Seata 的过去、现在和未来

Past, Present and Future

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Seata开源项目发起人

Agenda

Agenda

| 01 | What's New in Seata 1.0.0 |

| 02 | Past, Present and Future |

Seata 1.0.0

What's New in Seata 1.0.0

Overview

变更

修改文件数：803，代码变动：+31,285 −6,661, 合并PR数：128, 其中新增feature：16，bugfix: 52, 代码优化（重构、测试、性能等）：60

参与

参与人数：32，新增Contributor 14人，新增Committer 1人，贡献pr最多的是 slievrly，贡献feature最多的是 long187 ，解决bug最多的是 l81893521，优化pr最多的是 slievrly

周期

发布周期：65d，发版时间最长的一次

Seata 1.0

Overview

- [slievrly](https://github.com/slievrly)
- [long187](https://github.com/long187)
- [jsbxyyx](https://github.com/jsbxyyx)
- [181893521](https://github.com/181893521)
- [helloworlde](https://github.com/helloworlde)
- [xingfudeshi](https://github.com/xingfudeshi)
- [zjinlei](https://github.com/zjinlei)
- [CharmingRabbit](https://github.com/CharmingRabbit)
- [objcoding](https://github.com/objcoding)
- [cmonkey](https://github.com/cmonkey)
- [lzf971107](https://github.com/lzf971107)
- [ggndnn](https://github.com/ggndnn)
- [lightClouds917](https://github.com/lightClouds917)
- [ruqinhu](https://github.com/ruqinhu)
- [yuhuangbin](https://github.com/yuhuangbin)
- [anrror](https://github.com/anrror)

- [a364176773](https://github.com/a364176773)
- [caohdgege](https://github.com/caohdgege)
- [contextshuffling](https://github.com/contextshuffling)
- [echooymxq](https://github.com/echooymxq)
- [github-ygy](https://github.com/github-ygy)
- [iapplejohn](https://github.com/iapplejohn)
- [jKill](https://github.com/jKill)
- [Justice-love](https://github.com/Justice-love)
- [lovepoem](https://github.com/lovepoem)
- [niaoshuai](https://github.com/niaoshuai)
- [ph3636](https://github.com/ph3636)
- [wangwei-ying](https://github.com/wangwei-ying)
- [whjjay](https://github.com/whjjay)
- [yangfuhai](https://github.com/yangfuhai)
- [zhongfuhua](https://github.com/zhongfuhua)
- [lizwmaster](https://github.com/lizwmaster)

Feature

➢support dynamic config and dynamic disable

➢provide a visual graph designer for Seata Saga StateMachine based on GGEditor

➢add seata-spring-boot-starter

➢support gRPC

➢support hessian codec for RPC serialization

➢stateMachine ServiceTask supports asynchronous execution and support "Retry"

➢support use gzip compressor

➢support where exist syntax

➢fit springcloud-alibaba-seata autoconfig

➢support single sending of transaction message

➢provide initialization scripts for all configuration centers

Optimize

➢optimize the speed when batch insert or batch update

➢flatten Saga nested transactions

➢add ops script for Docker-Compose, Kubernetes and Helm

➢simplify and groom configuration items (60+ --> 10-)

➢one time release lock to reduce server RPC with DB

➢add phase one successful reporting switch (50% performance improvement)

➢when querying transactions according to the transaction status, the query is spliced once to reduce the number of interactions with the database

Bugfix

➢new connection can't be get when connection is not released

➢fix when tableName is keyword, the insert operation will get afterImage fai

➢fix startup failure when dynamic proxy is turned on and use druid-spring-

boot-starter

➢fix global status inconsistent when rollback and branch register are

concurrent

➢fix server restart not recover max sessionId on DB mode

➢fix when write the new file throw ClosedChannelException

➢fix stateInstance log can't record output parameters

➢fix datasource auto proxy for multiple-datasource does not work

➢fix a duplicate lock problem in a local transaction

➢fix can't use select for update in oracle
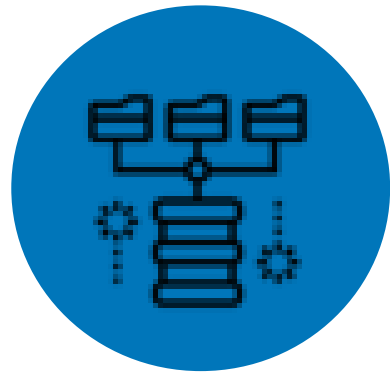
What's Seata

Seata：Simple Extensible Autonomous Transaction Architecture

微服务架构下，易用、高效的分布式事务解决方案

技术积累

内部产品：TXC、XTS

商业化产品：GTS、DTS

愿景

像使用本地事务一样使用分布式事务，提供一站式的分布式事务解决方案

What's Seata

1 **支持各微服务框架**

目前已支持 Dubbo、Spring Cloud、Sofa-RPC、Motan 和 gRPC 等RPC框架，其他框架持续集成中

2 **AT自动补偿模式**

提供无侵入自动补偿的事务模式，目前已支持 MySQL、Oracle 的自动补偿模式、PostgreSQL、H2 开发中
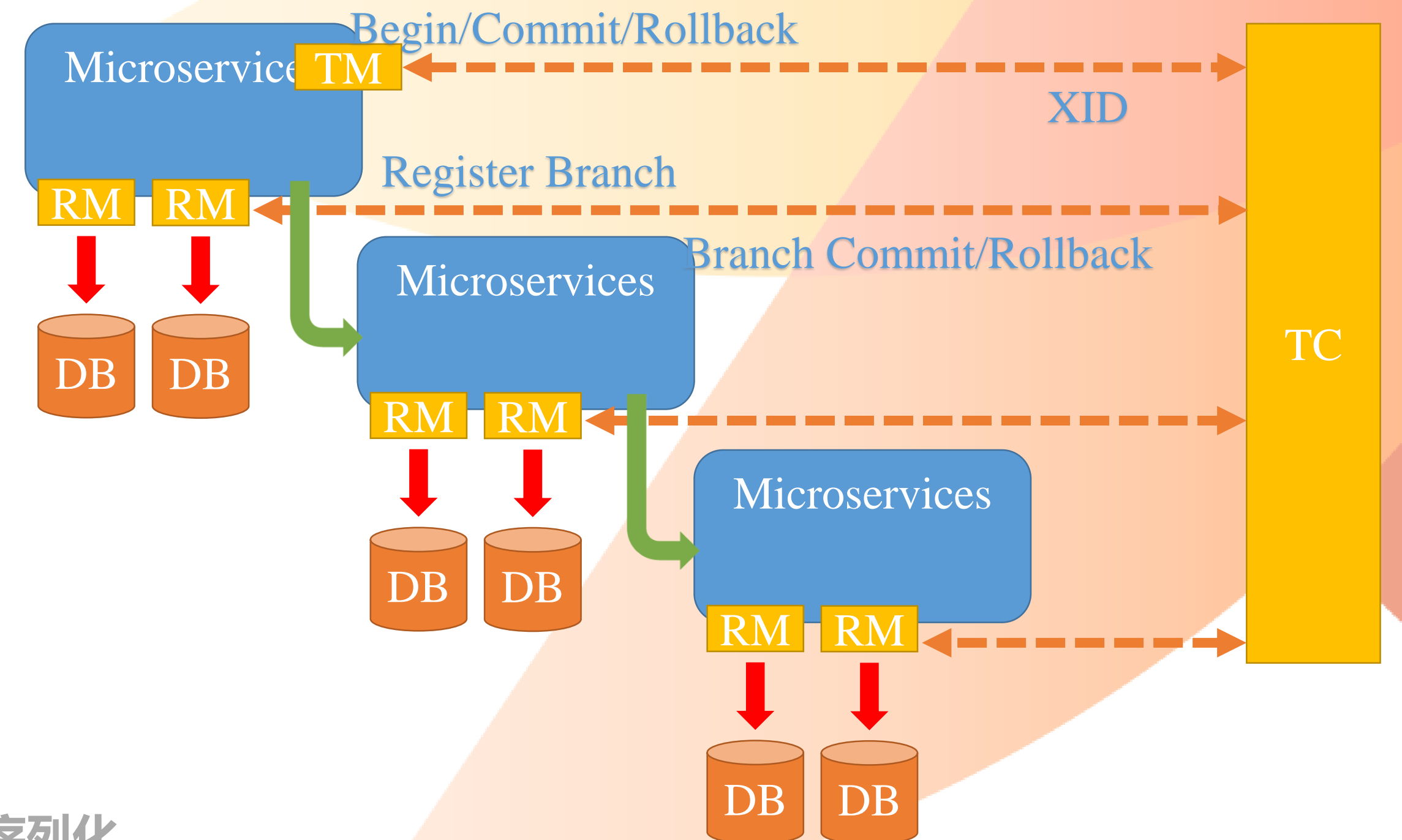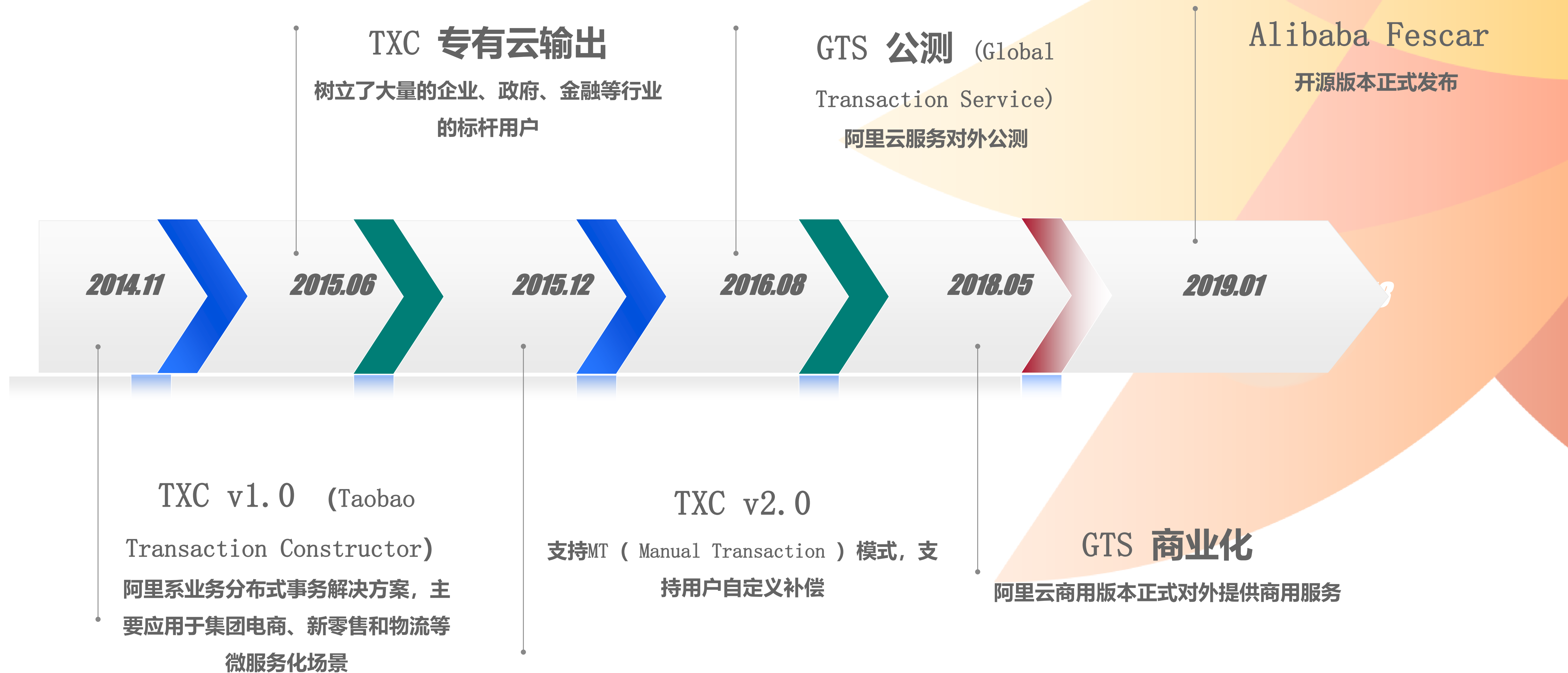
3 **TCC模式**

支持用户使用TCC灵活扩展事务

4 **Saga模式**

提供长事务和服务编排解决方案

5 **高可用**

支持基于数据库存储的集群模式，水平扩展能力强

6 **高可扩展性**

支持各类配置中心、注册中心、序列化、存储、协议序列化、负载均衡 等SPI扩展

Microservice TM
Begin/Commit/Rollback
RM RM
XID
Register Branch
Microservices
Branch Commit/Rollback
RM RM
DB DB
TC
Microservices
RM RM
DB DB
DB DB

History

TXC **专有云输出**
树立了大量的企业、政府、金融等行业
的标杆用户

GTS **公测** (Global
Transaction Service)
阿里云服务对外公测

Alibaba Fescar
开源版本正式发布

2014.11　　2015.06　　2015.12　　2016.08　　2018.05　　2019.01

TXC v1.0 **(**Taobao
Transaction Constructor**)**
阿里系业务分布式事务解决方案，主
要应用于集团电商、新零售和物流等
微服务化场景

TXC v2.0
支持MT（Manual Transaction）模式，支
持用户自定义补偿

GTS **商业化**
阿里云商用版本正式对外提供商用服务

History

❖ **三种模式，丰富的应用场景：**

➢ TCC模式

➢ FMT模式

➢ XA模式

❖ **极致性能提升**

❖ **高可用容灾**

❖ **无侵入解决方案**

2007

TCC

2009 双十一

极致性能提升

2013 LDC

高可用容灾

2014 金融云

对外输出

2015

FMT、XA
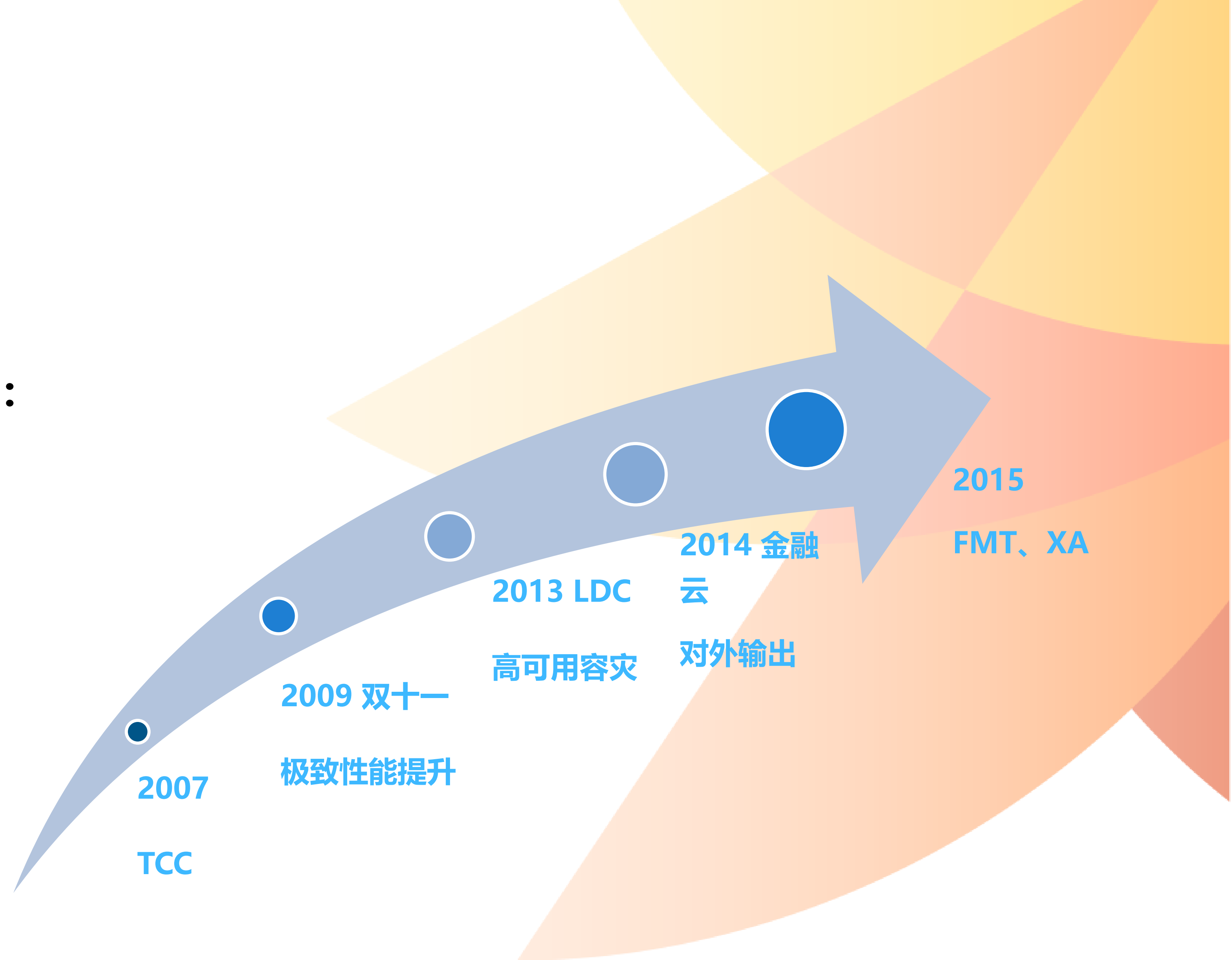
Present

多次蝉联GitHub Java月活跃排行榜第一

13238	**3373**	**128**
STARS	**FORKS**	**Contributors**

快速迭代
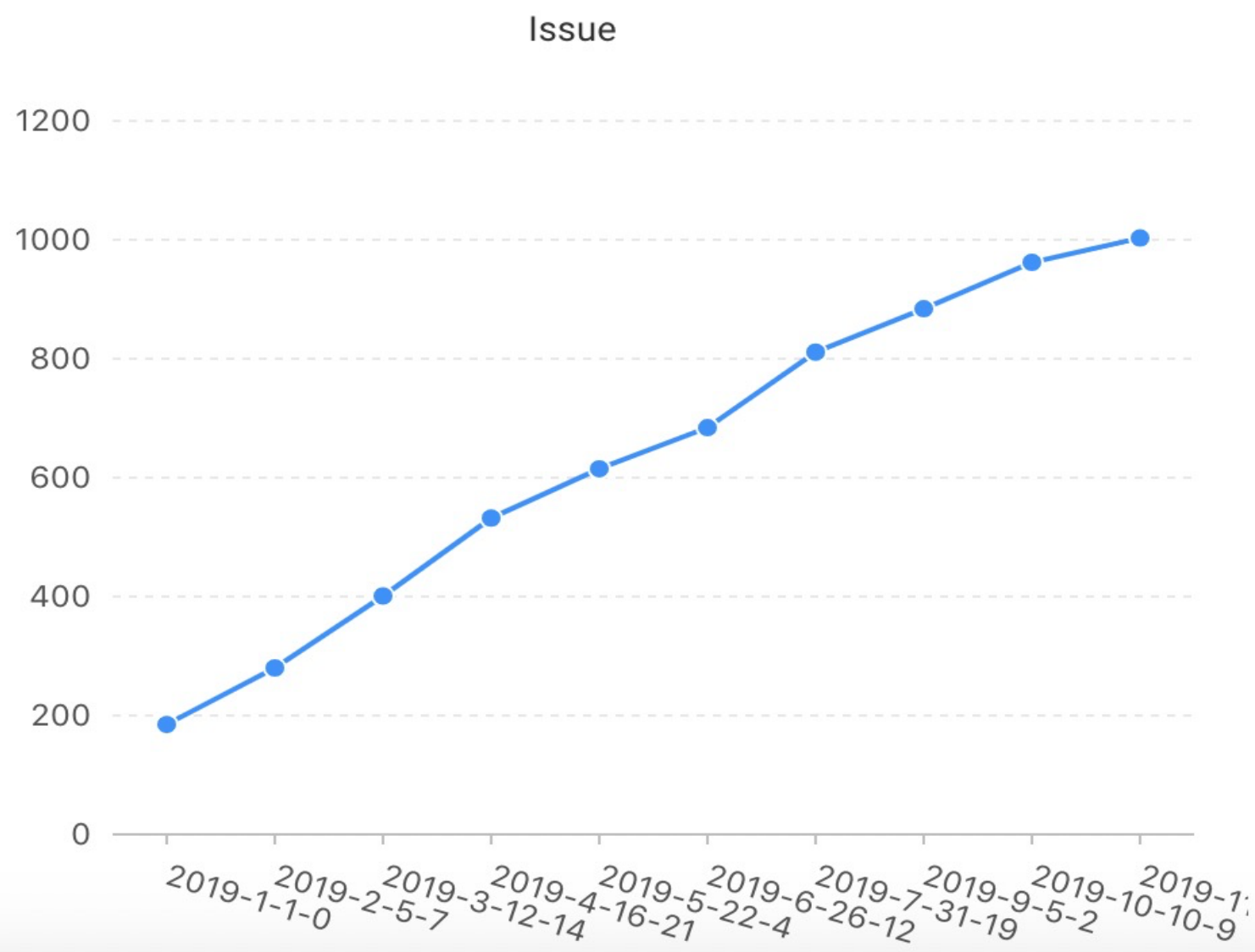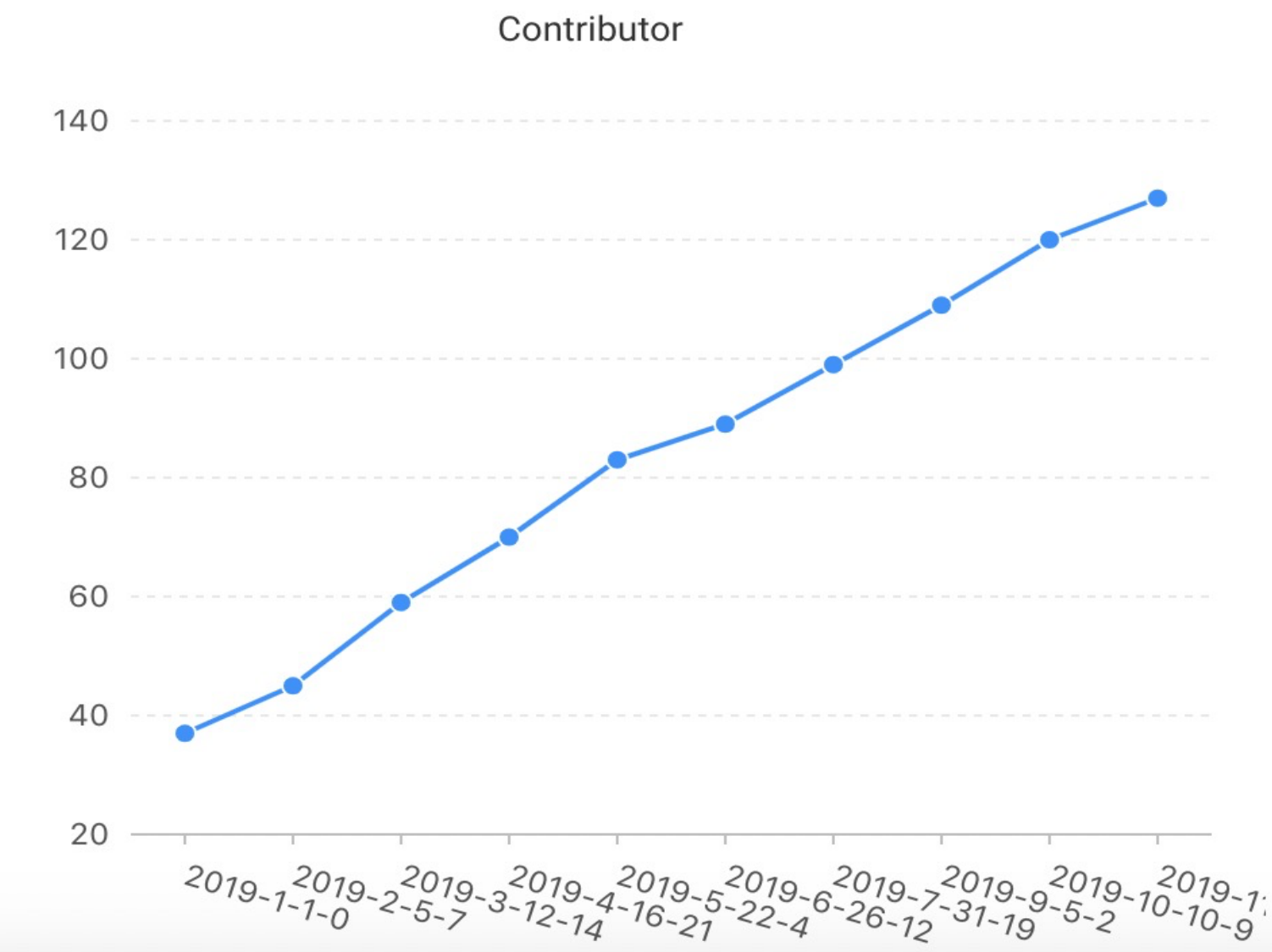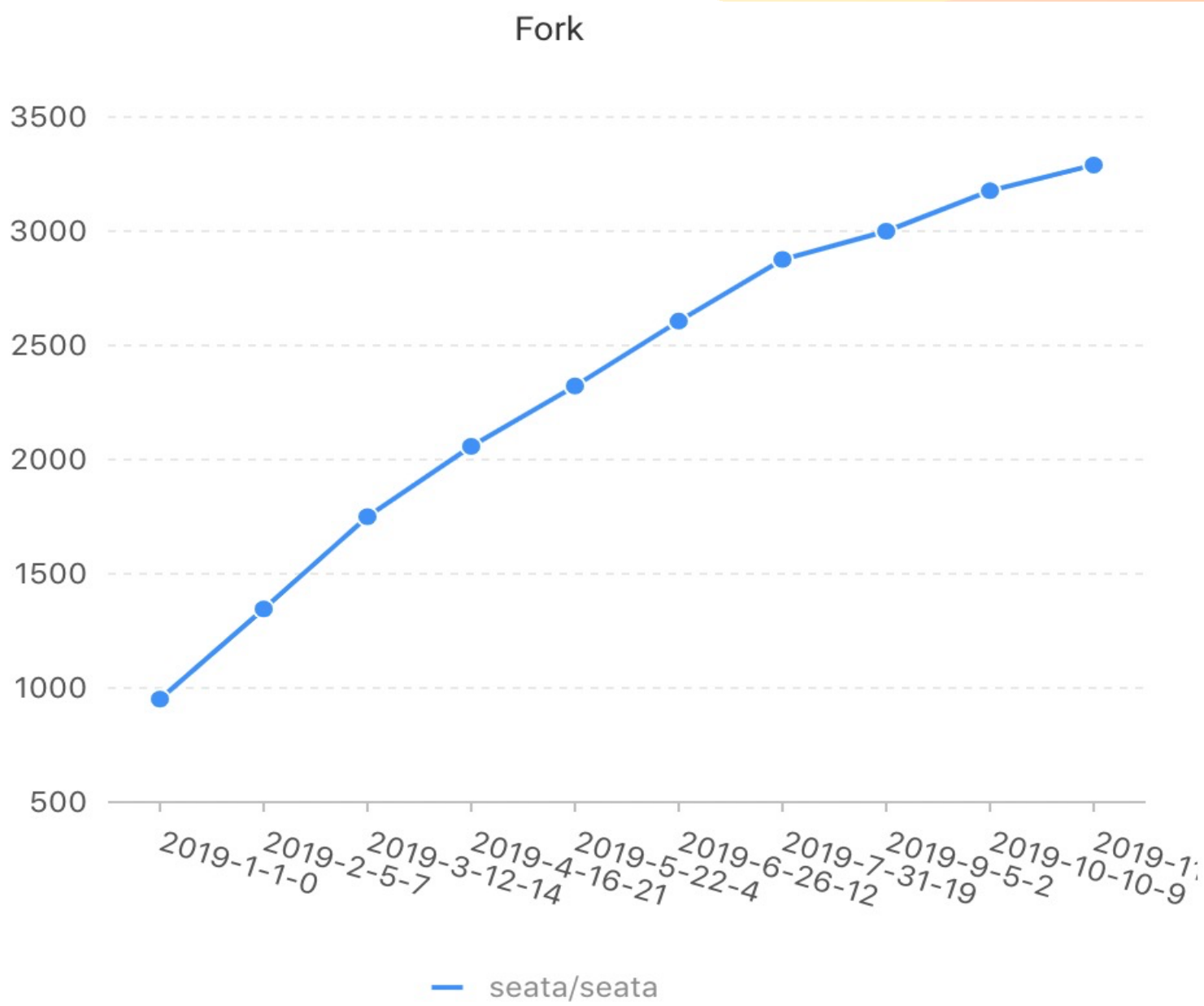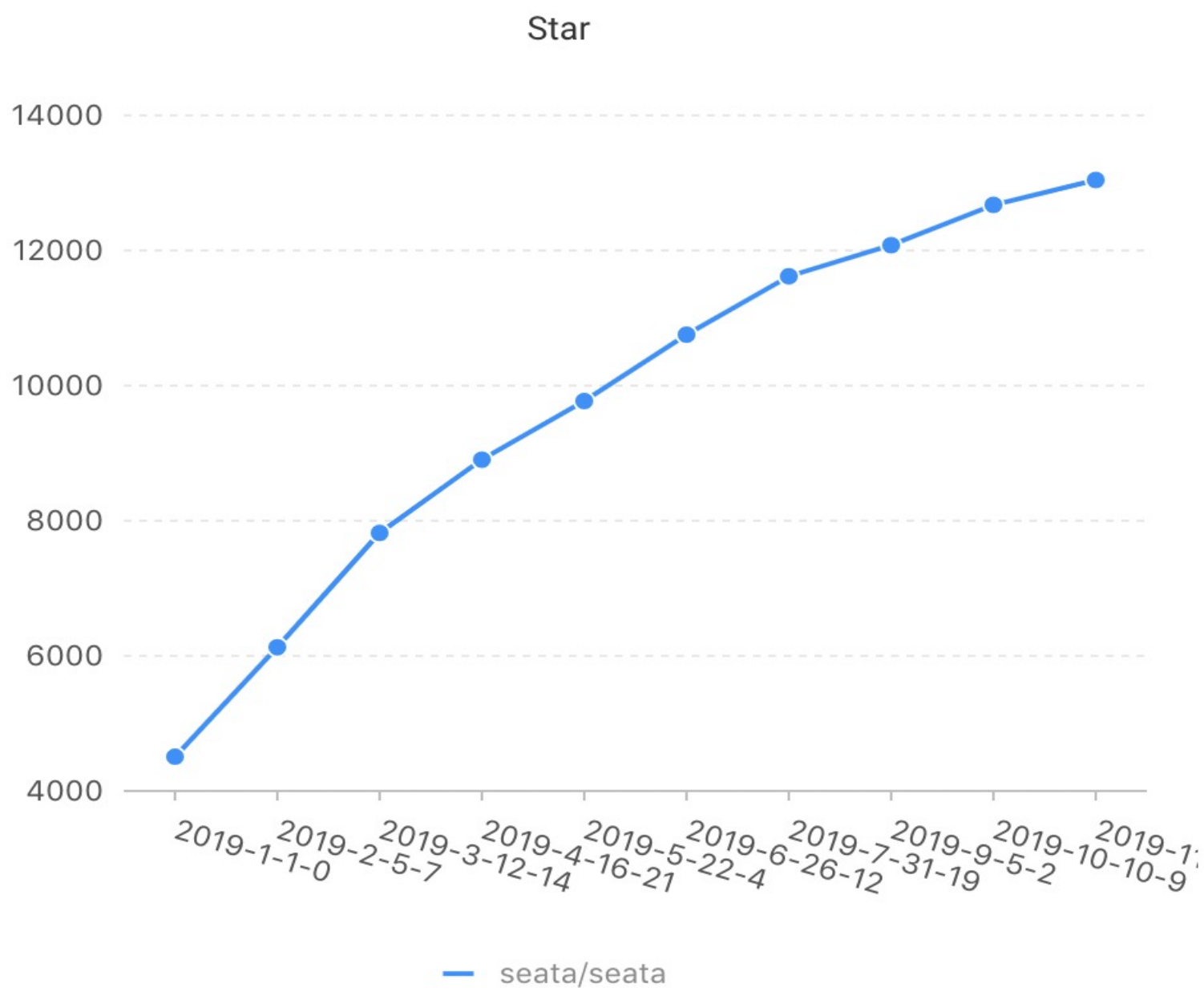
自2019.1 开源以来，11个多月的时间累积发行25个版本

Seata 生态

Docker、Kubernetes、Helm

Seata-go-server、 Seata-go-client

Samples、Workshop、Benchmark、 Seata.github.io

Present

Star

Fork

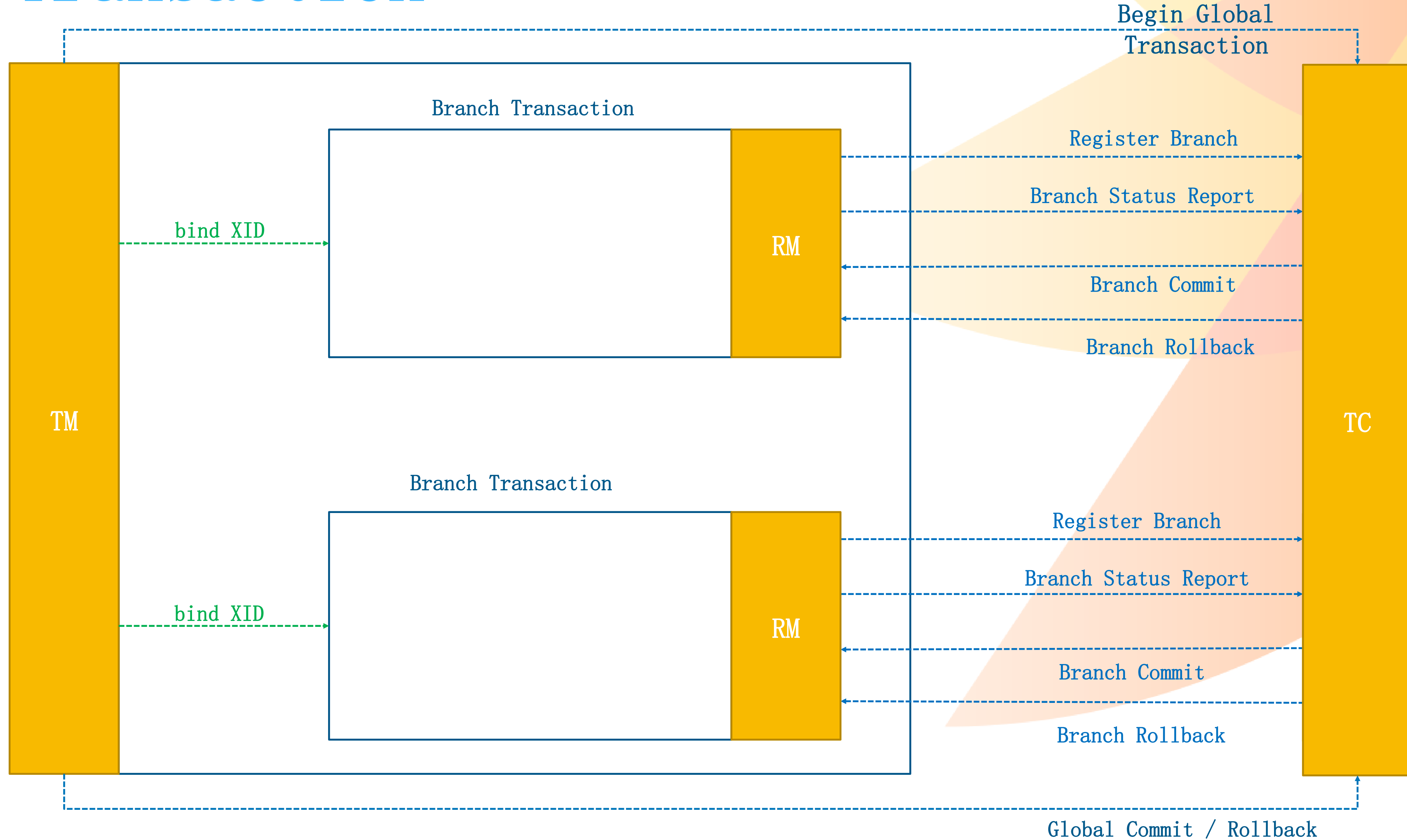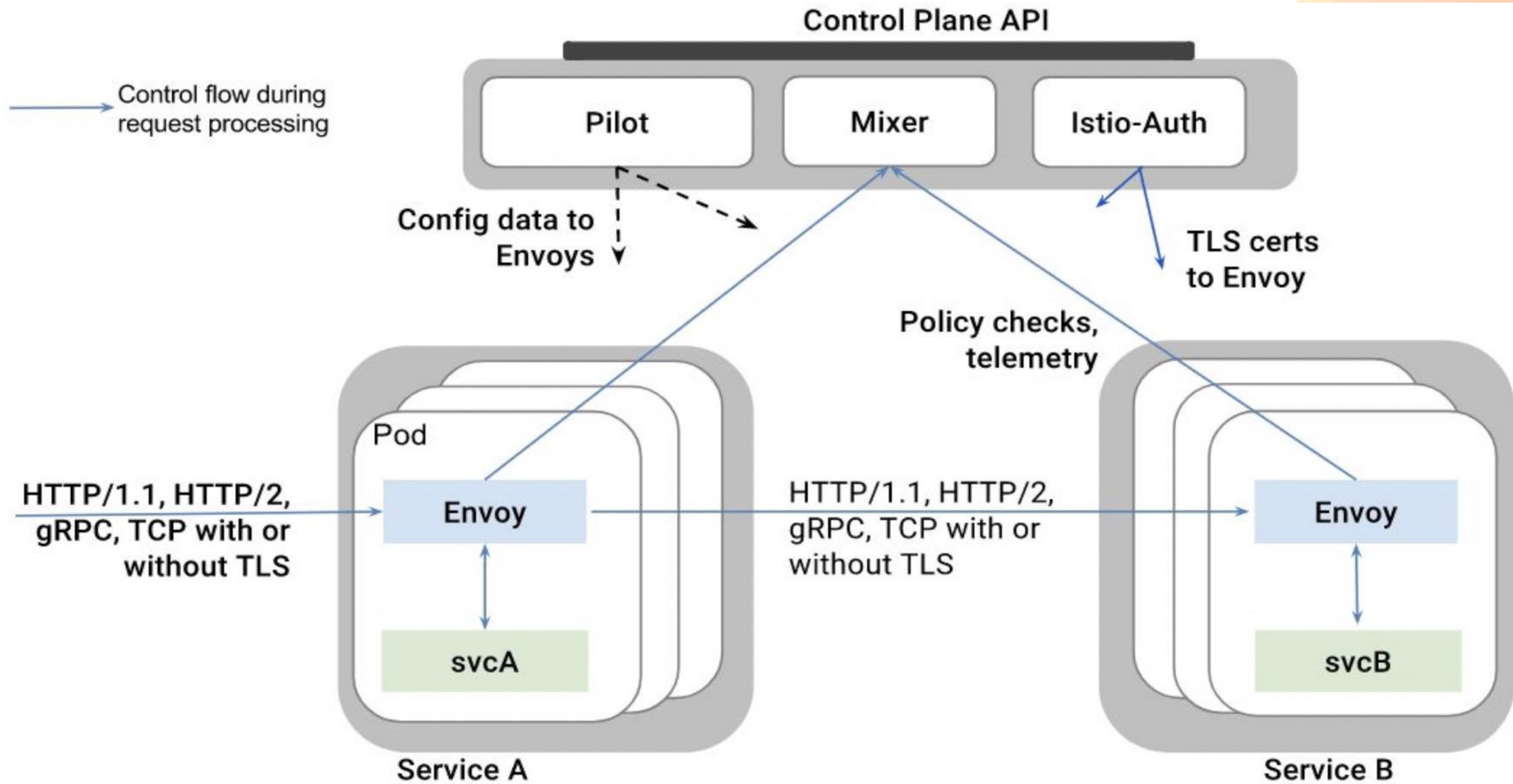### Contributor

Issue

Present

Future

API
API · Annotation · gRPC · Motan · Spring Cloud · Dubbo · Sofa-RPC

registry
ZK · Consul · Eureka · Etcd
Nacos · Consul · file · sofa

config
file · ZK · Apollo
Consul · Nacos · Etcd

compress
gzip · zip
7z · bzip2

cluster
DB · Raft

LB
Round Robin · Weight · Consistent Hash · Least Active · Latency aware · Random

lock
DB · Memory · Redis · TiKV

DB
H2 · Postgres · Oracle · MySQL

store
JSON · Protostuff
FST · kryo

file · Oracle
MySQL · Redis

transporter
netty4 · XIO
Mina · RSocket

codec
Seata · Hessian
Kryo · Protobuf

serialize

Discontinued · Already done · Recently Added · Planning

Open Transaction

Begin Global Transaction

Branch Transaction

bind XID

RM

Register Branch

Branch Status Report

Branch Commit

Branch Rollback

TM

Branch Transaction

bind XID

RM

Register Branch

Branch Status Report

Branch Commit

Branch Rollback

TC

Global Commit / Rollback

Cloud Native

Transaction Mesh
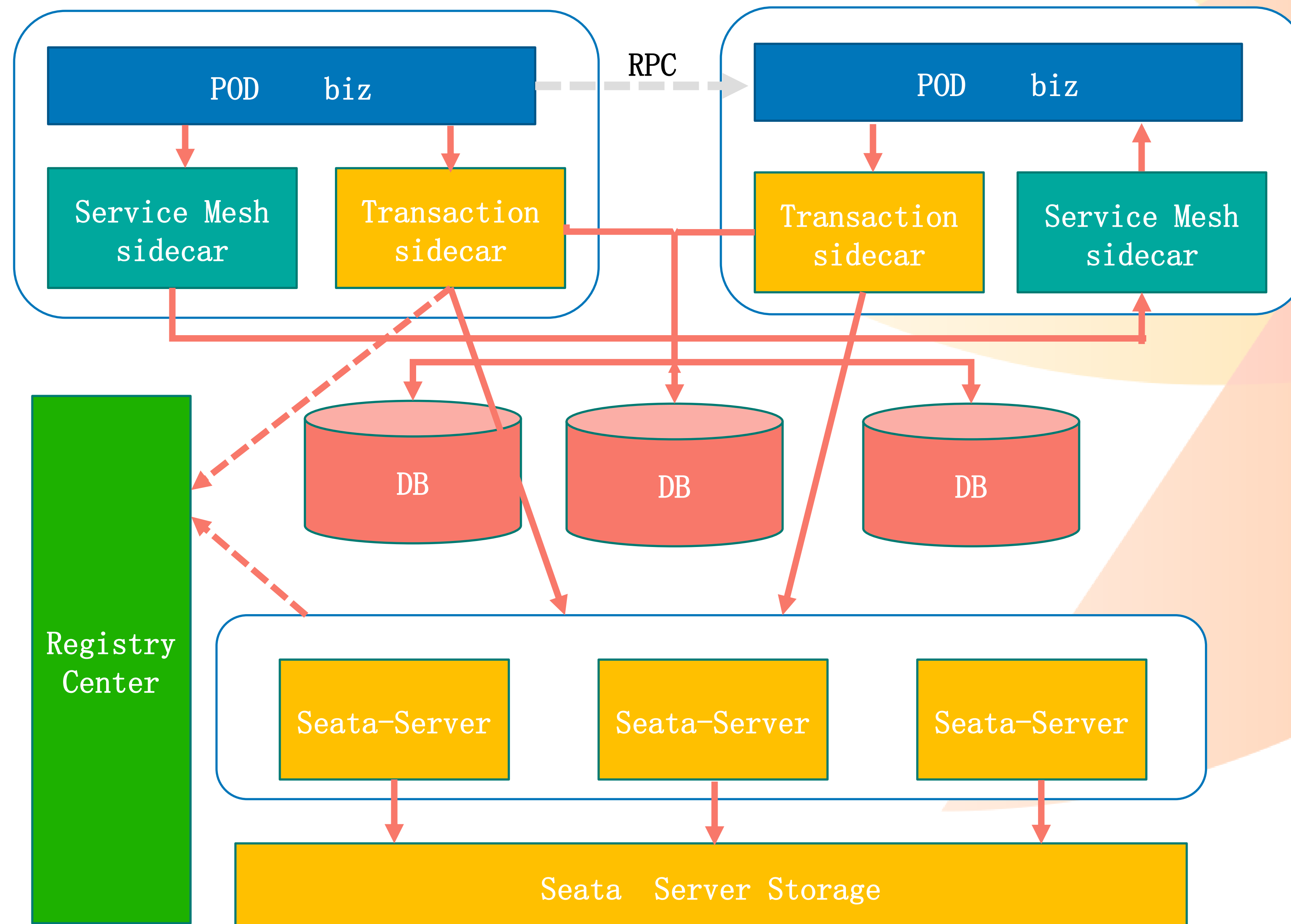
Contact

钉钉群

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QQ群

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Thanks everyone

感谢所有参与社区贡献的所有Contributor

感谢给予我们支持的开源兄弟社区

感谢陪伴我们的天使客户

感谢运营团队对于社区的支持

感谢 Seata Committer团队持续的付出

感谢老板在开源上的支持

SEATA

Thank You