

# Watermarks



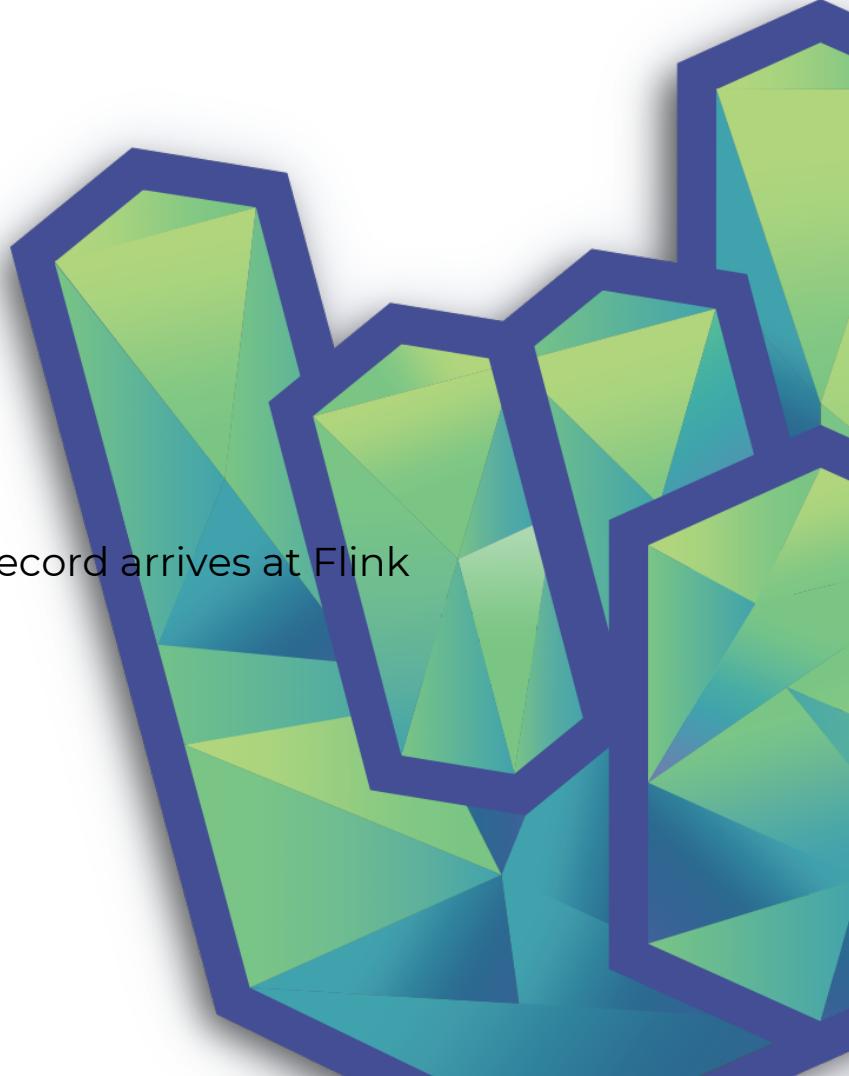
# Event Time

The moment when the record was generated

Set by the data generation system

Flink has APIs to extract the event time

Different from *processing time* = the time the record arrives at Flink



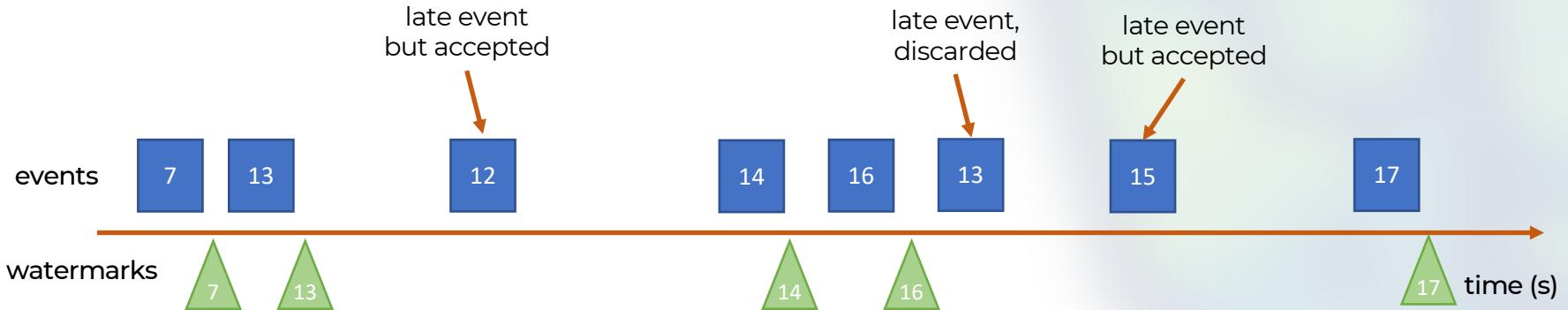
# Watermarks

Mechanism to discard late data

- Events may arrive much later than they were created
- We can set a marker to ignore events older than a threshold (watermark)
- As events arrive at Flink, the marker is automatically (or manually) updated

Example

- We emit a watermark with every incoming element with event time > current max
- Logic: ignore all data older than the watermark minus 2 seconds



**Flink rocks**

