

# DTCC

## 数 / 造 / 未 / 来

### 第十二届中国数据库技术大会

DATABASE TECHNOLOGY CONFERENCE CHINA 2021



2021 年 10 月 18 日 - 20 日 | 北京国际会议中心





# Apache ShardingSphere 在 Database Plus 的蓝海探索

Apache ShardingSphere & SphereEx Founder  
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# 数据库发展趋势

- 单机 -> 分布式
  - RDBMS
  - NoSQL
  - NewSQL
- 单一化 -> 多样化
  - One Size Fits All
  - One Size Fits None
  - One Size Fits a Bunch





# 数据库碎片化

- 异构数据库的痛点
  - 数据库访问协议、SQL 方言、存储接口和结构均不同
  - 数据库间无协作能力
  - 难于处理多元数据库的共性需求
- 痛点的解决方案
  - 统一的数据库协议网关和灵活的 SQL 方言转换器
  - 着眼于数据库上层，着力于数据库间协作
  - 提供增量的生态池，以处理共性需求





# Apache ShardingSphere Overview

- 官网: <https://shardingsphere.apache.org/>
- GitHub: <https://github.com/apache/shardingsphere>
- GitHub Stars: 14k+
- 贡献者数量: 280+
- 模块数量: 190+
- 采用公司: 170+

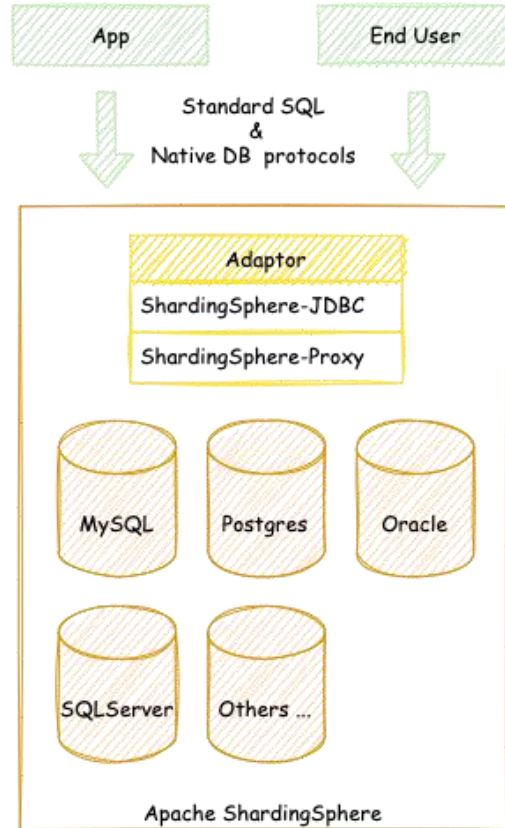






## Database Plus

Build criterion and ecosystem above multi-model databases



## Link

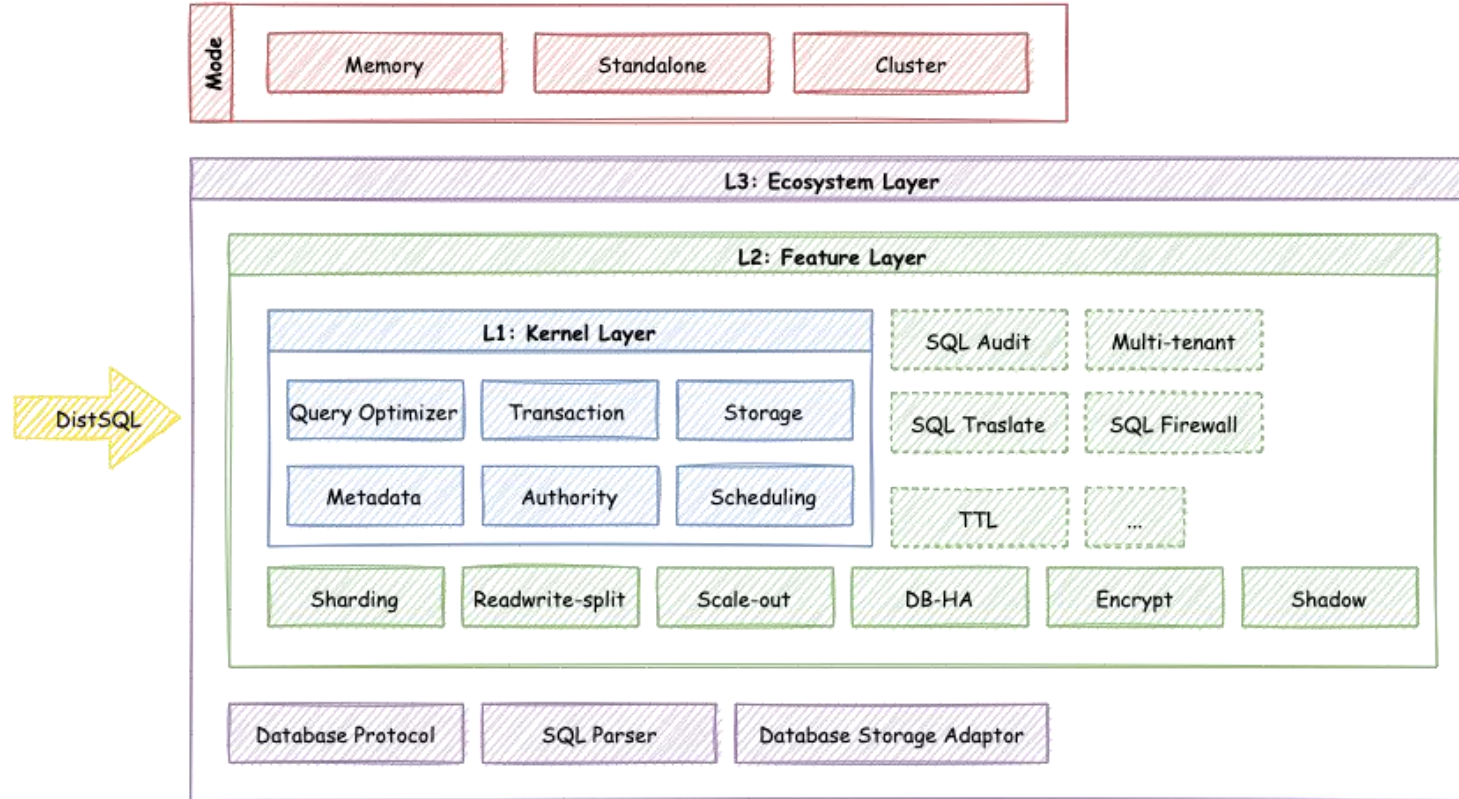
Link databases and services, focus on cooperation with multi-models among databases

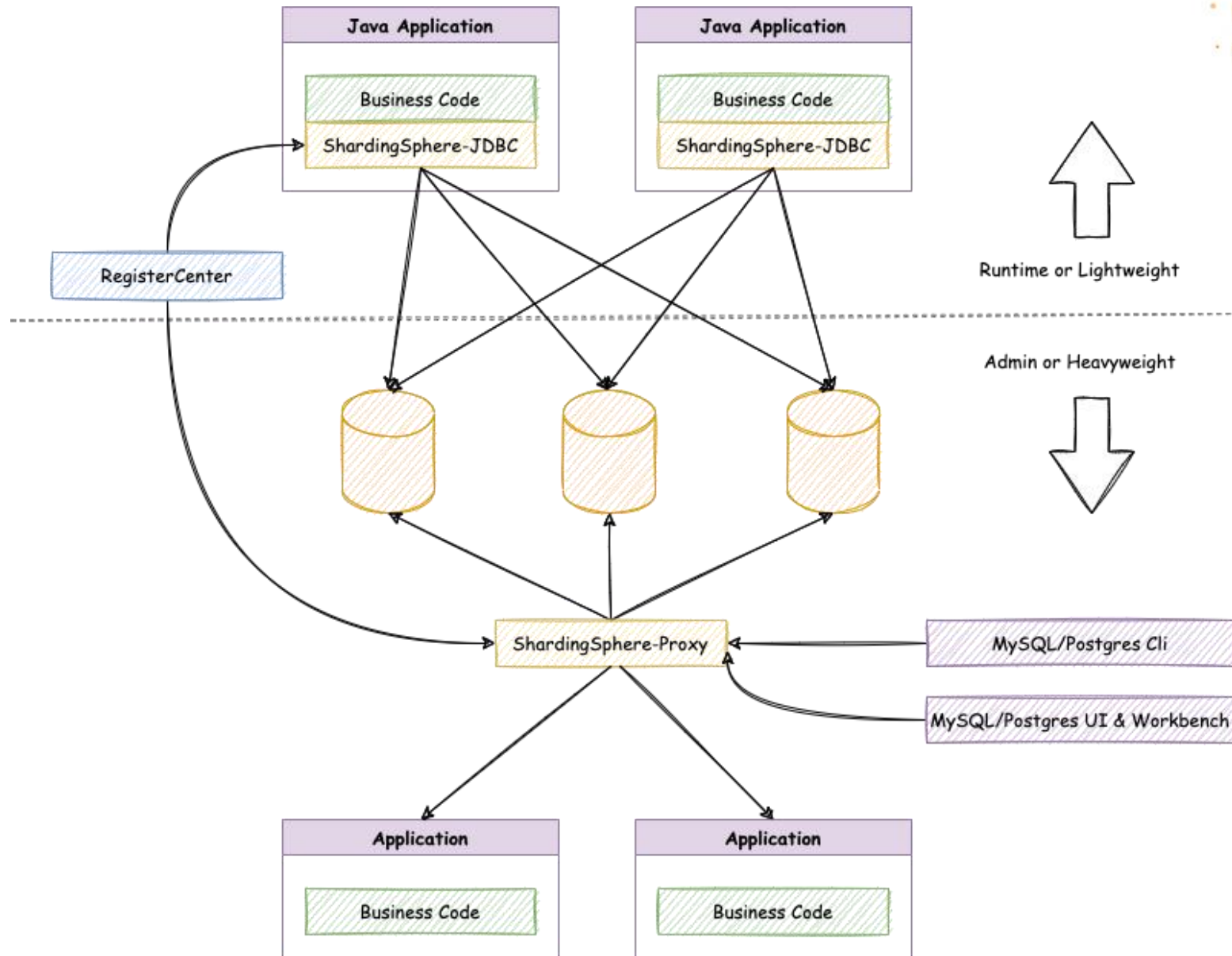
## Enhance

Capture database access entry to provide additional features transparently

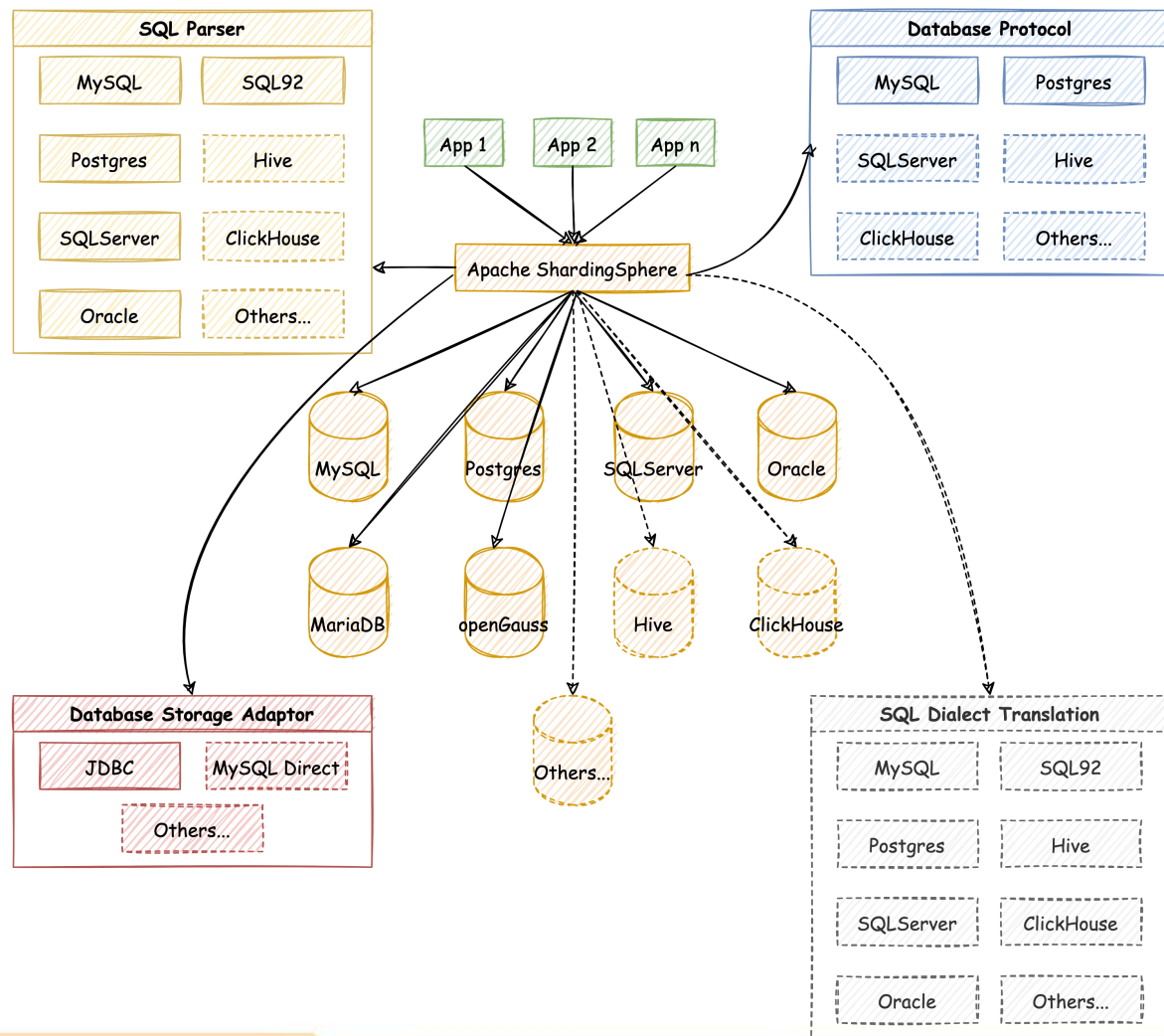
## Pluggable

Micro kernel for pluggable oriented, everything is pluggable with 3 layers



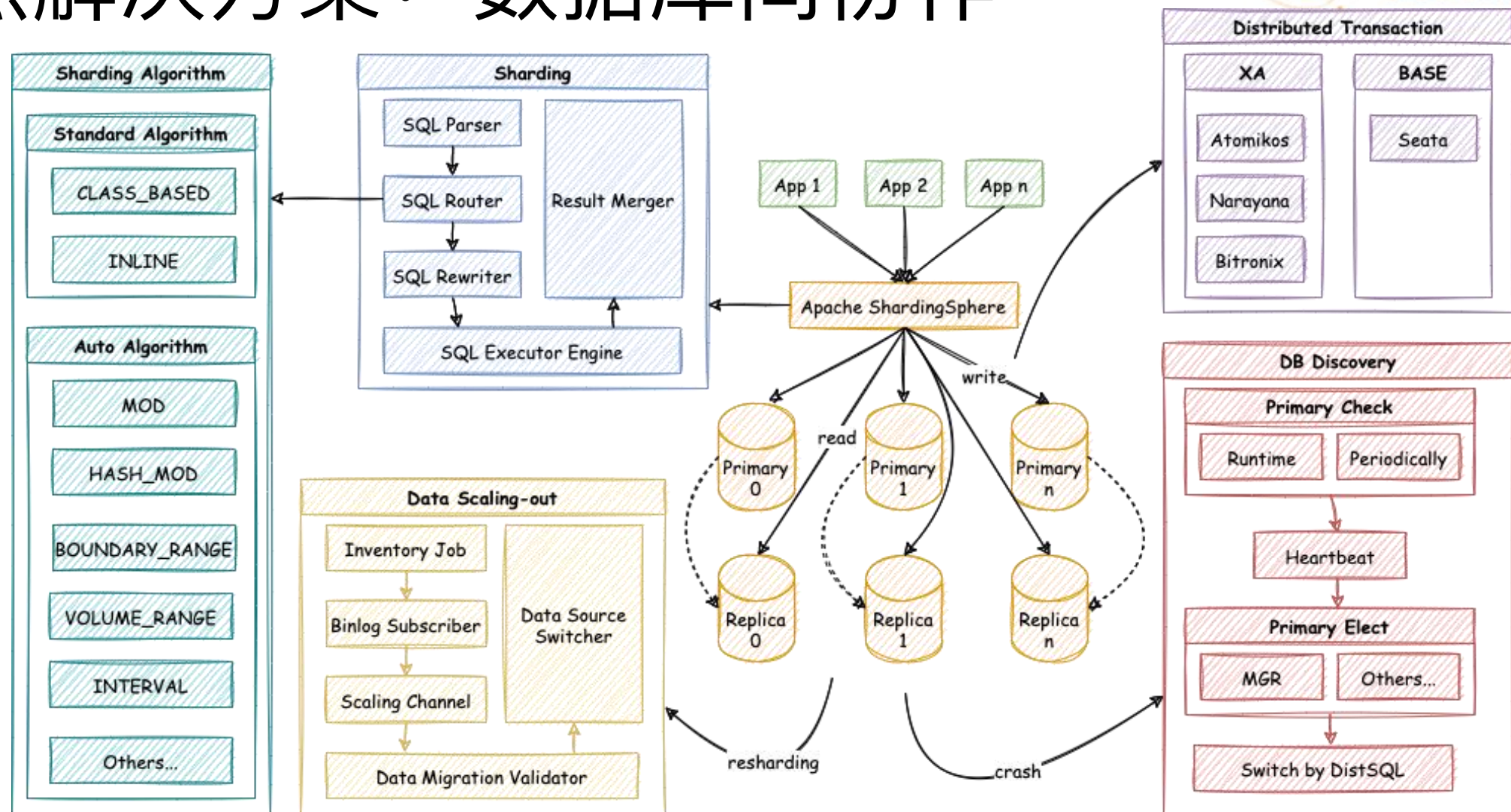


# 痛点解决方案：数据库网关





# 痛点解决方案：数据库间协作

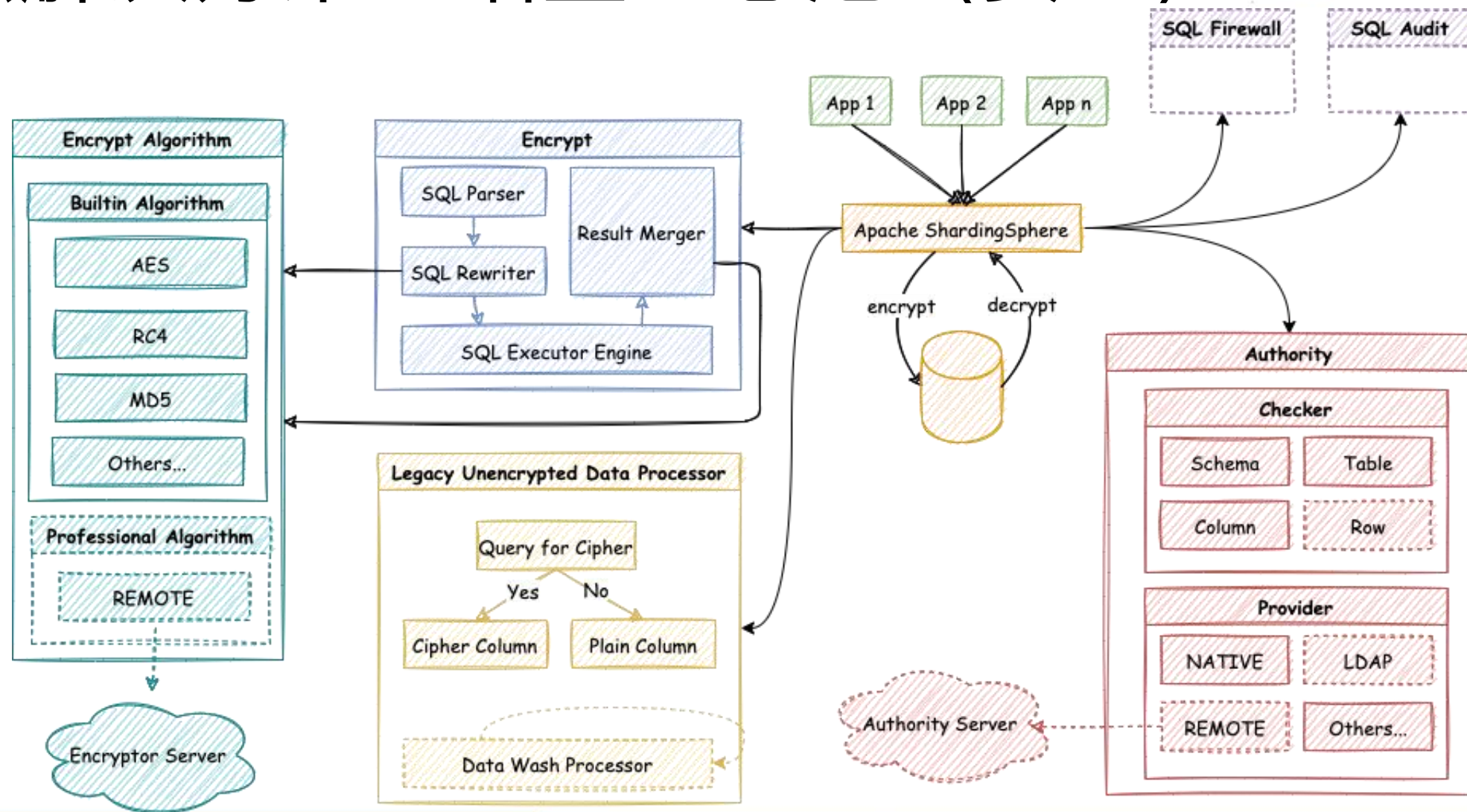


# 痛点解决方案：增量生态池（安全）



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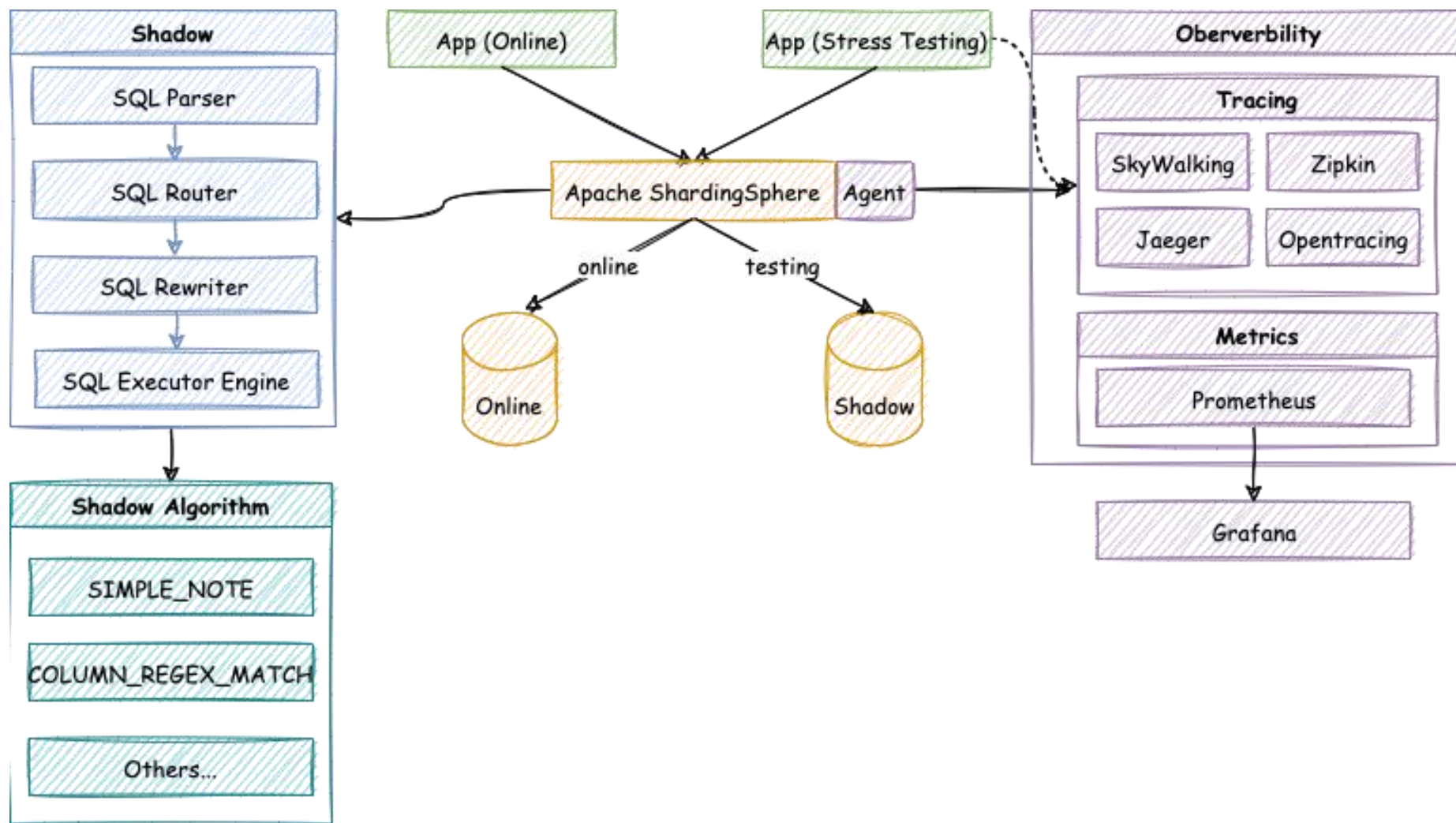




# 痛点解决方案：增量生态池（压测）



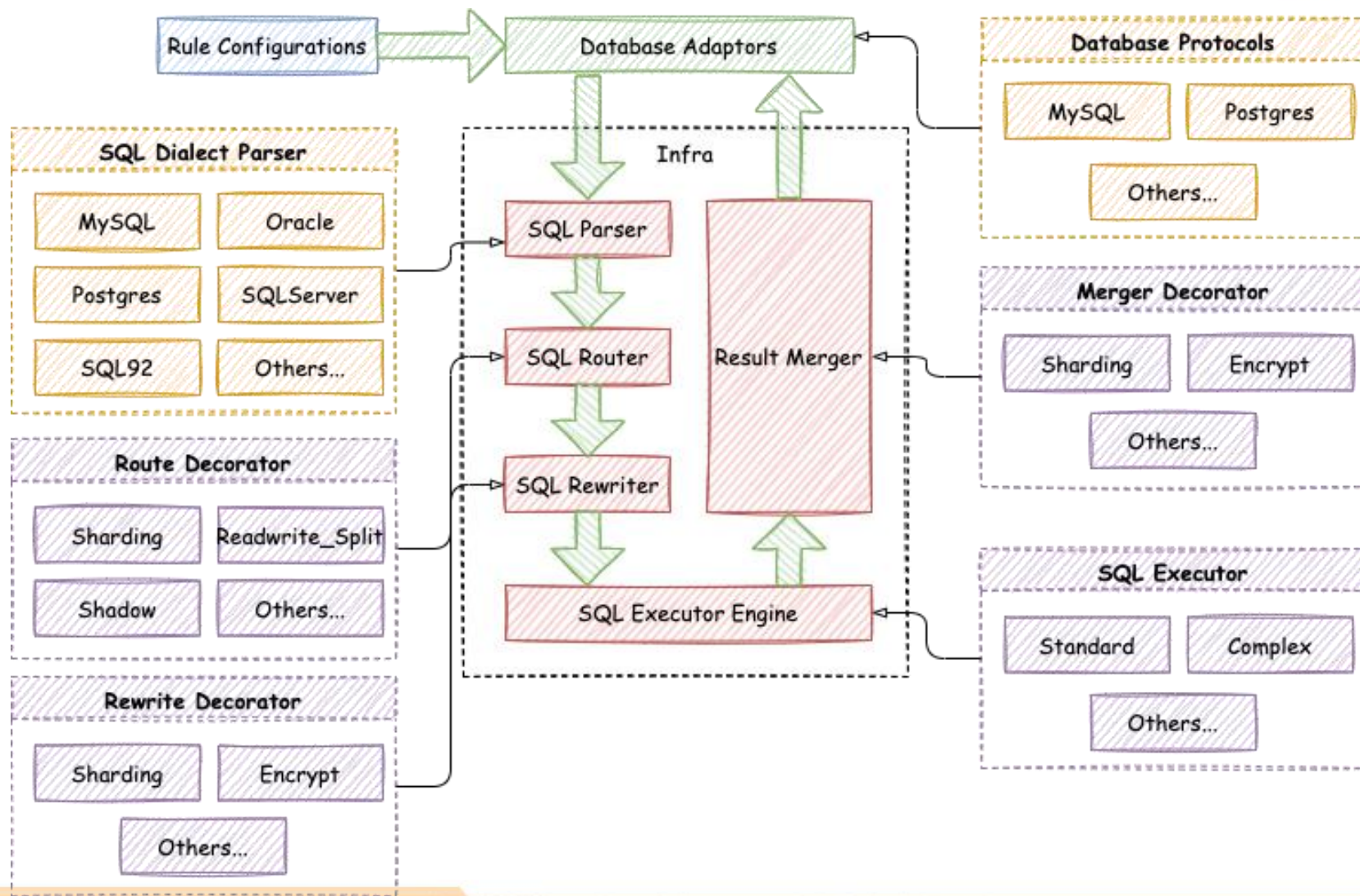
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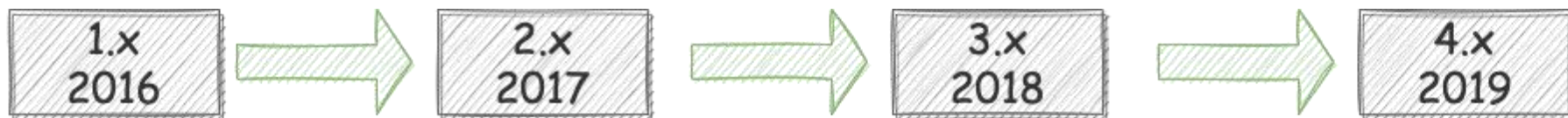


# 可插拔内核





# Roadmap



## Sharding-JDBC

Initial version, base on JDBC driver and for sharding only

## Orchestration

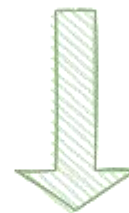
Can coordinate in distributed environment with ZooKeeper as registry center

## Sharding-Proxy

Use proxy to mock database which can adapt all programming languages and database workbenches

## Apache ShardingSphere

For Apache software foundation version, change the brand, and support more databases except MySQL



?

To be continue...

## To Ecosystem

Provide Database Plus production, build standard via DistSQL, and build ecosystem with pluggable platform and features

## To Developers

Simplify the SPI and involve more and more developers to contribute features and database dialects openly

## To Pluggable

Micro kernel for pluggable oriented, everything is pluggable with 3 layers, add more features except sharding, such as encrypt, shadow etc



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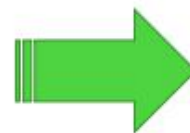
# 开源 VS 商业

- ShardingSphere

- 解决技术问题的极客智慧结晶
- 面向扩展的松耦合框架
- 积极吸纳具有实验性质的各种激进方案的开放社区



ShardingSphere



SphereEx

- SphereEx

- 解决用户痛点
- 提供千锤百炼的高质量产品
- 提供具备高度集成能力的解决方案
- 提供优质的咨询和实施服务





# 诚聘英才 & 寻求合作

- 极客文化
- 原生开源基因
- 国际化战略
- 为兴趣和梦想工作
- 团队快速扩张
- 顶级资本投入

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合作请发至: [biz@sphere-ex.com](mailto:biz@sphere-ex.com)





# THANKS