

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



Background The Horsehead Nebula and its surroundings. The reflection nebula NGC 2023 in the bottom left corner. / Stephanh / License: CC BY 4.0

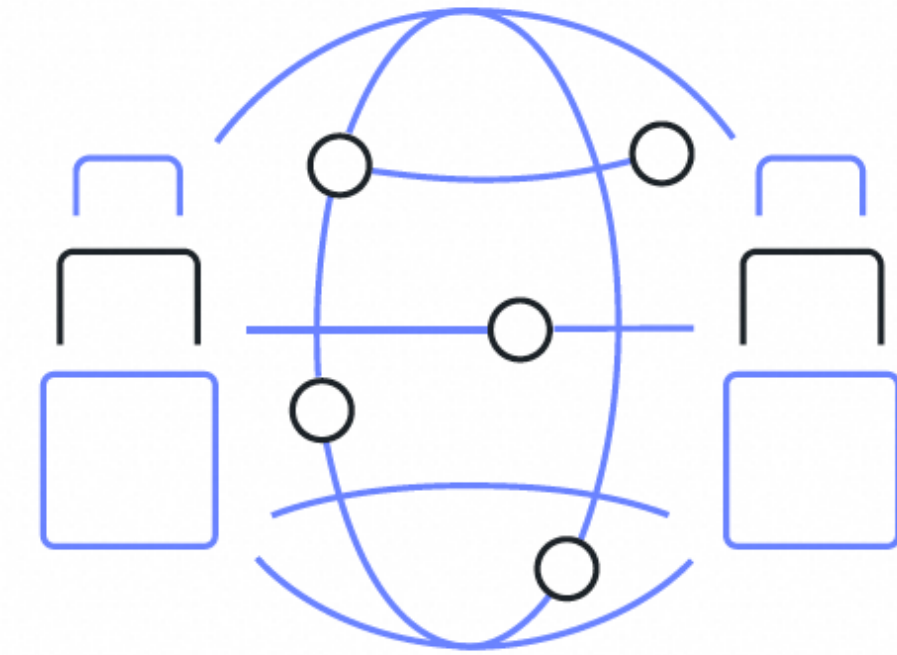
Introducing the Valkey project



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

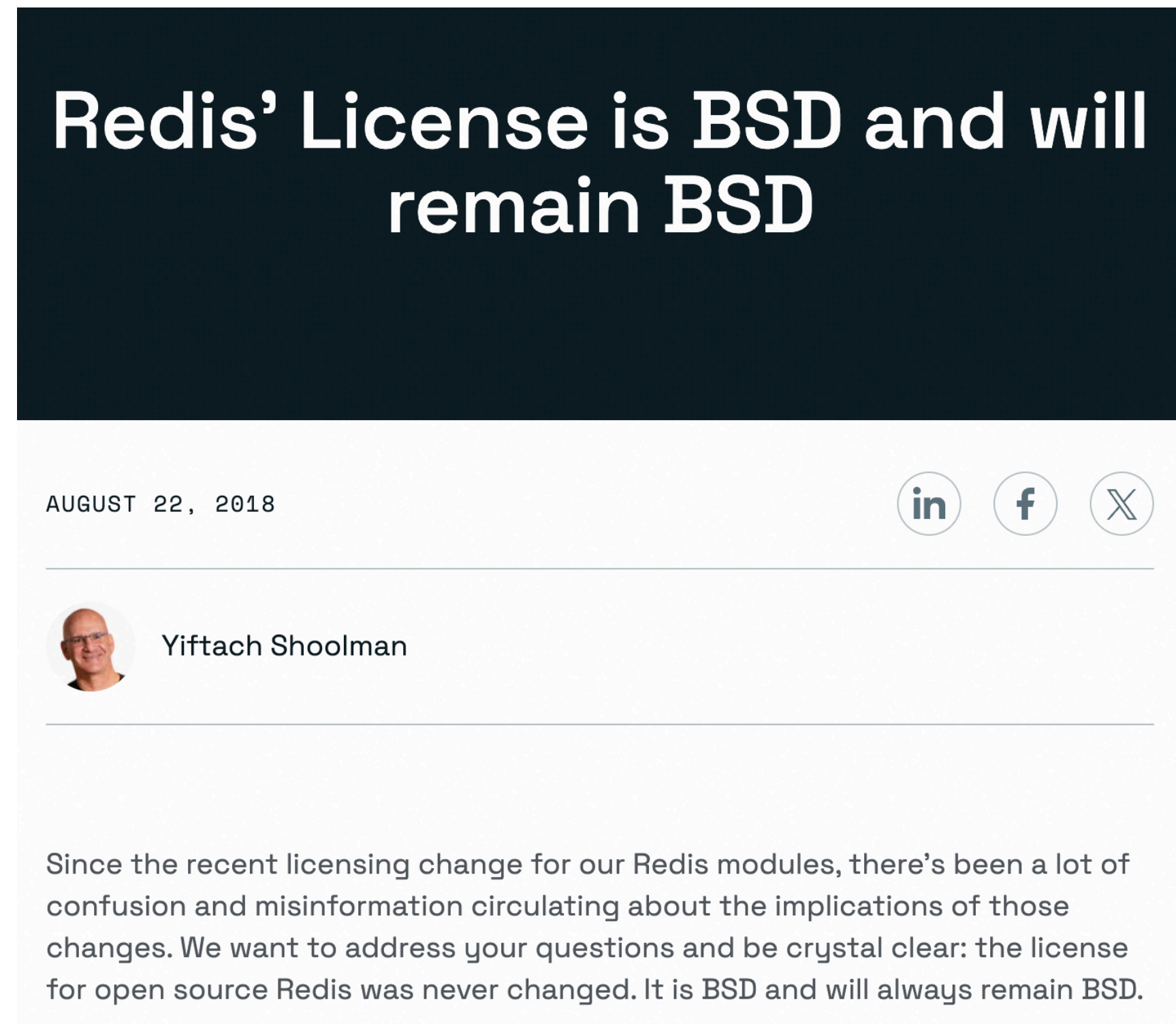
View details

Revert

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

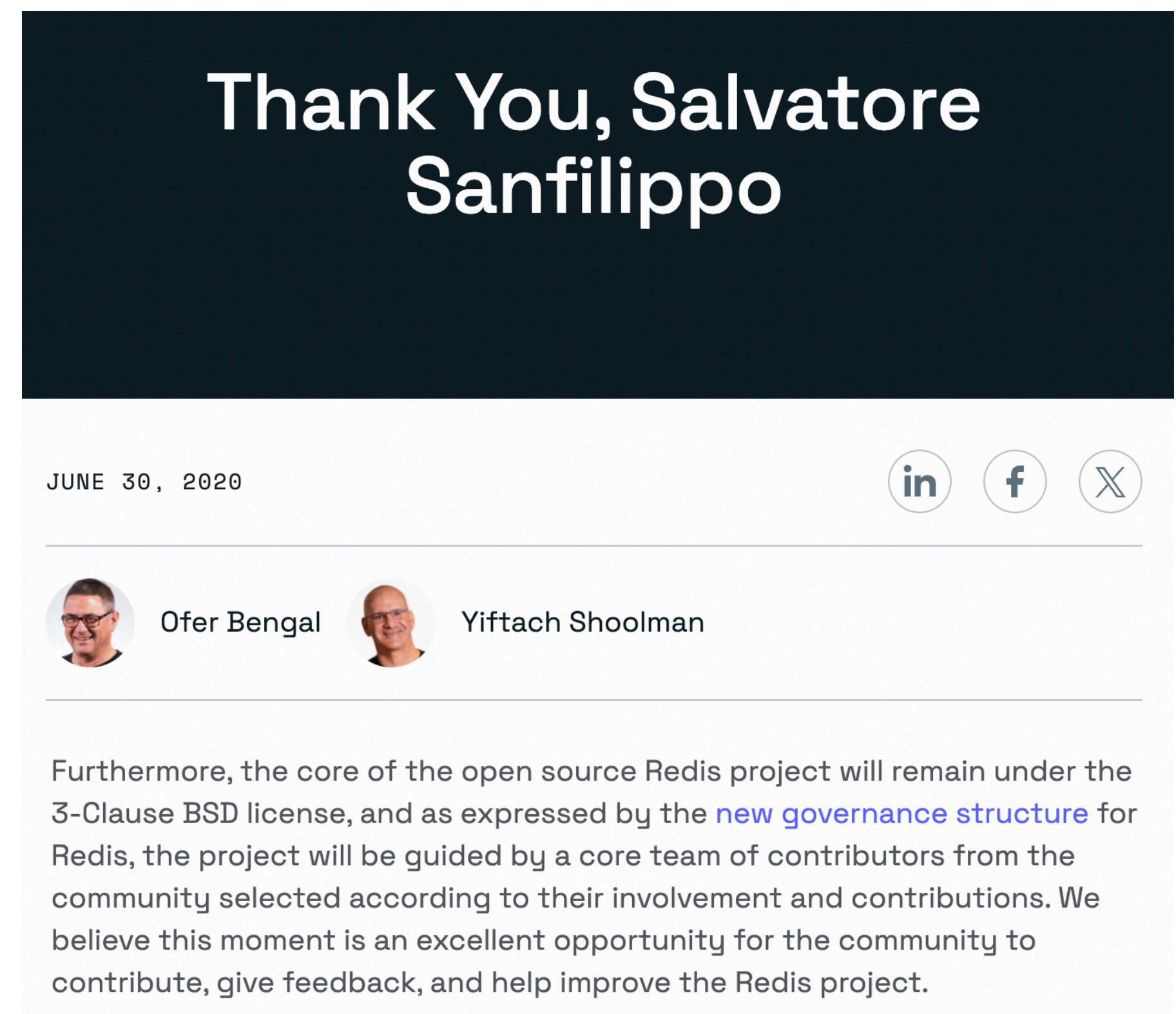
 Valkey

Redis历次协议变更风波



<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

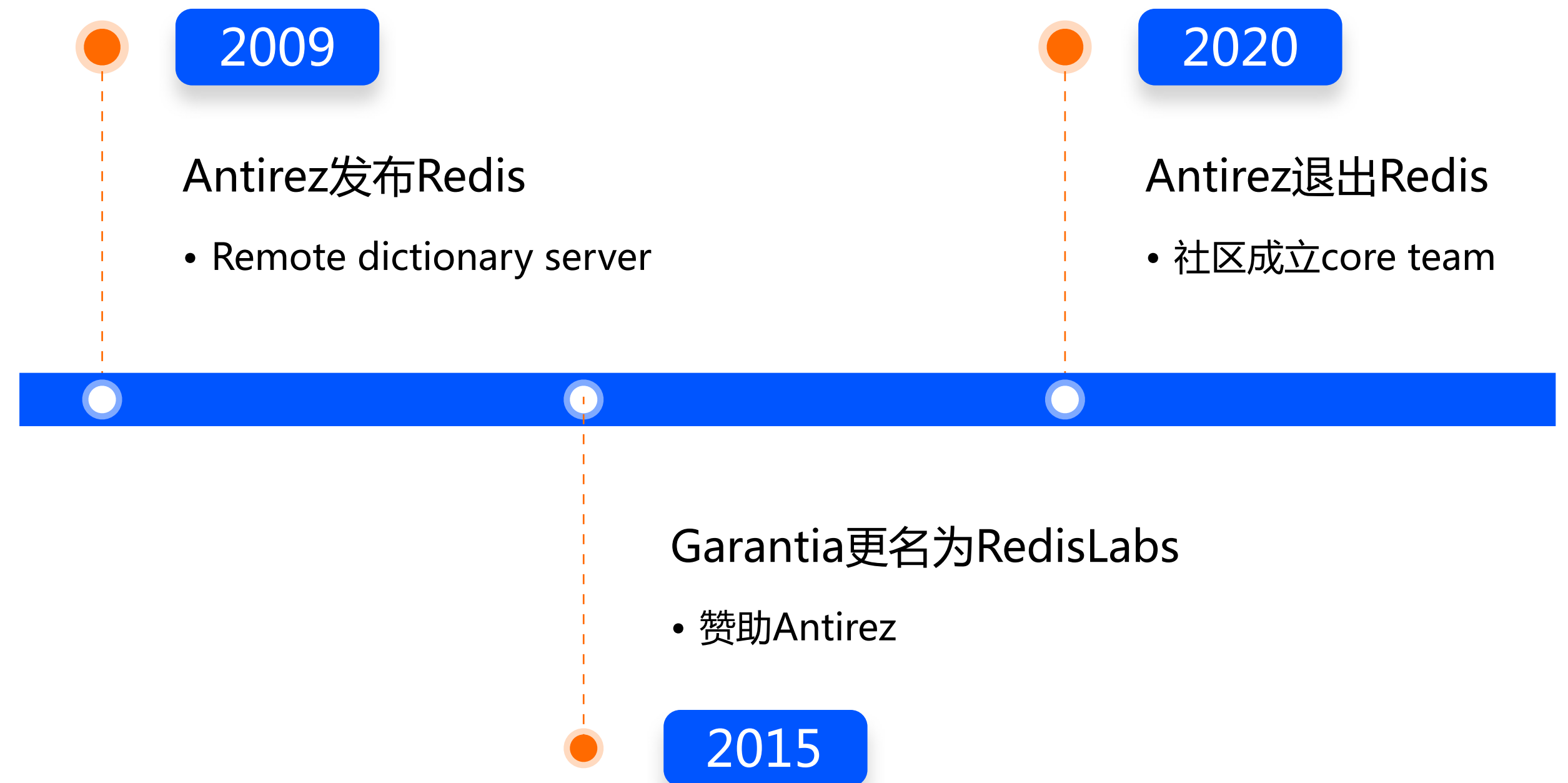
Redis发展历史回顾

Redis的前半生：从Antirez到core team

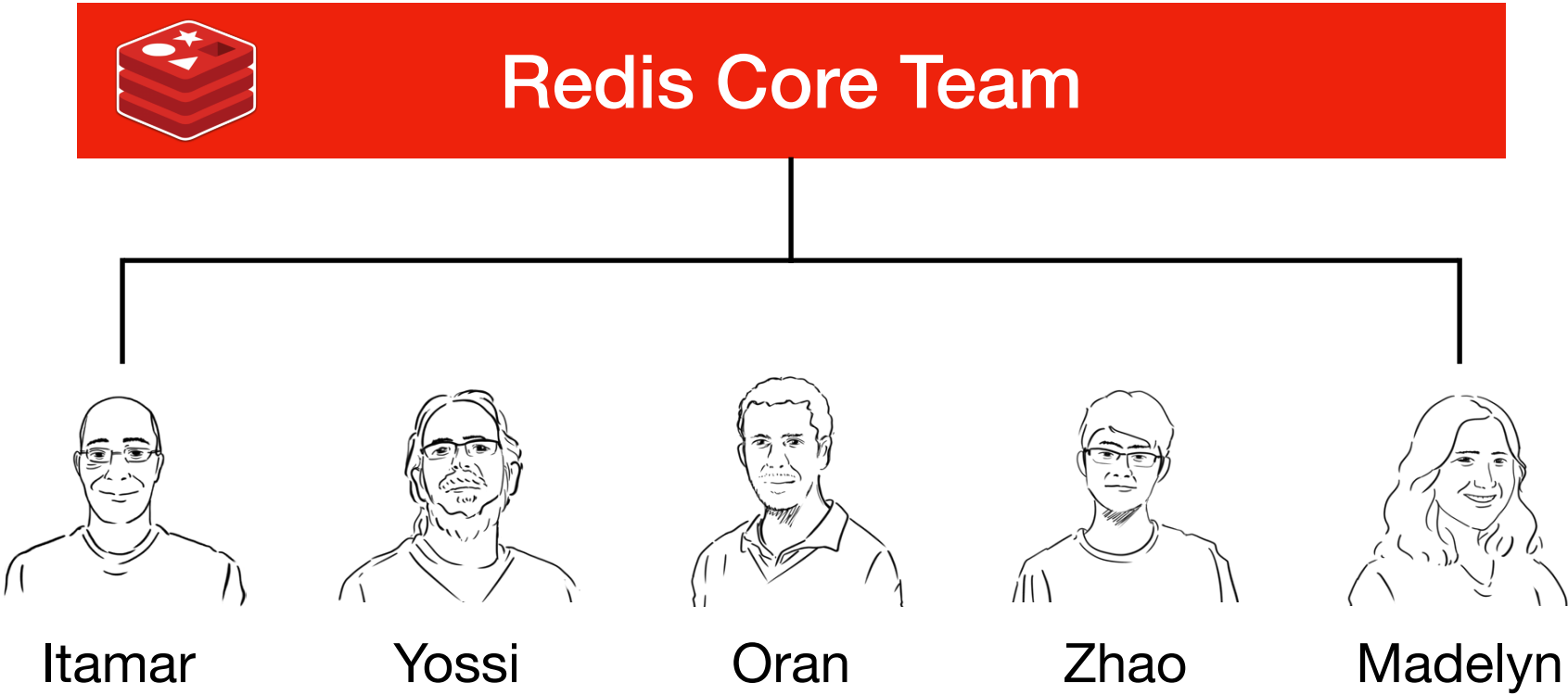


Salvatore Sanfilippo

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



ANTIREZ
@antirez

Today I'm stepping down as Redis leader and maintainer.

Dear Zhao Zhao,

Based on your personal involvement and contributions to the Redis Open Source Project, we are happy to offer you the opportunity to become a member of the Redis Open Source Core Team, which will be responsible for governing the Redis core project as of July 1st, 2020, subject to and in accordance with any and all terms and conditions, specified in the [Redis Open Source Governance policy](#).

You acknowledge and agree that your participation in the Redis Open Source Project as a core team member is completely voluntary and at your own will.

We are looking forward to having successful cooperation in helping lead and advance the Redis projects and facilitate the growth of a diverse and international community of Redis.

Redis core team project leaders:

Yossi Gottlieb: Yossi Gottlieb; July 1st, 2020
Signature Date

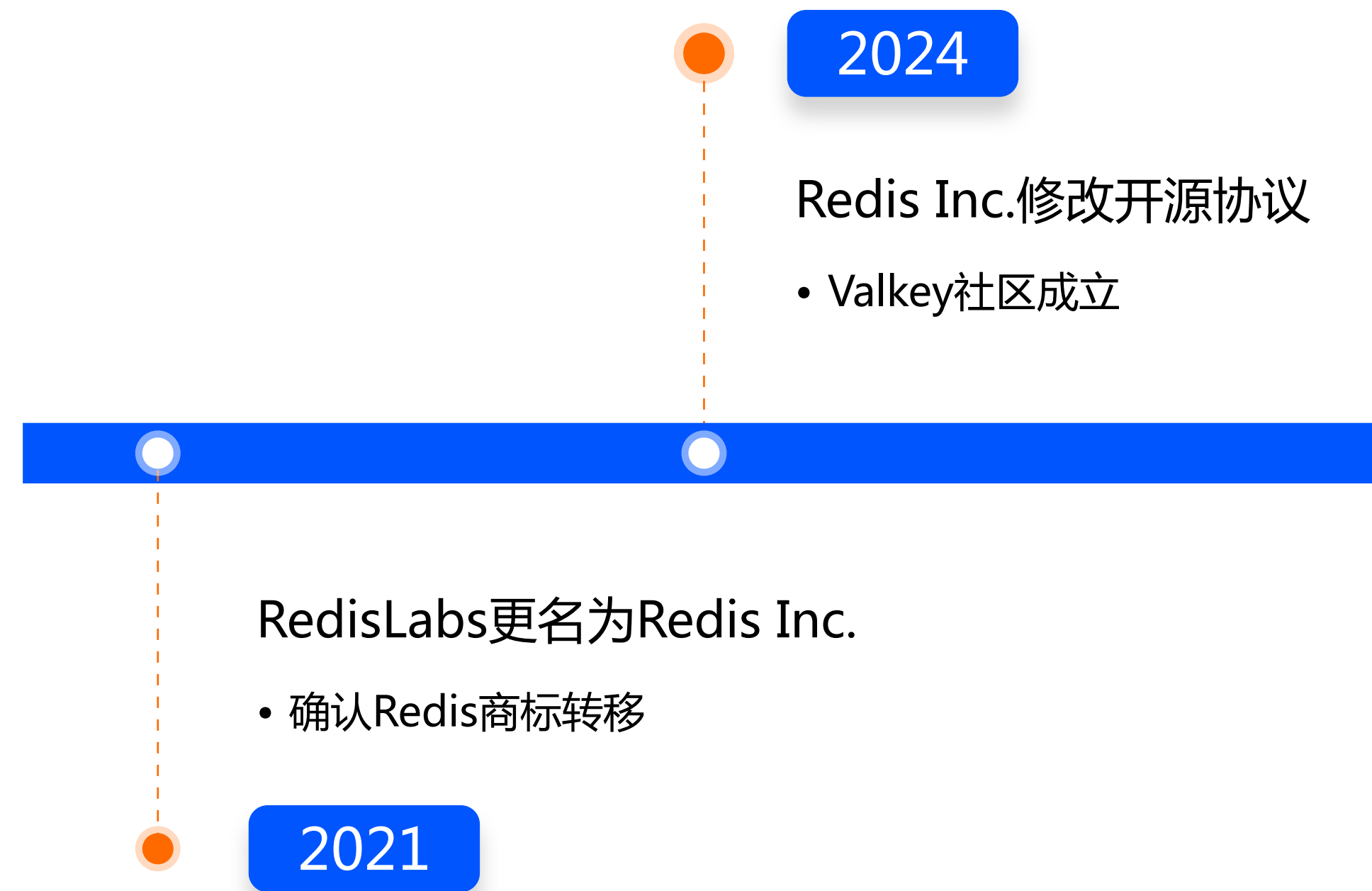
Oran Arga: [Signature];
Signature Date

Redis core team community member:

Zhao Zhao: Zhao Zhao; July 1st, 2020
Signature Date



Redis社区戛然而止



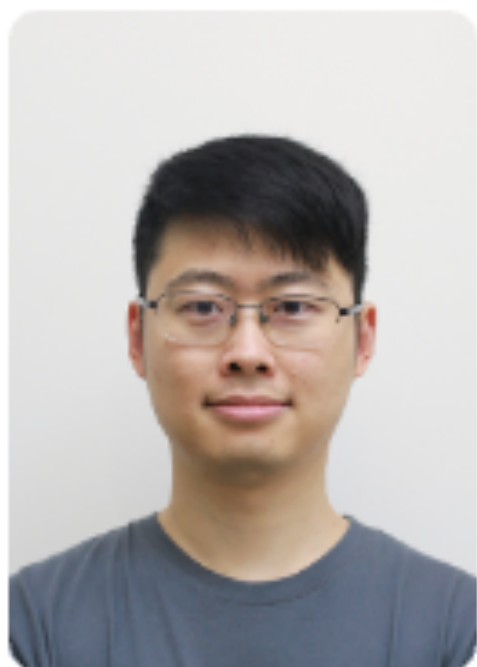
- Cluster V2
- Atomic slot migration
- Redirection in standalone

To be continued...

Part 3

Valkey的诞生

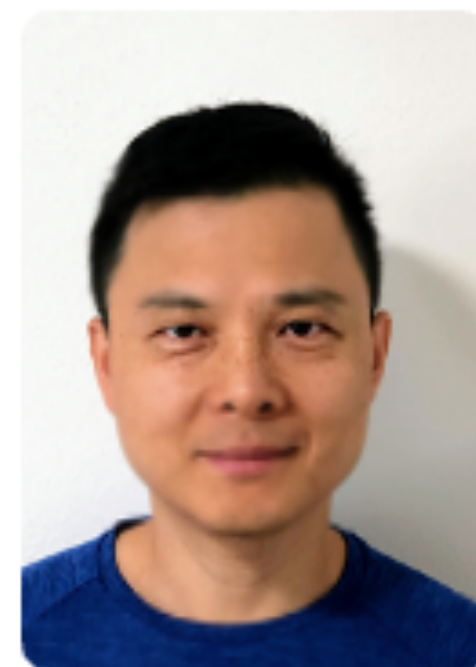
社区的回应：重新组建Valkey项目



**ZHAO
ZHAO**
Alibaba Cloud



**MADELYN
OLSON**
AWS



**PING
XIE**
Google Cloud



**WEN
HUI**
Huawei

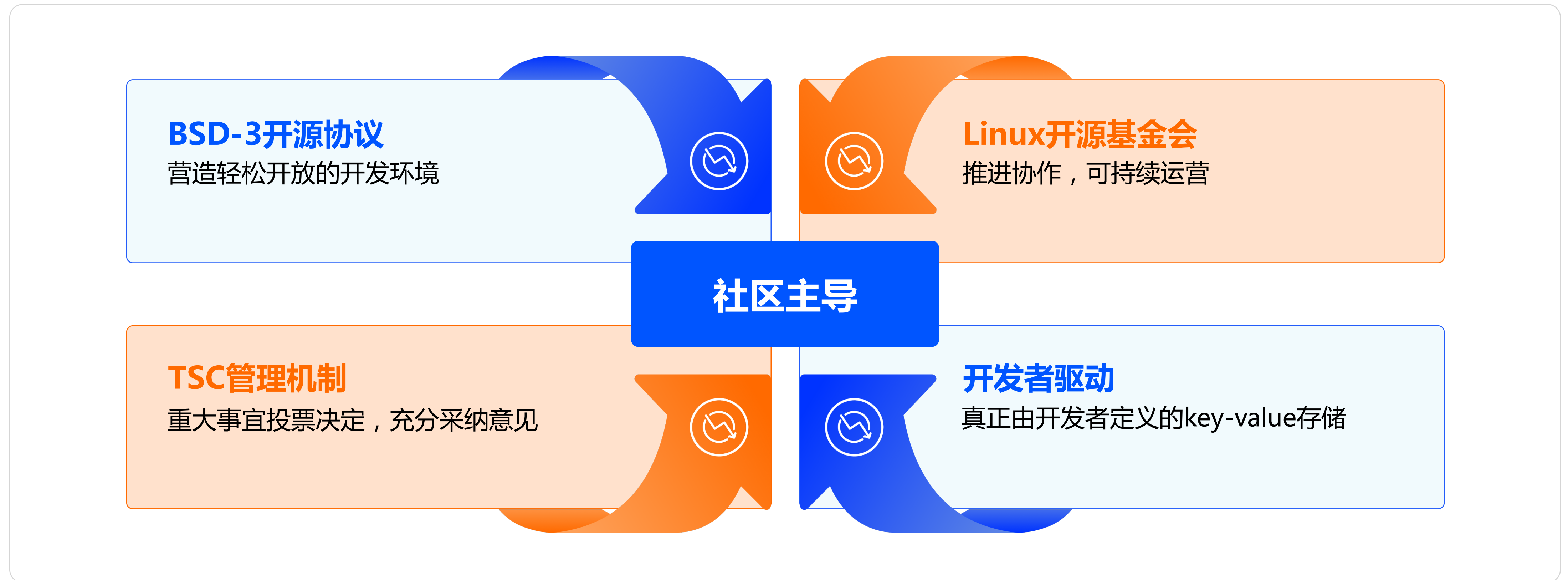


**ZHU
BINBIN**
Tencent



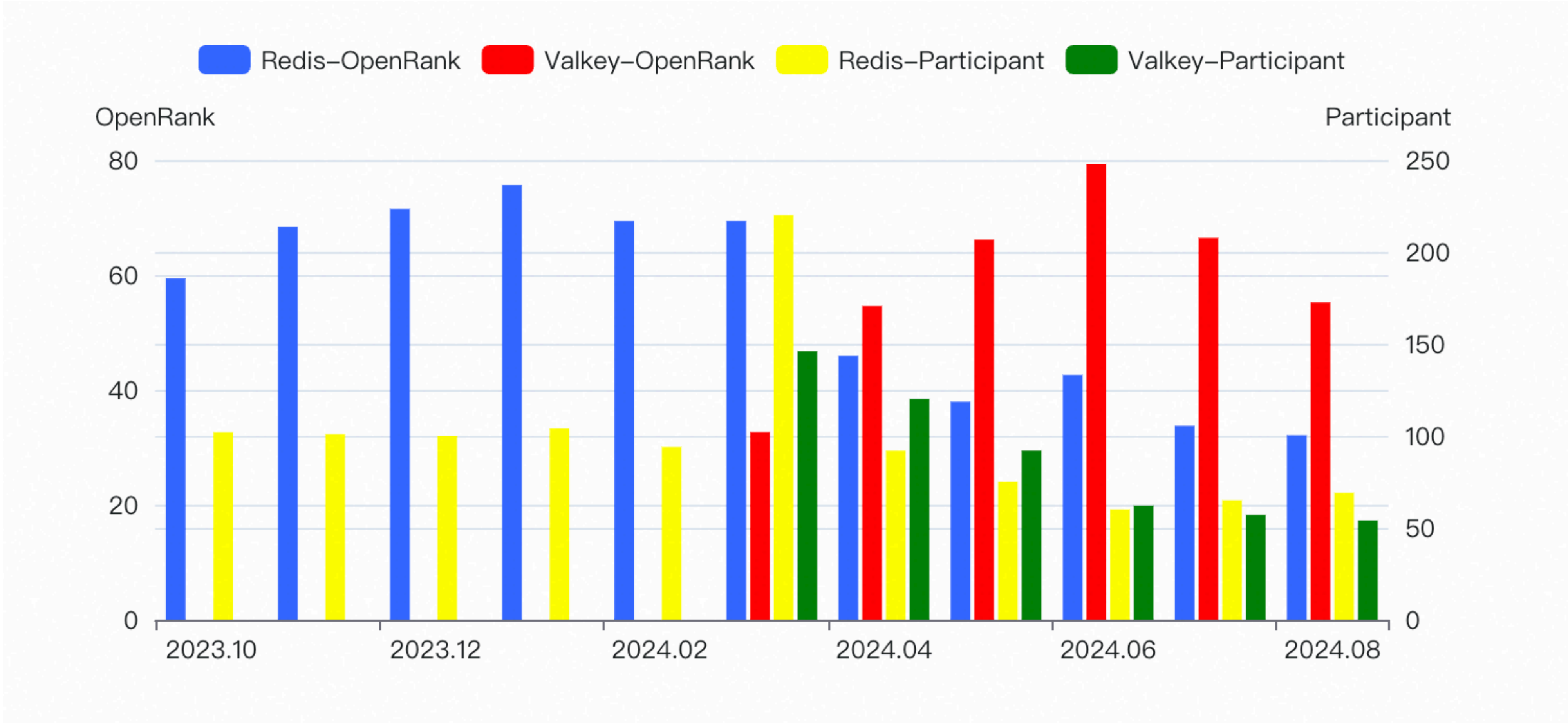
**VIKTOR
SÖDERQVIST**
Ericsson

Valkey社区的运营模式



Github: <https://github.com/valkey-io/valkey>

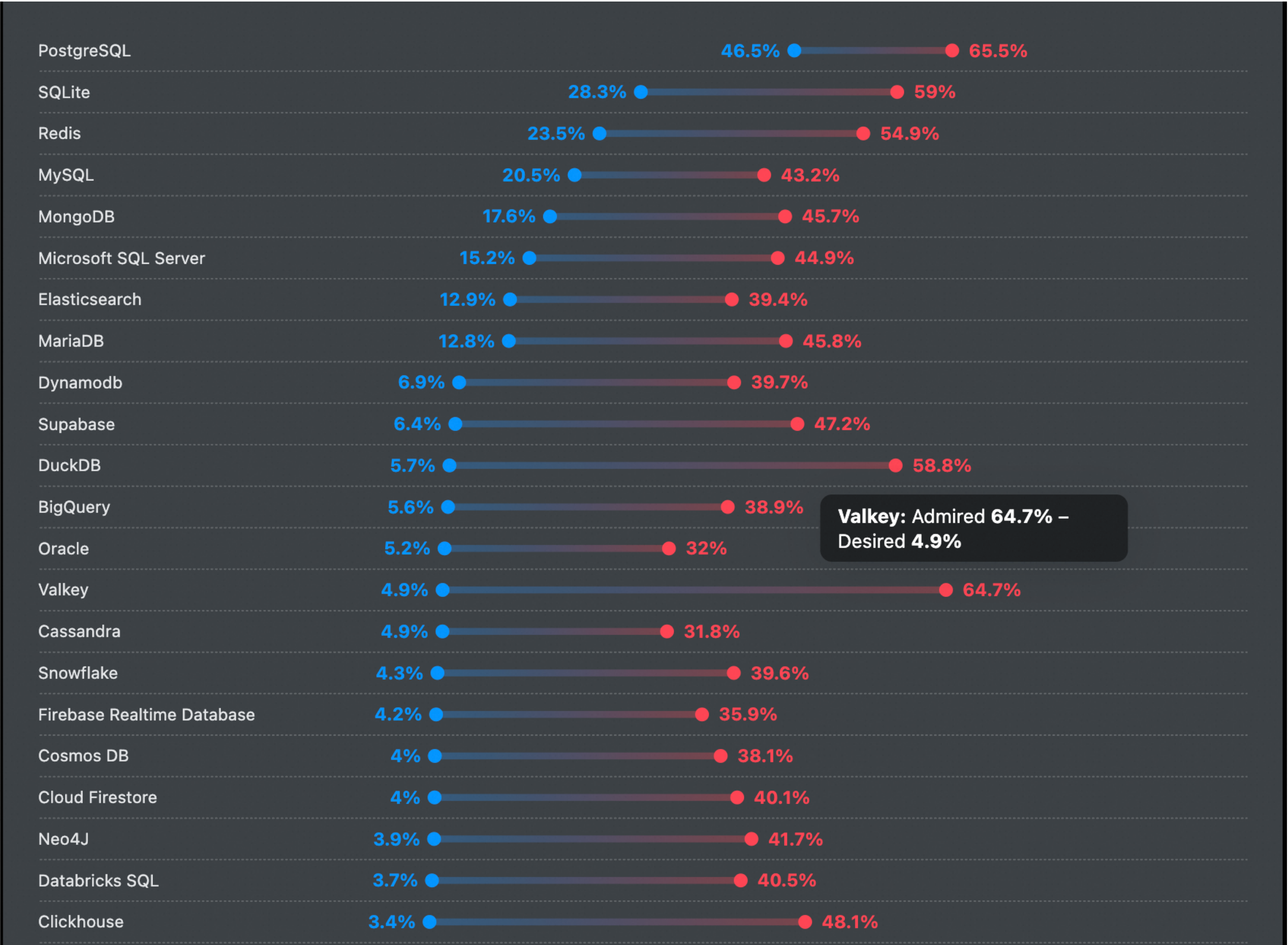
Valkey社区活跃度



<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!