

# 基于 **Apache Pulsar** 构建消息流 **PaaS** 平台

翟佳

上海谙流科技有限公司



- 翟佳 (wechat\_id: zhai--jia) :
  - Co-Founder of AscentStream
  - Co-Founder of StreamNative
  - Apache Member
  - Apache Pulsar PMC member & Committer
  - Apache BookKeeper PMC member & Committer

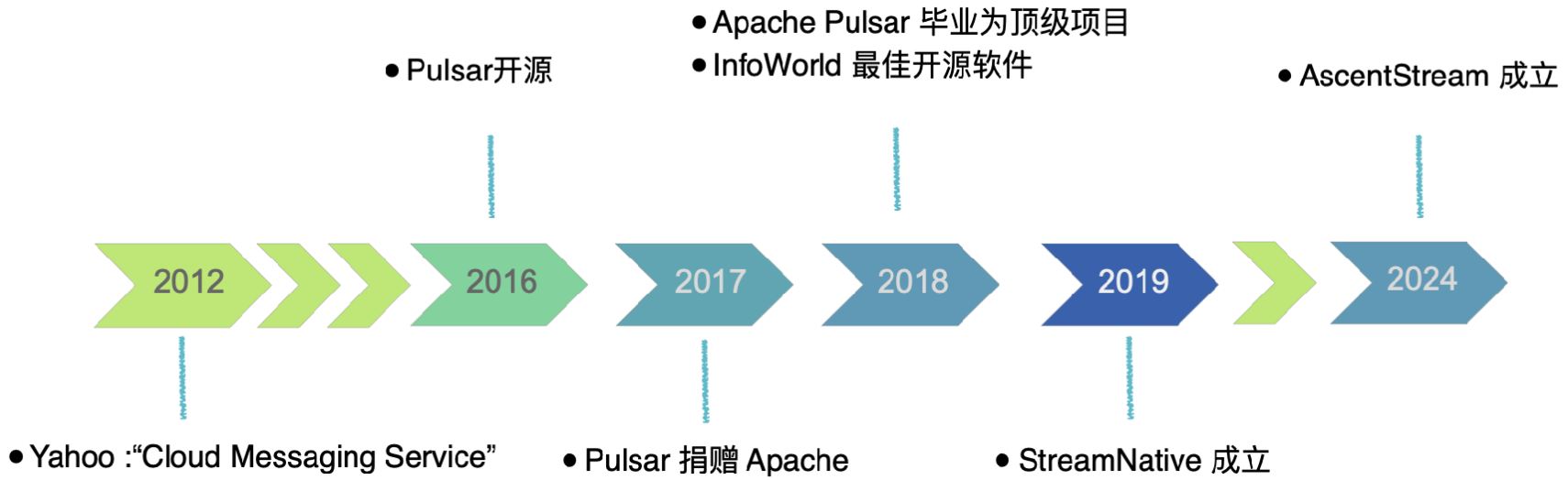
# Apache Pulsar

## 社区简介

# 消息队列发展历程



- 从需求上看：消息 -> 流 -> 消息和流融合
- 从架构上看：单机 -> 分布式 -> 云原生



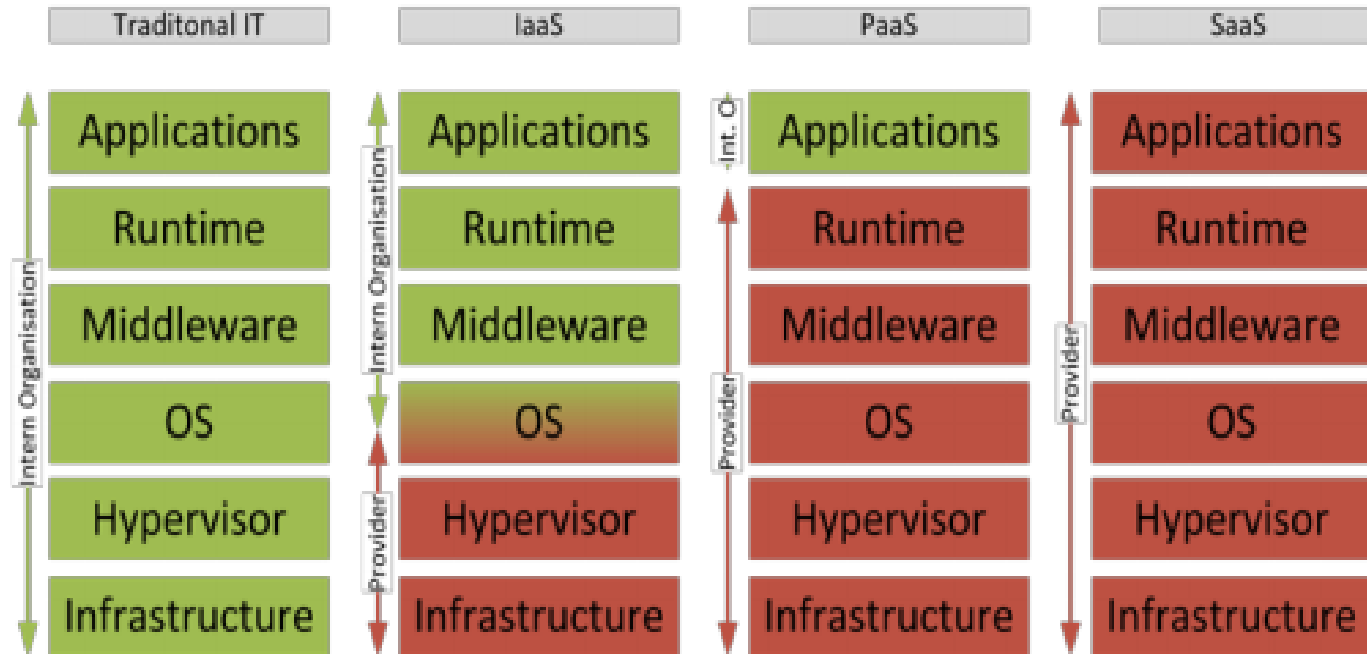




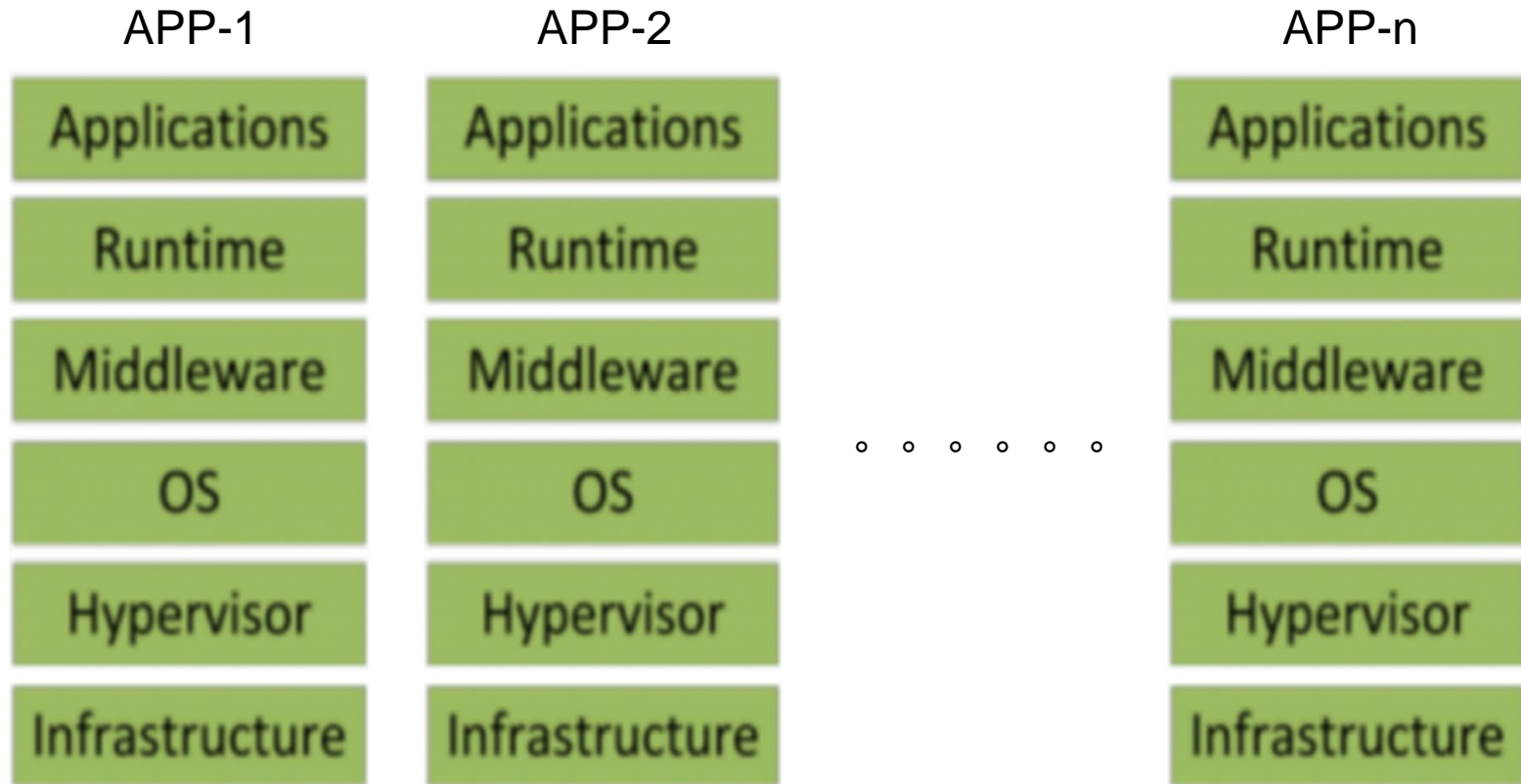
PaaS



# What is PaaS?



Source: Based on the model developed by NIST (2011)



APP-1

Applications

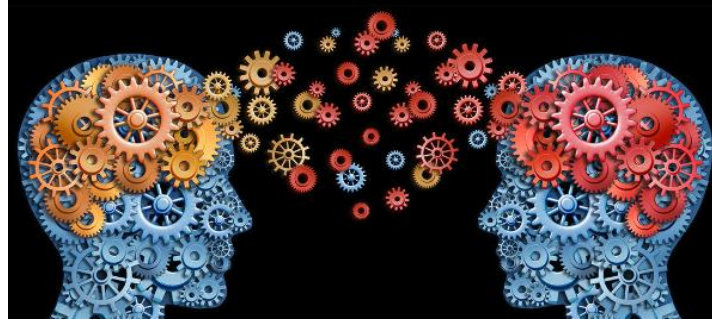
APP-2

Applications

APP-n

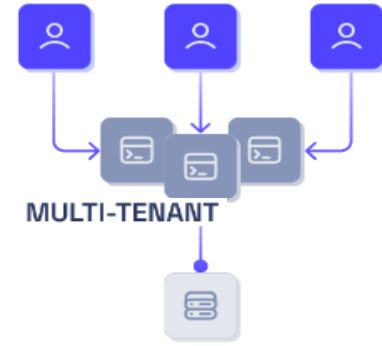
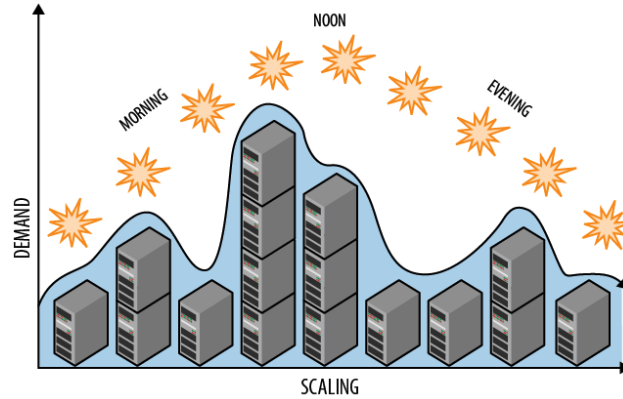
Applications

Platform



# Platform

What is needed?



# Platform

# Pulsar 的 PaaS 特性

What is needed?



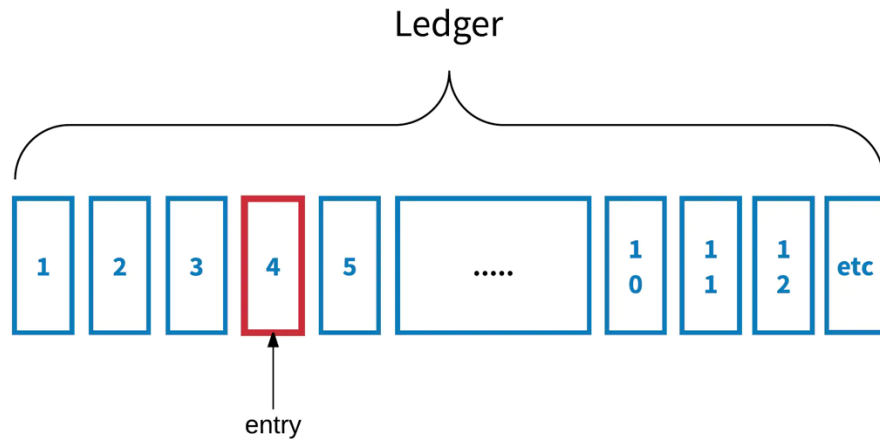
# Platform



**The Log**

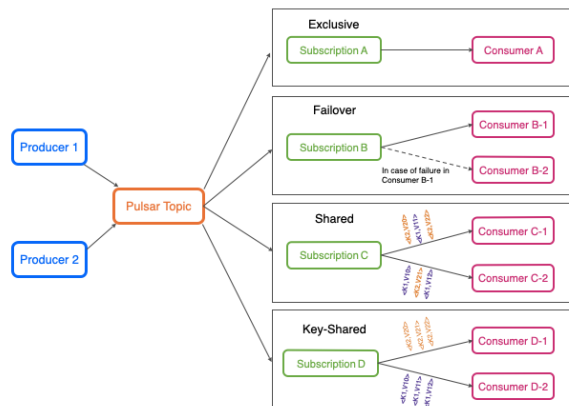


**Apache  
BookKeeper**

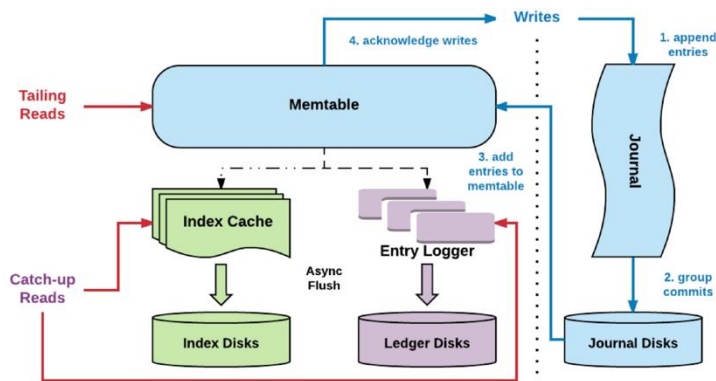




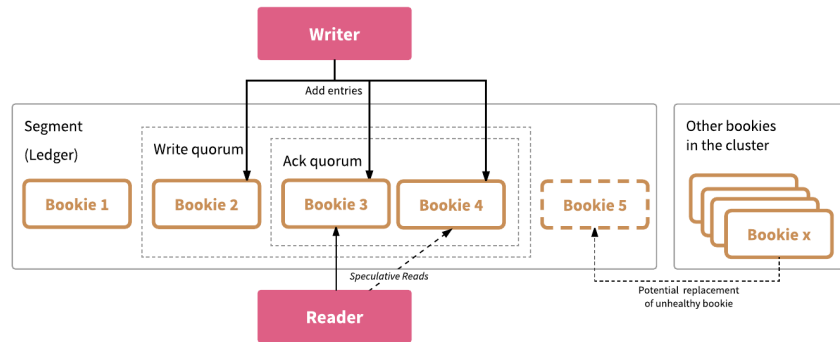
# Pulsar: 统一的 API -- 常用场景的支持



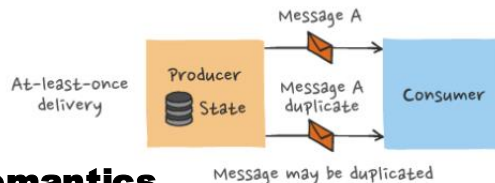
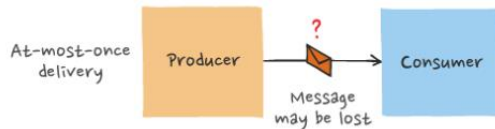
## Multi Subscribe modes



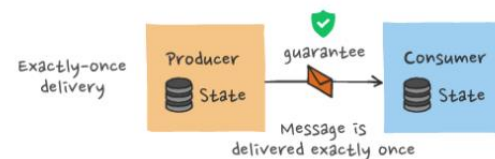
## Flexible persistence



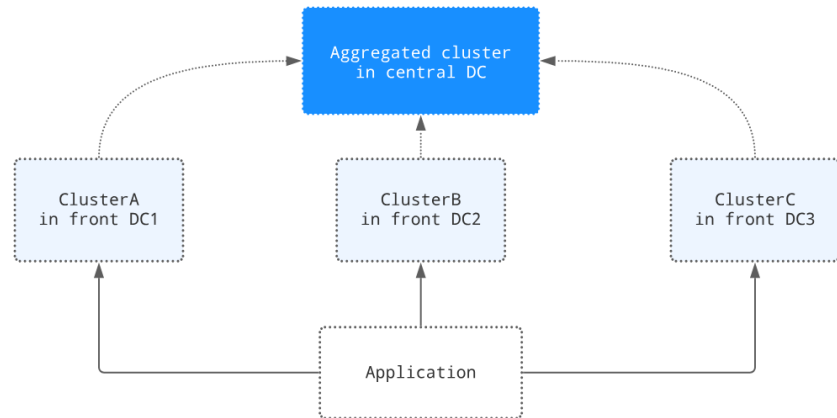
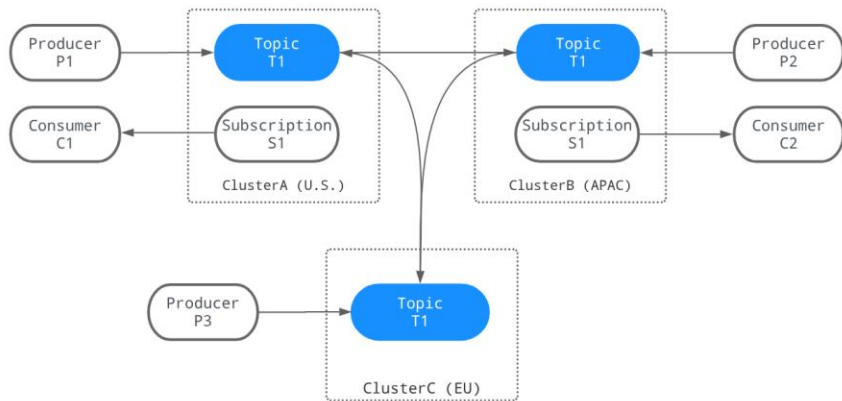
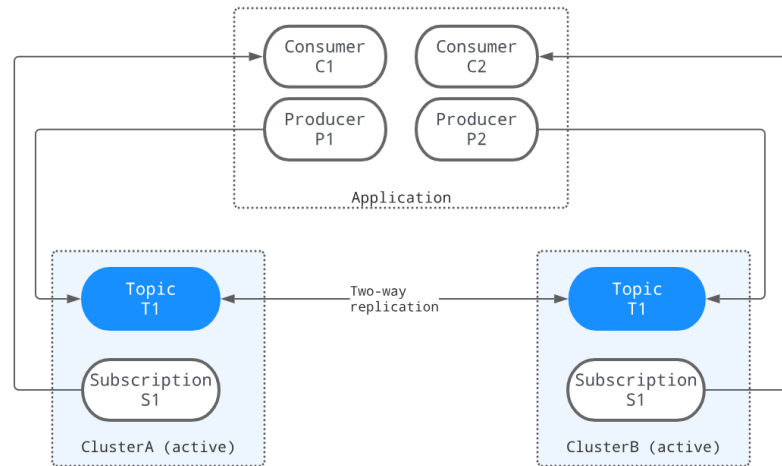
## Flexible replicas

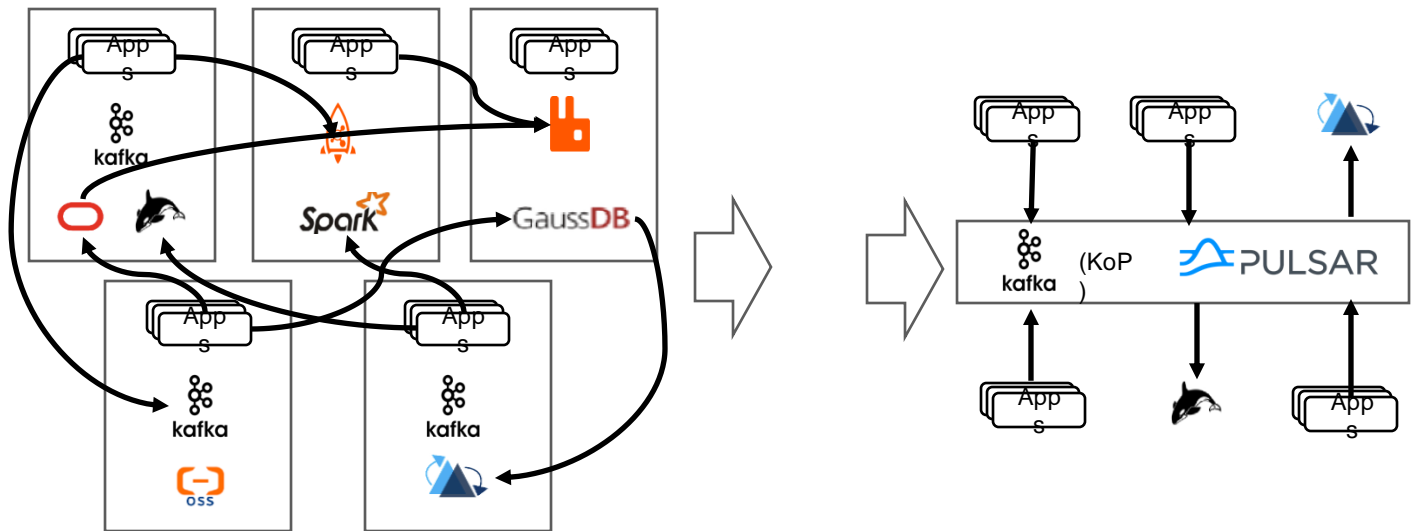


## Flexible Semantics



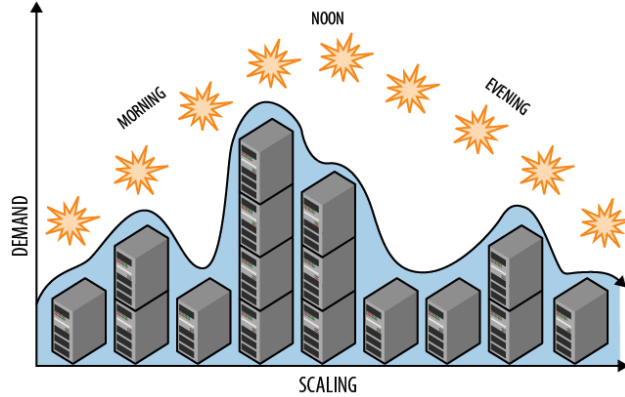
# Pulsar: 跨集群, 多集群; 跨云, 多云





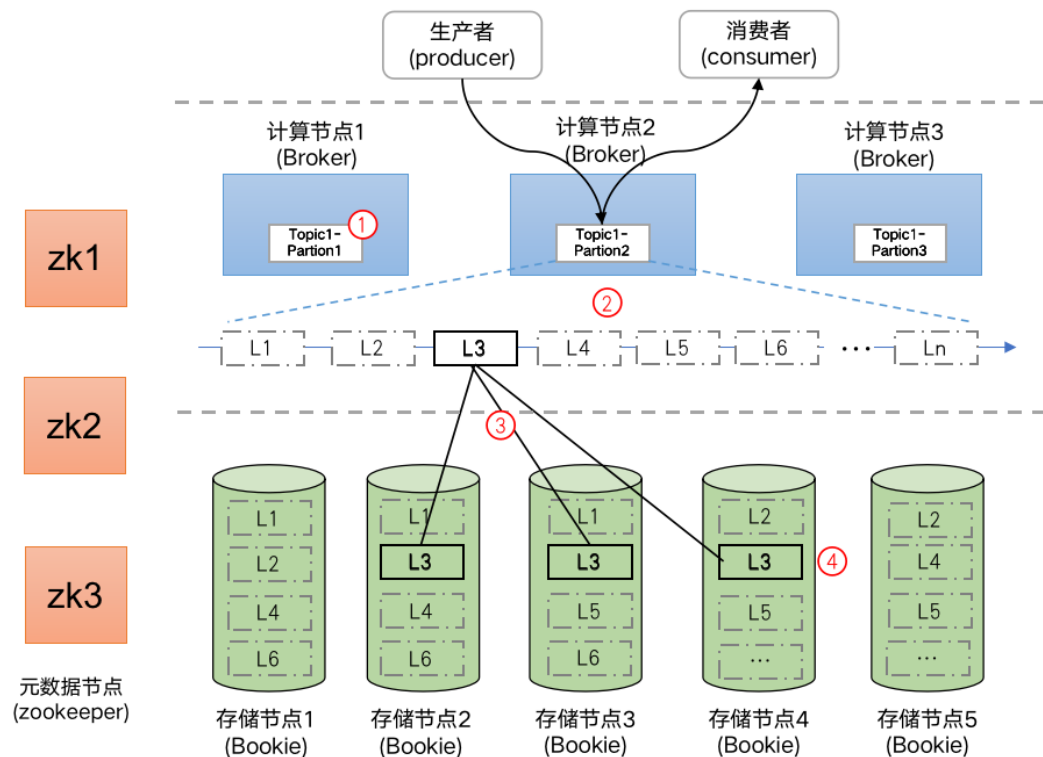
业务层进行数据汇集，构建统一的事件流平台

What is needed?



# Platform

# Pulsar: 存算分离带来的弹性扩缩容

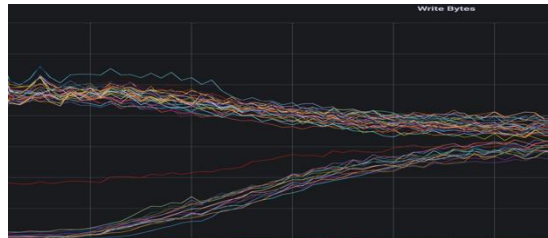


## 计算层:

- ① Topic按照分区**动态均衡**到不同broker
- ② Topic将数据**分片条带化**写入bookie

## 存储层:

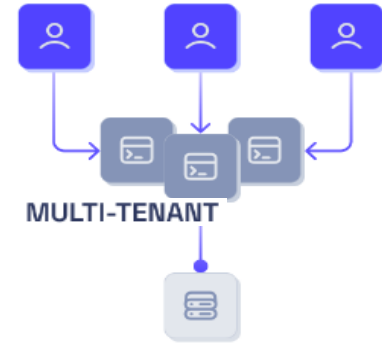
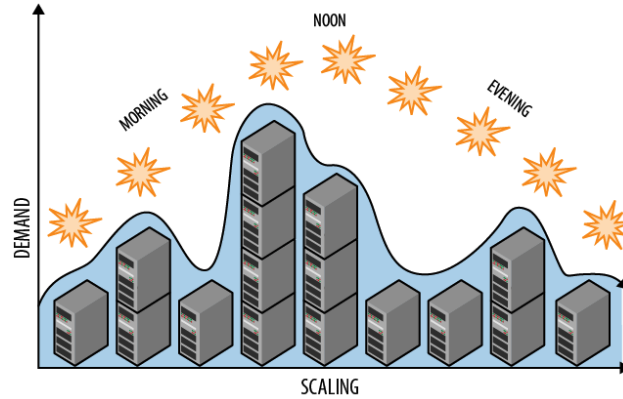
- ③ 数据多副本均衡到不同bookie
- ④ 分片存储, 新增节点可快速分担存储压力



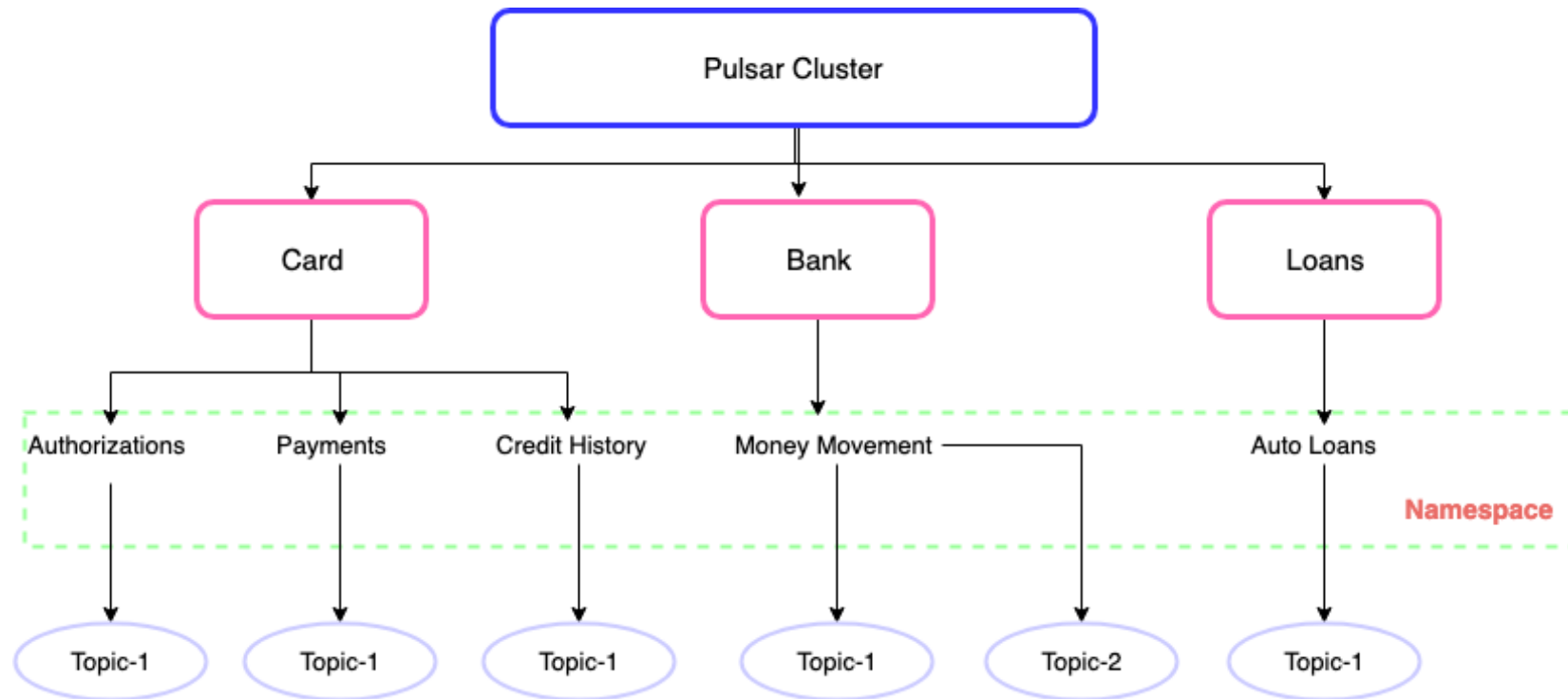
(扩容后恢复均衡曲线)

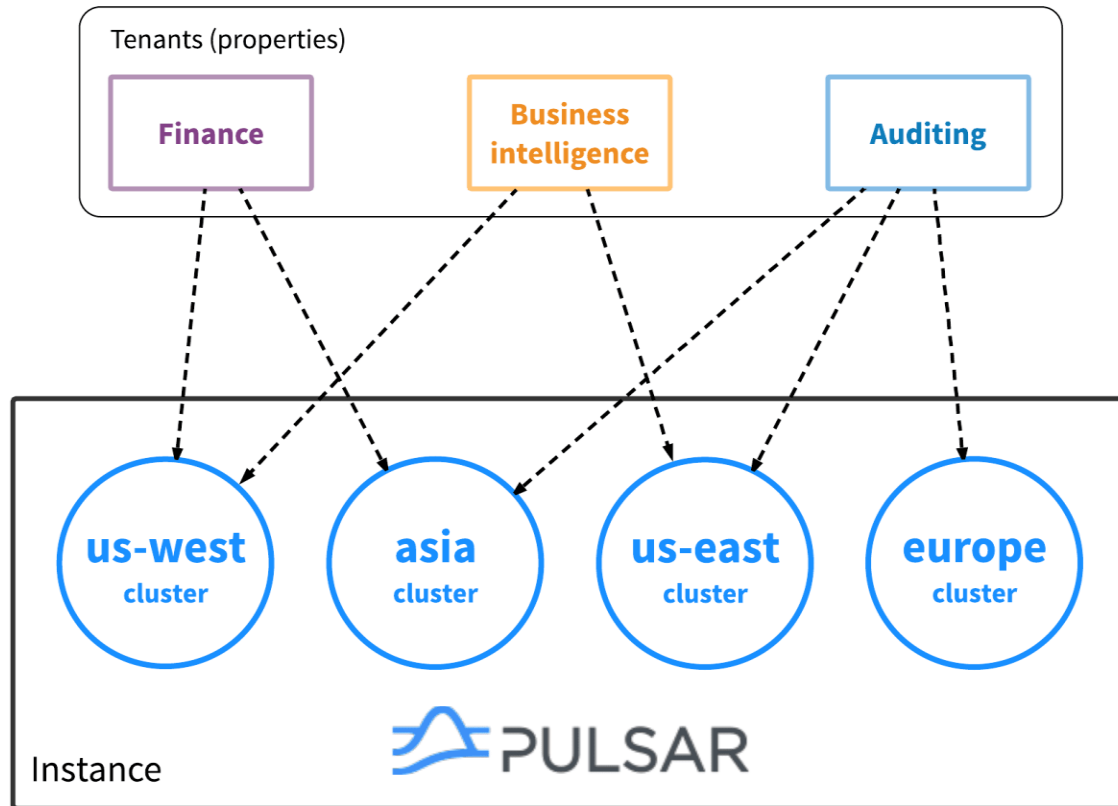
**Pulsar特性: 存算分离, 无感扩容**

What is needed?

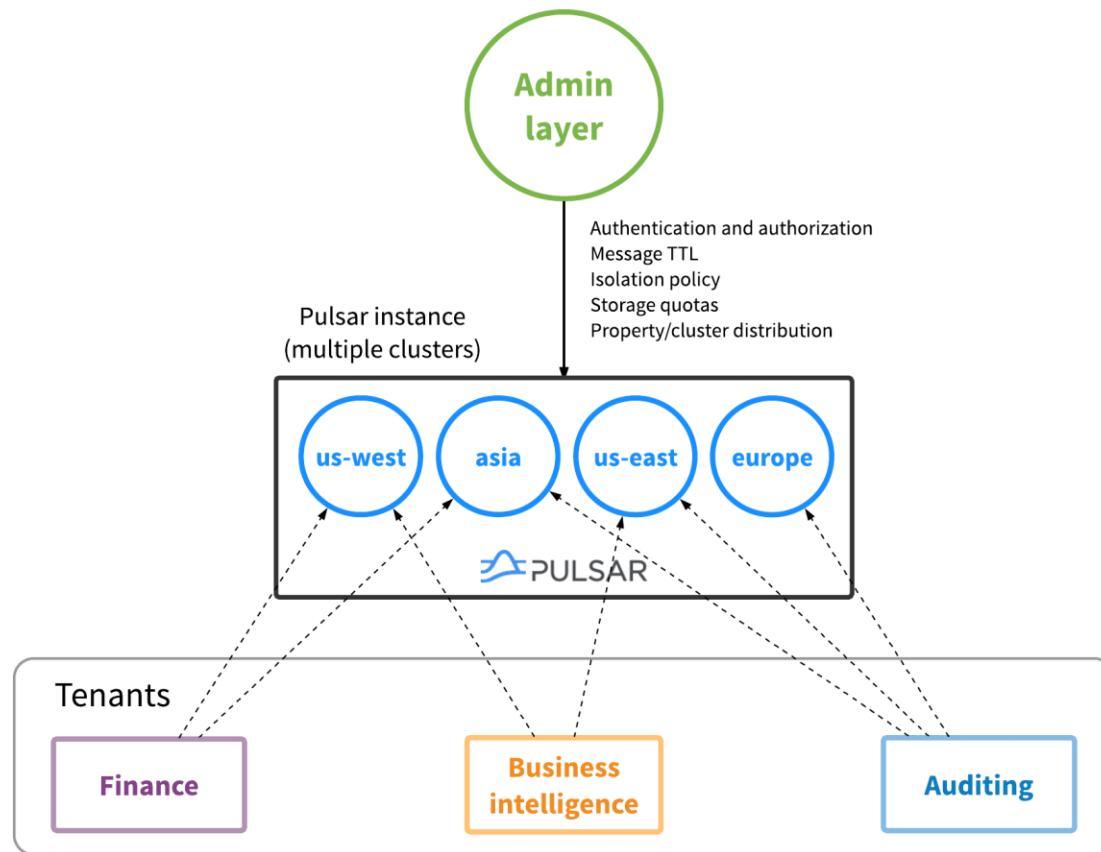


# Platform









# 谙流科技 公司介绍

## 上海谡流科技有限公司 (AscentStream)

- 致力于打造**金融级云原生**消息流平台，助力企业挖掘实时数据价值。
- 由 Apache Pulsar 与 Apache BookKeeper **创始团队**成员组建。
- 专注中国商业化和社区，满足**信创**要求。



- |   |   |
|---|---|
| • 开源社区  | <ul style="list-style-type: none"><li>• 7 * 24 专家支持</li><li>• 架构评审/上线评估/业务咨询/...</li><li>• 巡检/实施/...</li></ul>    |
| • 简版页面  | <ul style="list-style-type: none"><li>• 集群管控/Function/Geo/...</li><li>• 运维部署/扩缩容/...</li><li>• 灵活对接企业环境</li></ul> |
| • 无   | <ul style="list-style-type: none"><li>• 消息轨迹/KoP/限流/...</li><li>• K8S环境支持/...</li><li>• 支持灵活接入</li></ul>          |
| <ul style="list-style-type: none"><li>• <b>核心功能保持不变</b></li><li>• 随开源周期发布</li></ul> | <ul style="list-style-type: none"><li>• <b>核心功能保持不变</b></li><li>• 灵活对接企业环境</li></ul>                              |

开源版

商业版

支持服务

管理页面

功能插件

Pulsar核心

# Thanks



- 微信公众号:
  - **ApachePulsar / 谙流科技**
- 网站:
  - <https://pulsar.apache.org/>
  - <https://ascentstream.com/>
- 邮件列表
  - [dev@pulsar.apache.org](mailto:dev@pulsar.apache.org)
  - [users@pulsar.apache.org](mailto:users@pulsar.apache.org)
- Github
  - <https://github.com/apache/pulsar>
  - <https://github.com/apache/bookkeeper>
  - <https://github.com/AscentStream>

