August 28
KEYSPACE
Amsterdam
[Tickets]
Migrating 15k
Redis servers to Valkey
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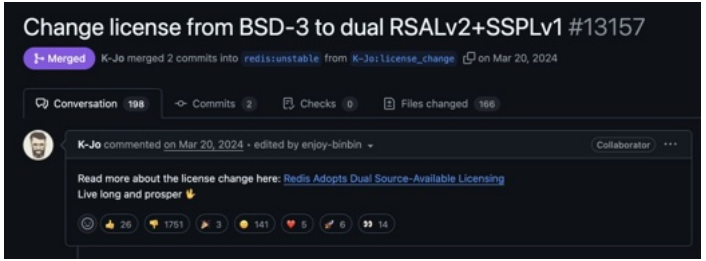
Valkey
Background The Horsehead Nebula and its surroundings. The reflection nebula NGC 2023 in the bottom left corner. / Stephanh / License: CC BY 4.0.

Why? 1/2

DBaaS provider

- PostgreSQL
- MySQL
- OpenSearch
- Valkey
- ...

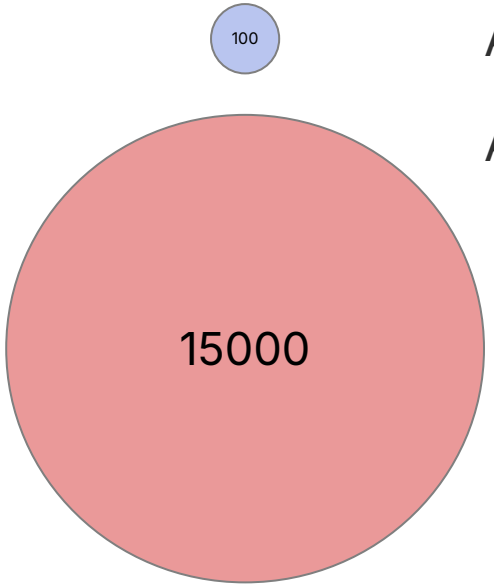
Aiven for Redis (2018 - 2024)



Aiven for Valkey (June 2024 - now)

Why? 2/2

Status as of July 2024:

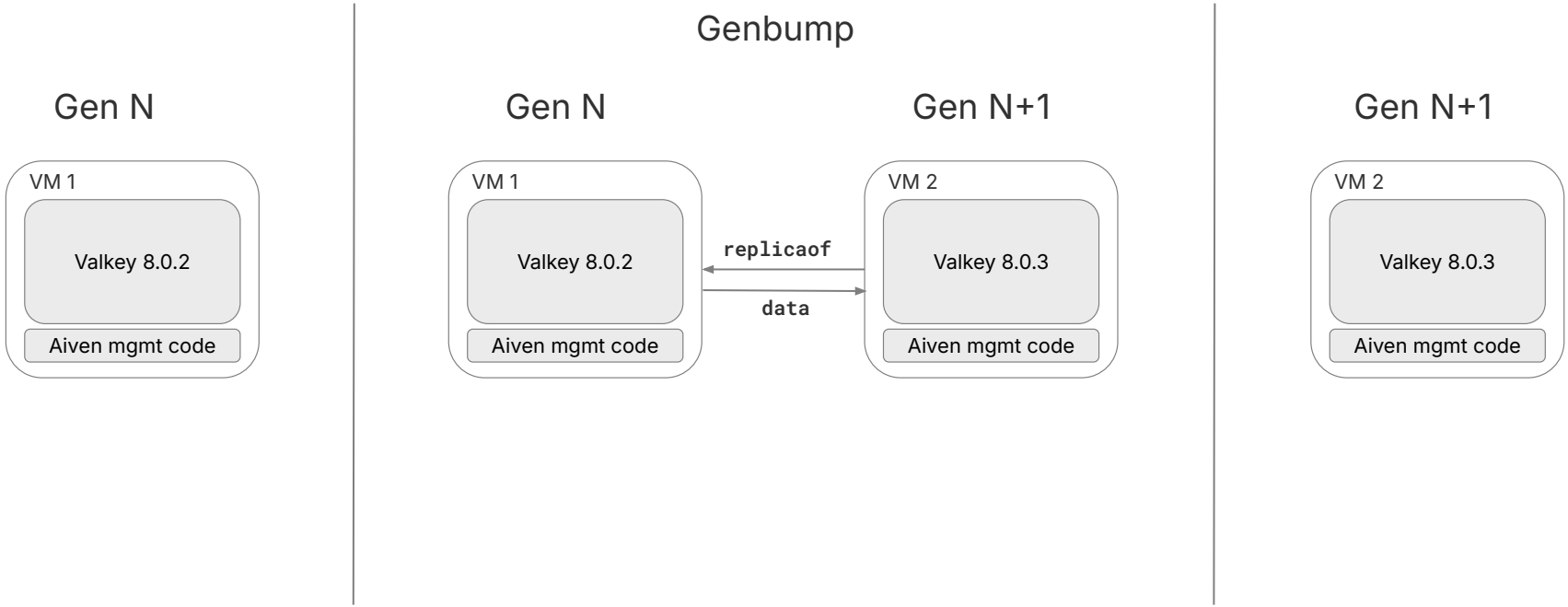


Aiven for Valkey

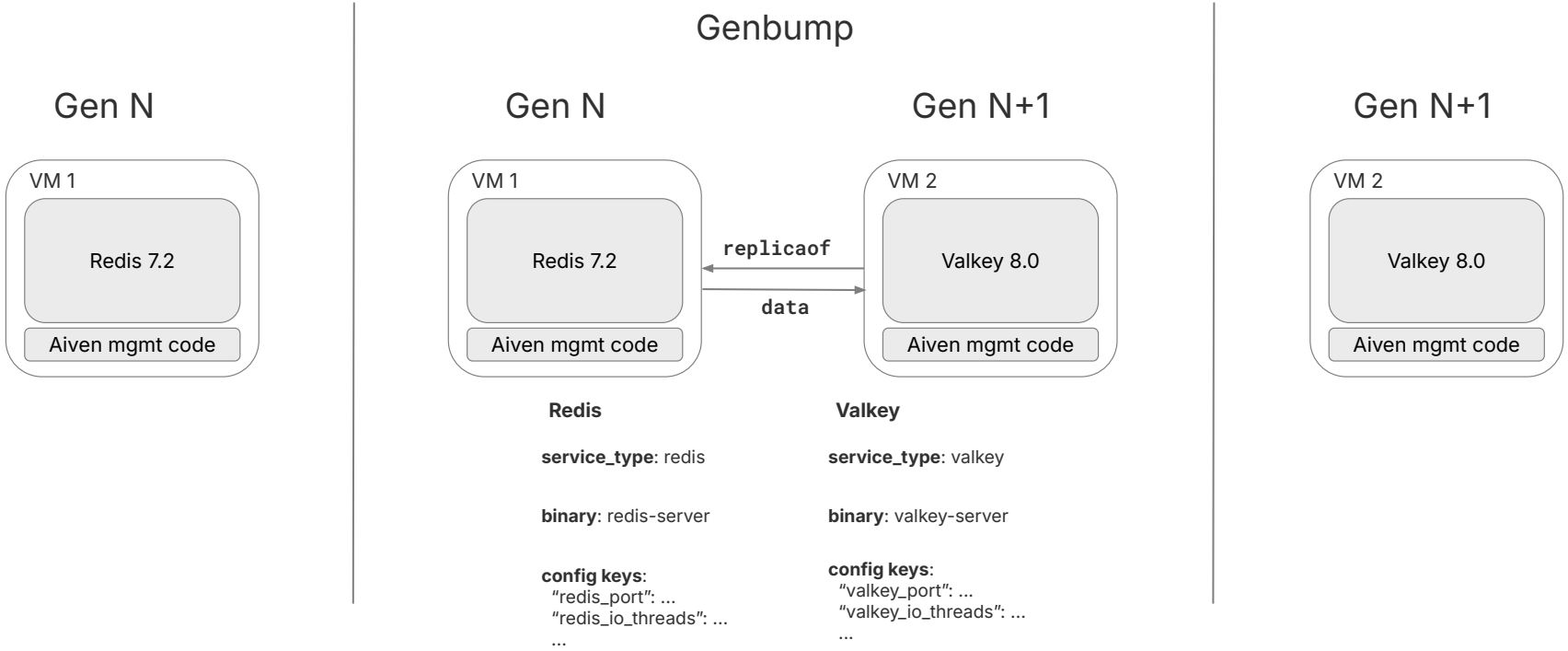
Aiven for Redis

At the time, existing migration options required multiple manual steps and resulted in downtime

How? 1/3


Gen N
VM 1
Valkey 8.0.2
Aiven mgmt code
Genbump
Gen N
VM 1
Valkey 8.0.2
Aiven mgmt code
replicaof
data
Gen N+1
VM 2
Valkey 8.0.3
Aiven mgmt code
Gen N+1
VM 2
Valkey 8.0.3
Aiven mgmt code

How? 2/3


Genbump
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Valkey 8.0
Aiven mgmt code
VM 2
Valkey 8.0
Aiven mgmt code
Redis
service_type: redis
binary: redis-server
config keys:
"redis_port": ...
"redis_io_threads": ...
...
Valkey
service_type: valkey
binary: valkey-server
config keys:
"valkey_port": ...
"valkey_io_threads": ...
...

How? 3/3

Option 1

Option 2

Automatic migration during a server's maintenance window, after the EOL date

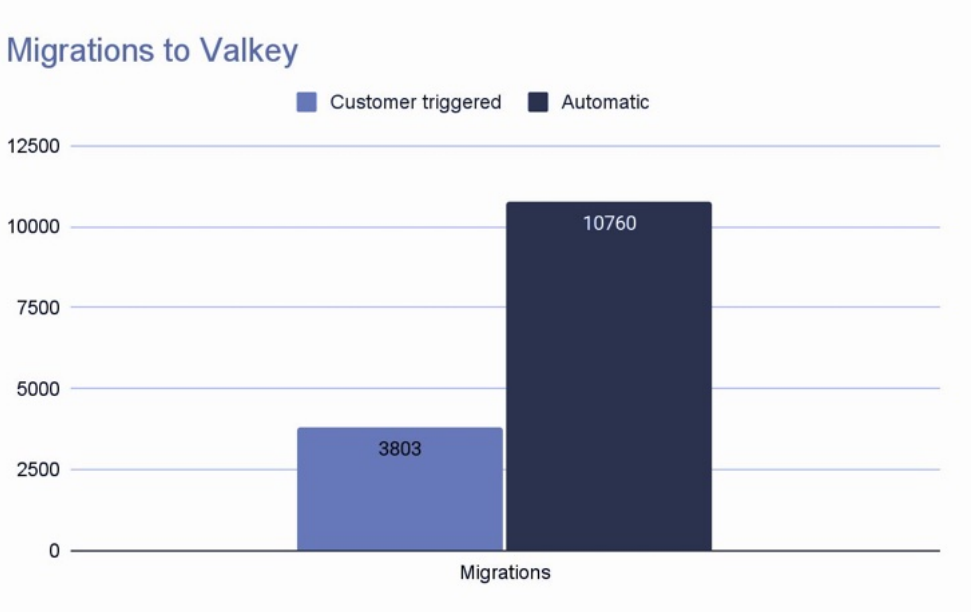
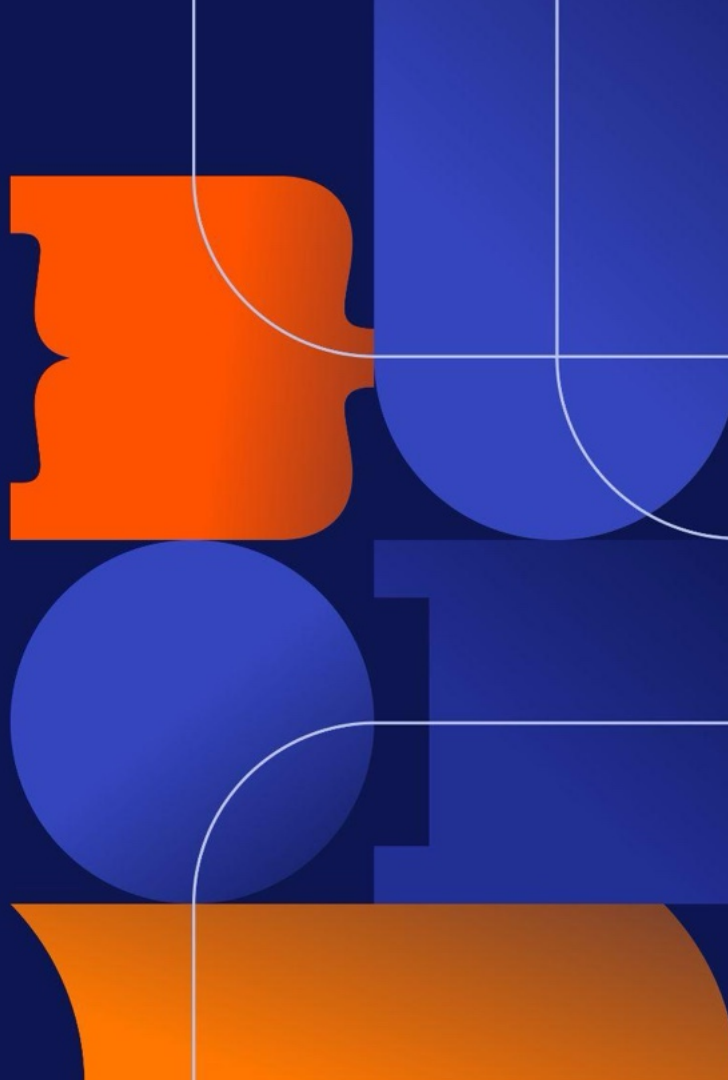
Complications

Some setbacks along the way:

- Terraform and Kubernetes state mismatch
- ACL load bug in Valkey 8.0
- convincing customers and partners that the migration is safe

Status

As of August 2025:



Thank you!
Q&A