

KEYSPACE

2025 / 北京

什么是Valkey：从诞生到未来发展方向

赵钊

阿里云研发，Valkey TSC Member



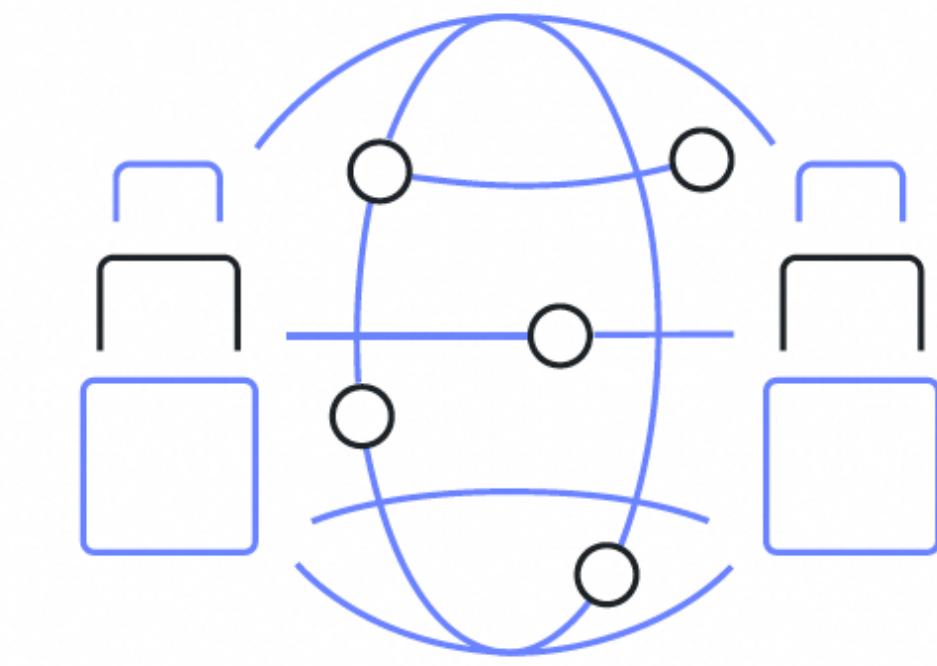
Introducing the Valkey project



Fully compatible
with Redis OSS 7.2



Vendor Neutral
BSD-3 Licensed



Built by contributors in the
open source community

Part 1

Redis大事记：开源协议变更

Redis修改开源协议，由开源走向闭源

Change license from BSD-3 to dual RSALv2+SSPLv1 #13157

Merged K-Jo merged 2 commits into `redis:unstable` from `K-Jo:license_change` on Mar 21

Conversation 194 Commits 2 Checks 13 Files changed 166

 K-Jo commented on Mar 21 · edited by enjoy-binbin

Collaborator ...

Read more about the license change here: [Redis Adopts Dual Source-Available Licensing](#)
Live long and prosper 🤙

25 1625 4 136 5 6 14

 K-Jo added 2 commits 6 months ago

Change license from BSD-3 to dual RSALv2+SSPLv1  18721a4

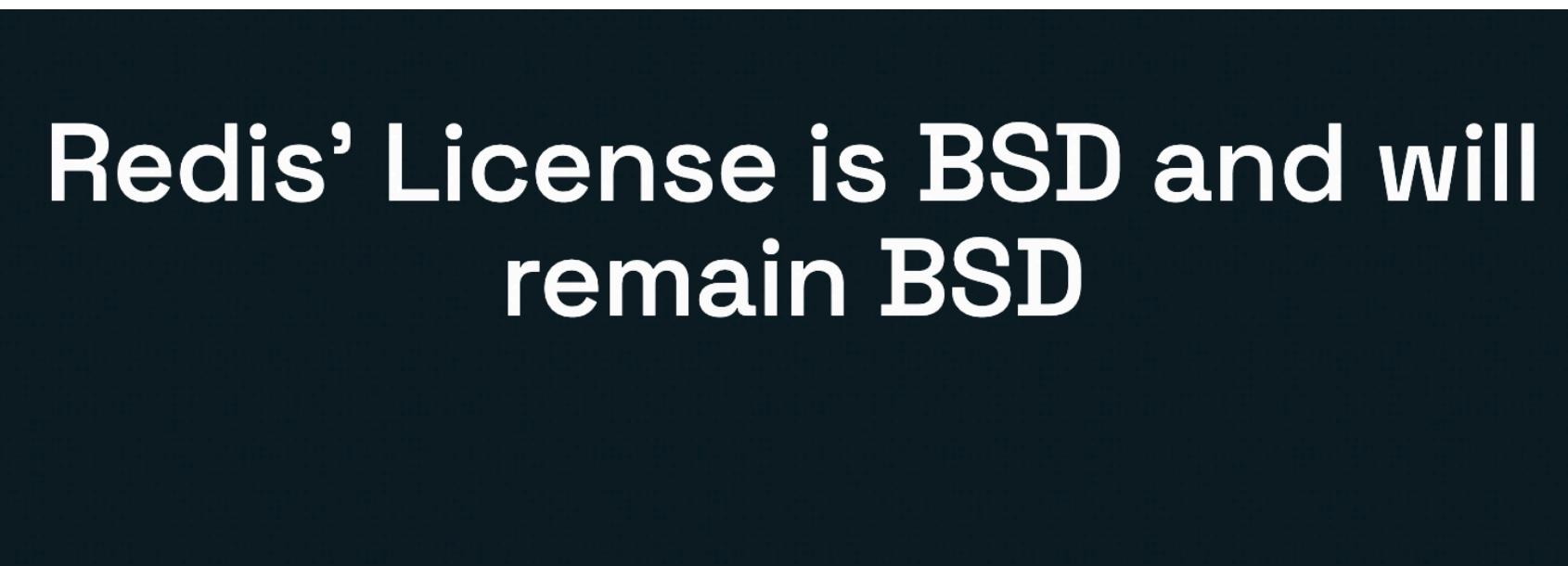
fix readme typo  17a6ddc

 K-Jo merged commit `0b34396` into `redis:unstable` on Mar 21
13 checks passed

[View details](#) [Revert](#)

<https://github.com/redis/redis/pull/13157>

Redis历次协议变更风波



AUGUST 22, 2018



Yiftach Shoolman

Since the recent licensing change for our Redis modules, there's been a lot of confusion and misinformation circulating about the implications of those changes. We want to address your questions and be crystal clear: the license for open source Redis was never changed. It is BSD and will always remain BSD.



JUNE 30, 2020



Ofer Bengal



Yiftach Shoolman

Furthermore, the core of the open source Redis project will remain under the 3-Clause BSD license, and as expressed by the [new governance structure](#) for Redis, the project will be guided by a core team of contributors from the community selected according to their involvement and contributions. We believe this moment is an excellent opportunity for the community to contribute, give feedback, and help improve the Redis project.

<https://redis.io/blog/redis-license-bsd-will-remain-bsd/>

2018年修改Modules开源协议

<https://redis.io/blog/thank-you-salvatore-sanfilippo/>

2020年原作者Antirez退出项目

Part 2

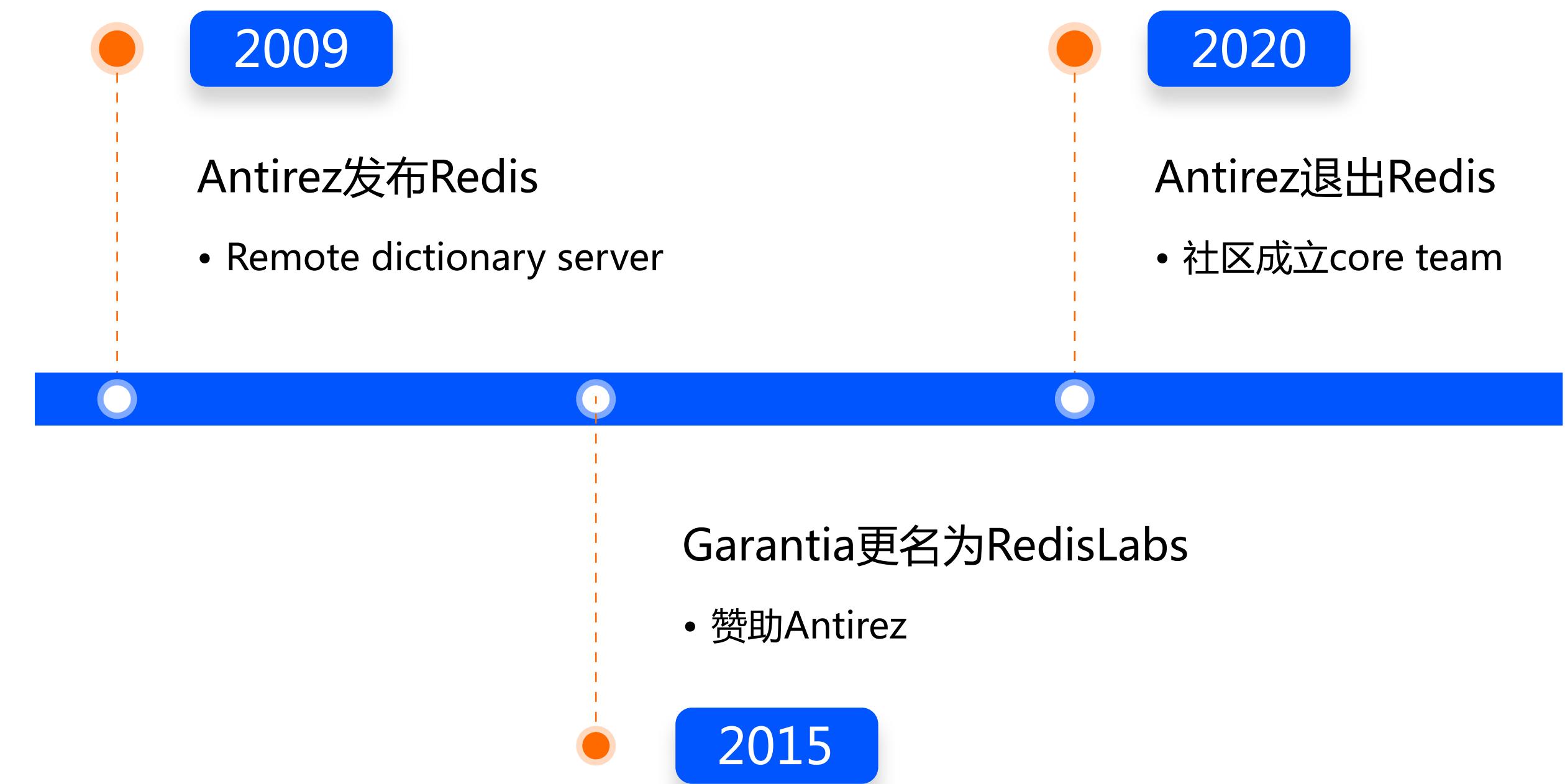
Redis发展历史回顾

Redis的前半生：从Antirez到core team

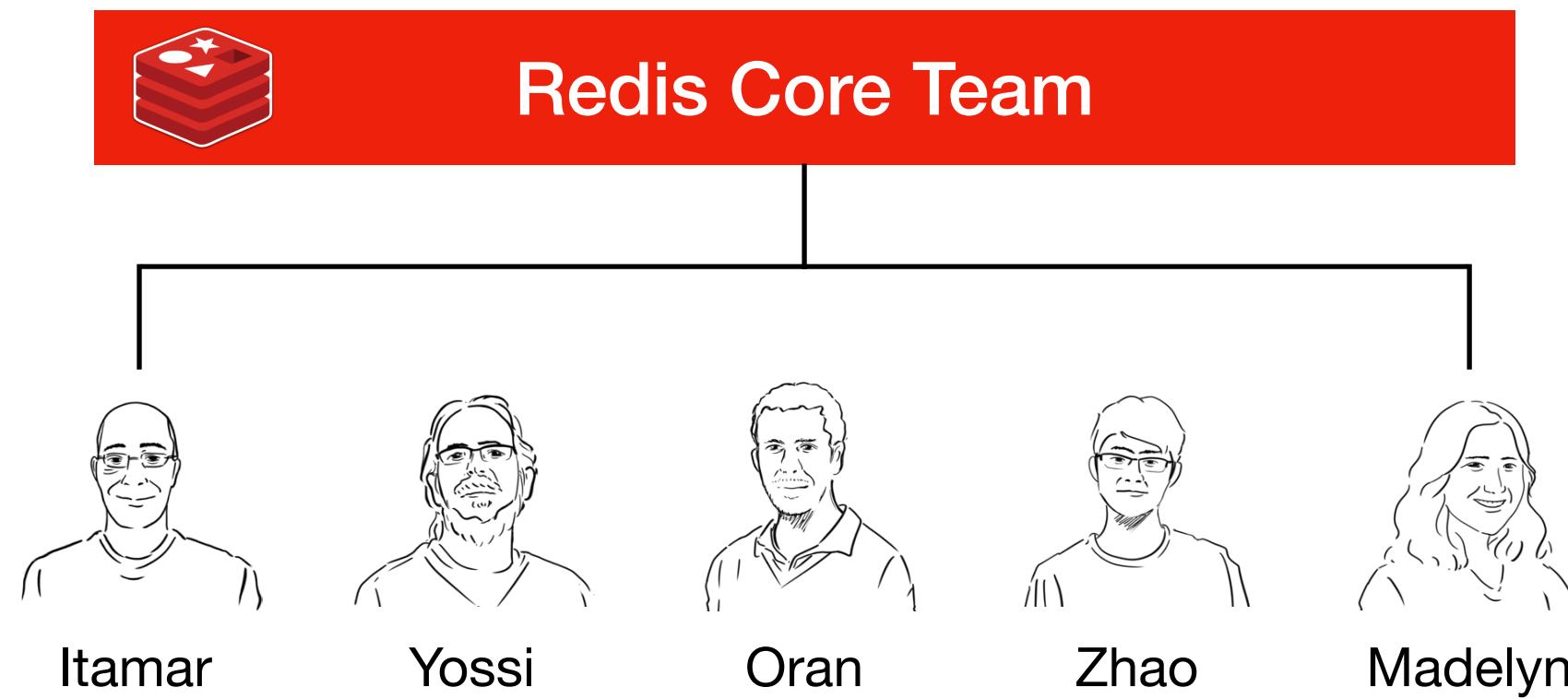


Salvatore Sanfilippo

antirez

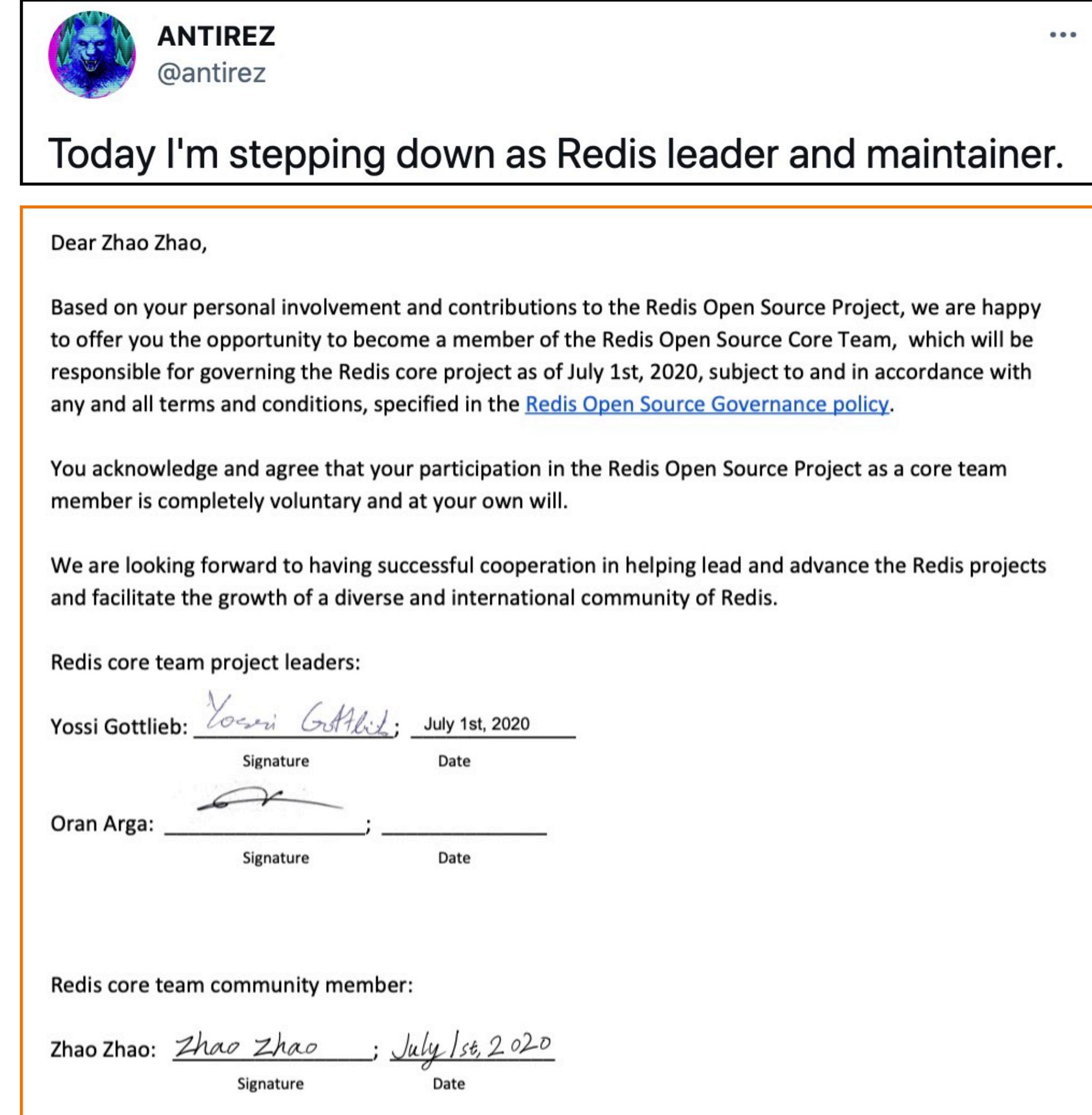


Redis 社区 core team

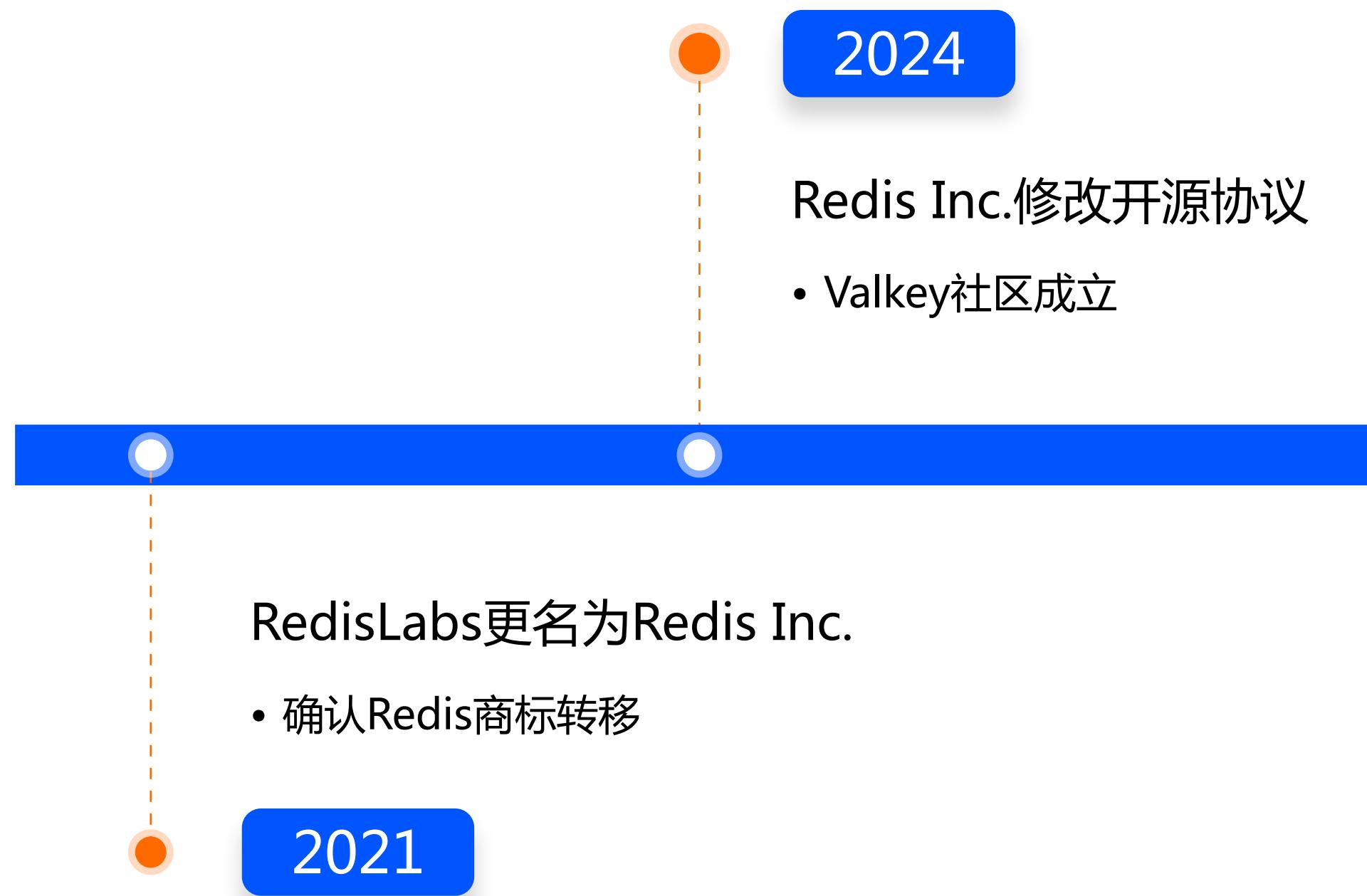


Roles and responsibilities of the core team

- Managing the core Redis code and documentation
- Managing new Redis releases
- Maintaining a high-level technical direction/roadmap
- Providing a fast response, including fixes/patches, to address security vulnerabilities and other major issues
- Project governance decisions and changes
- Coordination of Redis core with the rest of the Redis ecosystem
- Managing the membership of the core team



Redis社区戛然而止



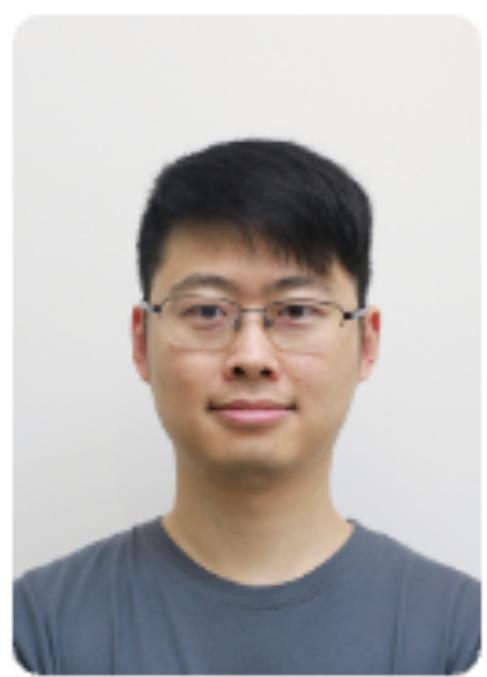
- Cluster V2
- Atomic slot migration
- Redirection in standalone

To be continued...

Part 3

Valkey的诞生

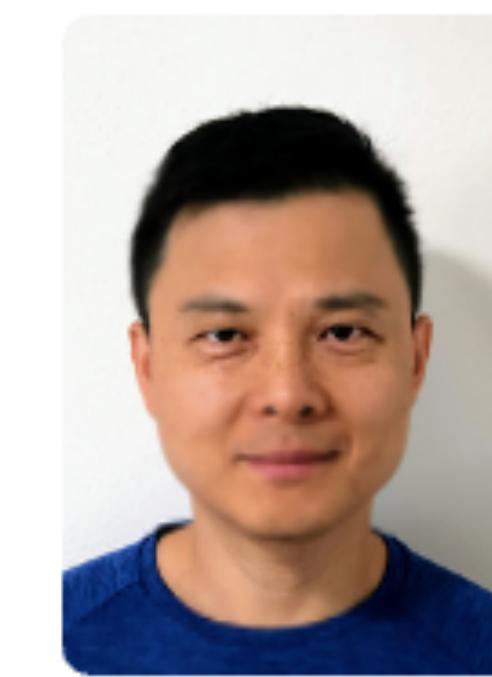
社区的回应：重新组建Valkey项目



**ZHAO
ZHAO**
Alibaba Cloud



**MADELYN
OLSON**
AWS



**PING
XIE**
Google Cloud



**WEN
HUI**
Huawei



**ZHU
BINBIN**
Tencent



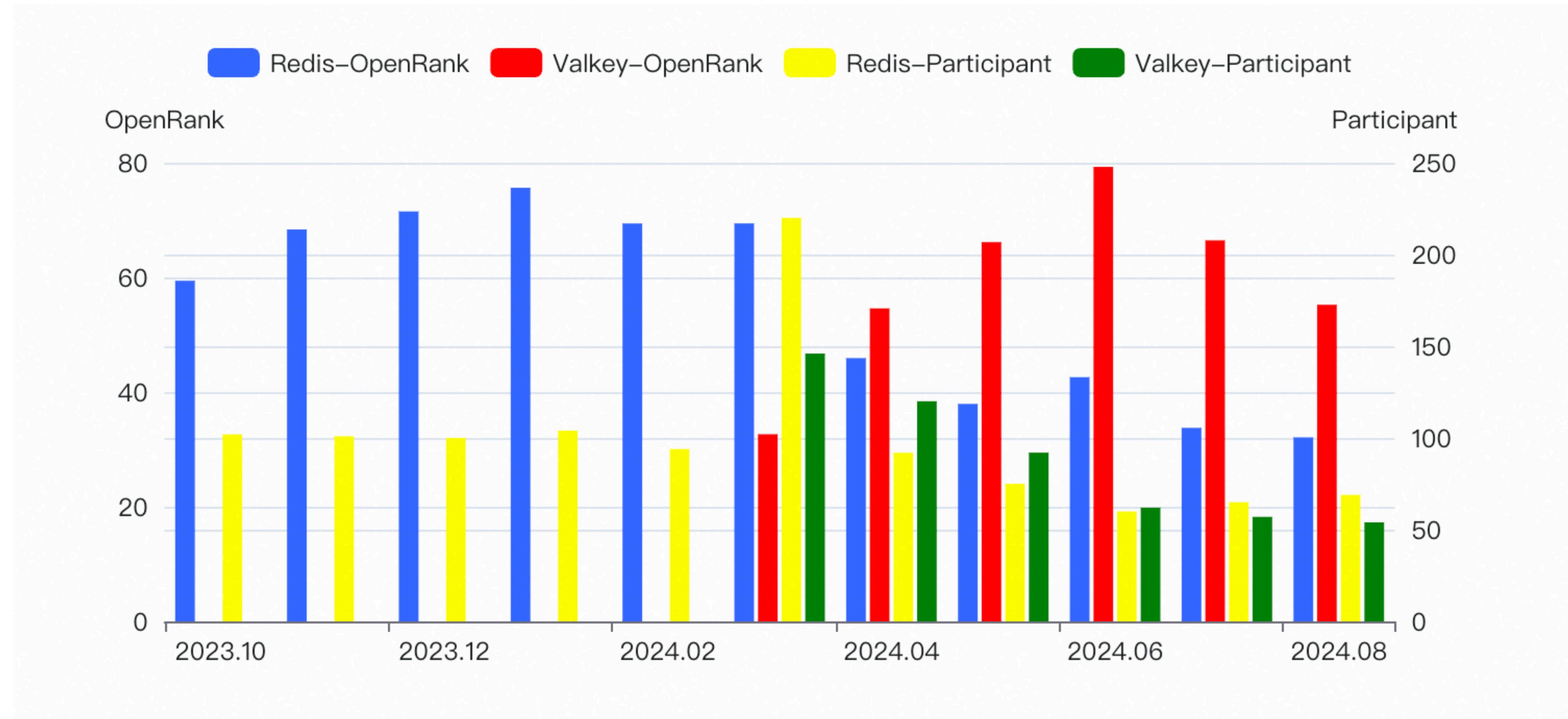
**VIKTOR
SÖDERQVIST**
Ericsson

Valkey社区的运营模式



[Github: https://github.com/valkey-io/valkey](https://github.com/valkey-io/valkey)

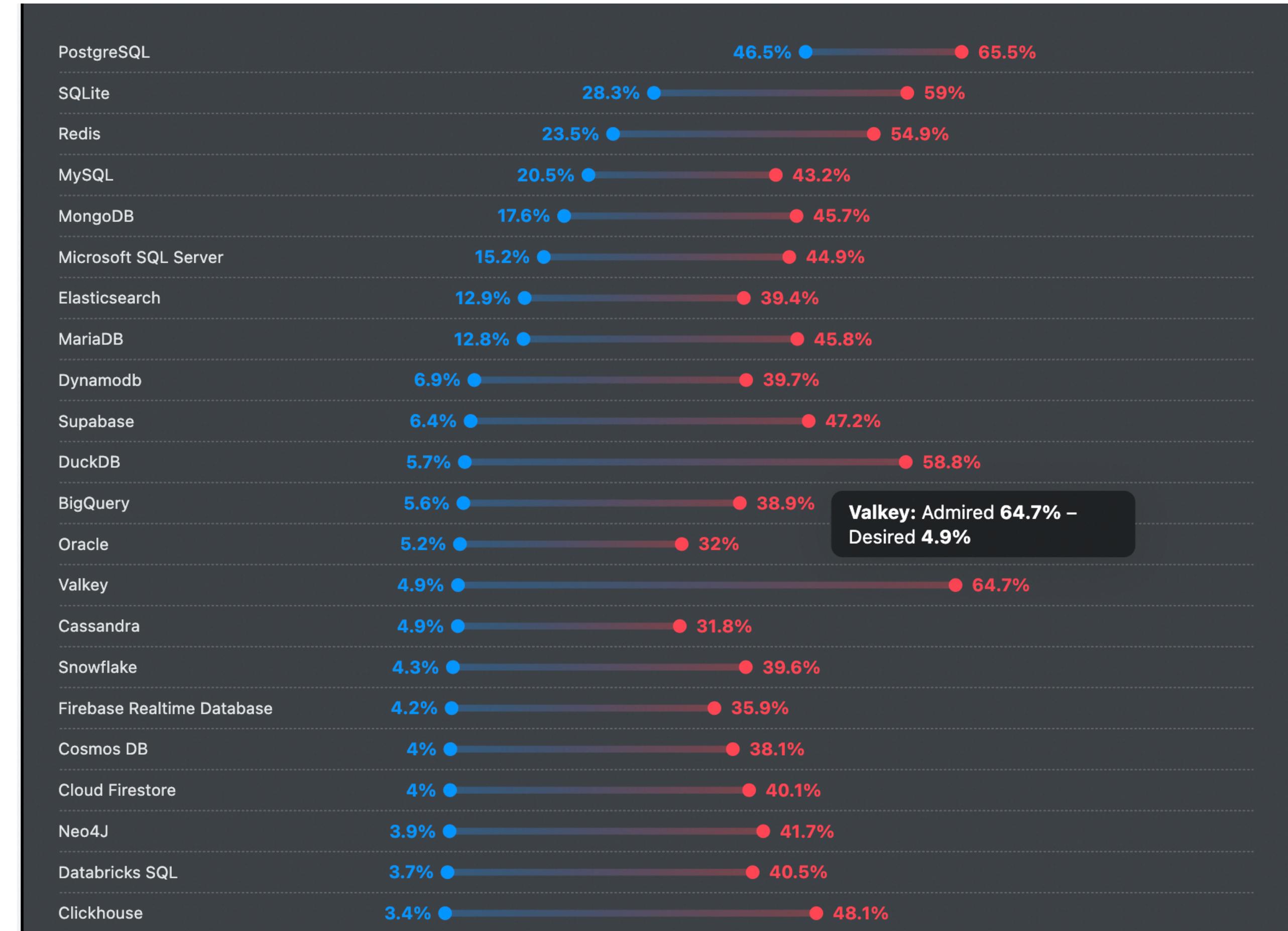
Valkey社区活跃度



<https://open-digger.cn/blog/redis-analysis>

Valkey社区活跃度

Rank			DBMS	Database Model	Score		
Dec 2025	Nov 2025	Dec 2024			Dec 2025	Nov 2025	Dec 2024
1.	1.	1.	MongoDB 	Multi-model 	372.27	+0.60	-28.11
2.	2.	2.	Redis	Key-value, Multi-model 	142.48	-2.61	-7.79
3.	3.	3.	Amazon DynamoDB	Multi-model 	72.96	-2.82	+0.23
4.	4.	4.	Microsoft Azure Cosmos DB	Multi-model 	23.80	+1.25	+0.74
5.	5.	5.	Memcached	Key-value	15.11	-0.24	-1.92
6.	6.	6.	etcd	Key-value	7.72	-0.01	+0.58
7.	7.	7.	Hazelcast	Key-value, Multi-model 	5.41	+0.20	+0.06
8.	8.	8.	Aerospike 	Multi-model 	3.92	-0.37	-1.42
9.	9.	16.	RocksDB	Key-value	3.25	-0.18	+0.40
10.	12.	10.	Riak KV	Key-value	3.22	-0.02	-0.42
11.	10.	9.	Ehcache	Key-value	3.18	-0.14	-1.44
12.	11.	11.	Oracle NoSQL	Multi-model 	3.09	-0.14	-0.12
13.	13.	14.	ArangoDB	Multi-model 	3.02	+0.05	+0.06
14.	14.	13.	Apache Ignite	Multi-model 	2.90	-0.04	-0.08
15.	15.	18.	GemFire	Key-value, Multi-model 	2.73	+0.01	+0.20
16.	16.	12.	Google Cloud Bigtable	Multi-model 	2.61	-0.04	-0.41
17.	17.	15.	OrientDB	Multi-model 	2.59	+0.00	-0.28
18.	18.	17.	InterSystems IRIS	Multi-model 	2.15	+0.05	-0.45
19.	22.		Valkey	Key-value	2.08	+0.16	
20.	20.	22.	LMDB	Key-value	1.96	+0.01	+0.09



开源的意义



社区与开发者



生态与工具



标准化与兼容性



用户需求与发展方向

Part 4

Valkey这一年

新版本特性



Valkey 8.0

- 1M Requests per second (RPS)
 - IO线程性能增强，百万RPS
- Dual channel replication
 - 双通道复制，加速全量数据传输
- Redirection in standalone mode
 - 主从模式重定向，支持无感切换

新版本特性



Valkey 8.1

- Introduce a new hash table
 - 主hash表重构，最大节省20%内存
- New command log and metrics
 - 支持大流量命令统计，更强的可观测性
- Vector , Bloom , and JSON modules
 - 集成多种模块，提升可扩展性

新版本特性



Valkey 9.0

- Multiple databases in cluster mode
 - 集群模式支持多DB存储
- Atomic slot migration
 - 原子性slot搬迁技术
- Expiration on hash filed items
 - 支持field级别过期的hash数据结构

Thank you!