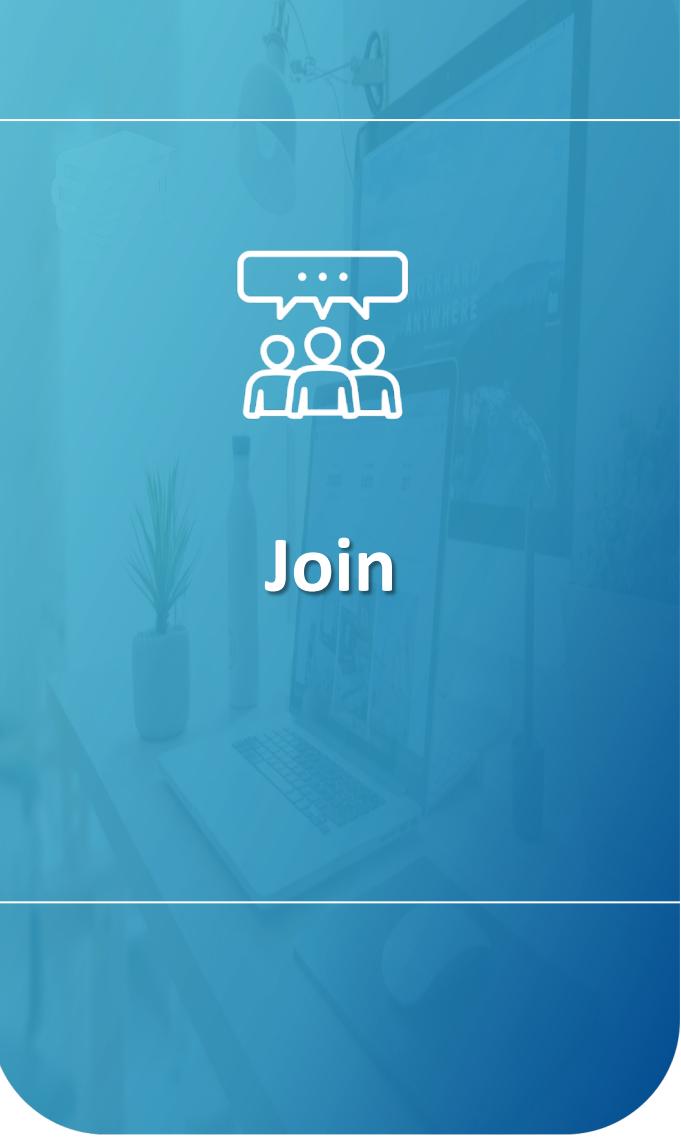


DEMO



<https://github.com/mzegarras/ksqldemo>







Gracias



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