

CNAB2322US

Geo-Distributed Modern Apps with Redis and VMware Tanzu

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#vmwareexplore #CNAB2322US

vmware®

EXPLORE
2022



Agenda

- ❖ Redis?
- ❖ Redis Enterprise + Tanzu
- ❖ Demo!

Who and What is Redis?

Our Roots are in Open Source

An **In-memory open source database**, supporting a variety high performance operational, analytics and hybrid use cases



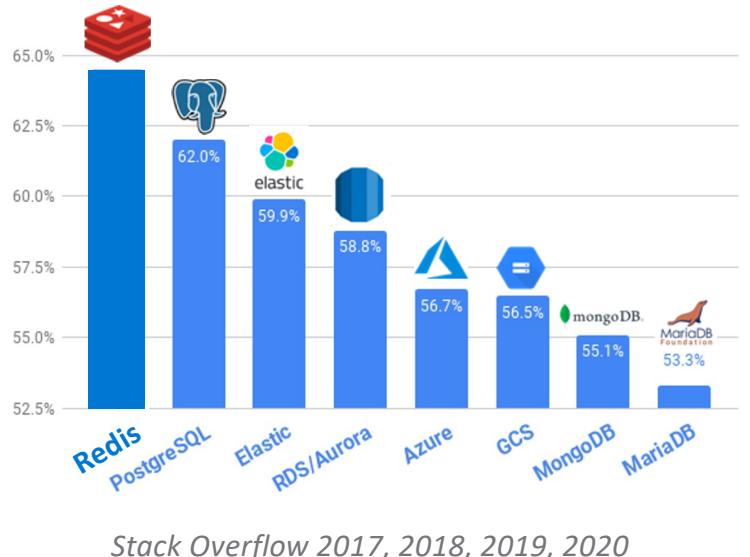
redis

Redis is the Most Loved Database...

Developer Love

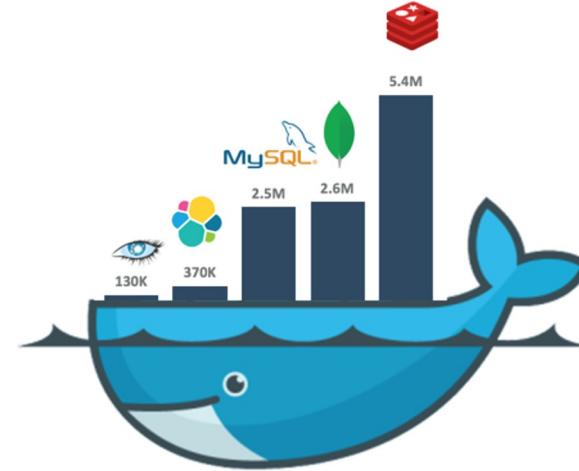


The **most loved** database in Stack Overflow's Developer Survey for **five years in a row**



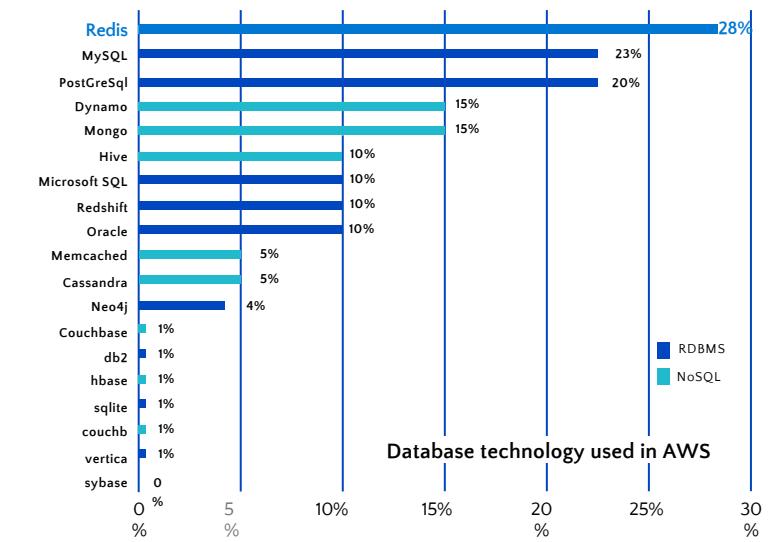
Popular Open-Source Software

162 clients in **80** languages
Over **6 million** daily downloads
on Docker



Hyperscaler Adoption

Adopted by all of the top public cloud providers including **GCP, AWS, Azure**.



Redis OSS Is...

Use Cases



Leaderboards



Caching



Session Management



Data Structures



Redis



Strings



Bit Field



Sorted Sets



Geospatial



Lists



Bitmaps



Hashes



Sets



HyperLogLog



Streams

Functionality



Durability



Backup & Restore

Redis Enterprise

An in-memory multi-model database

Built on top of Redis OSS



Redis Enterprise Is...

Use Cases



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HyperLogLog



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ENTERPRISE

Functionality

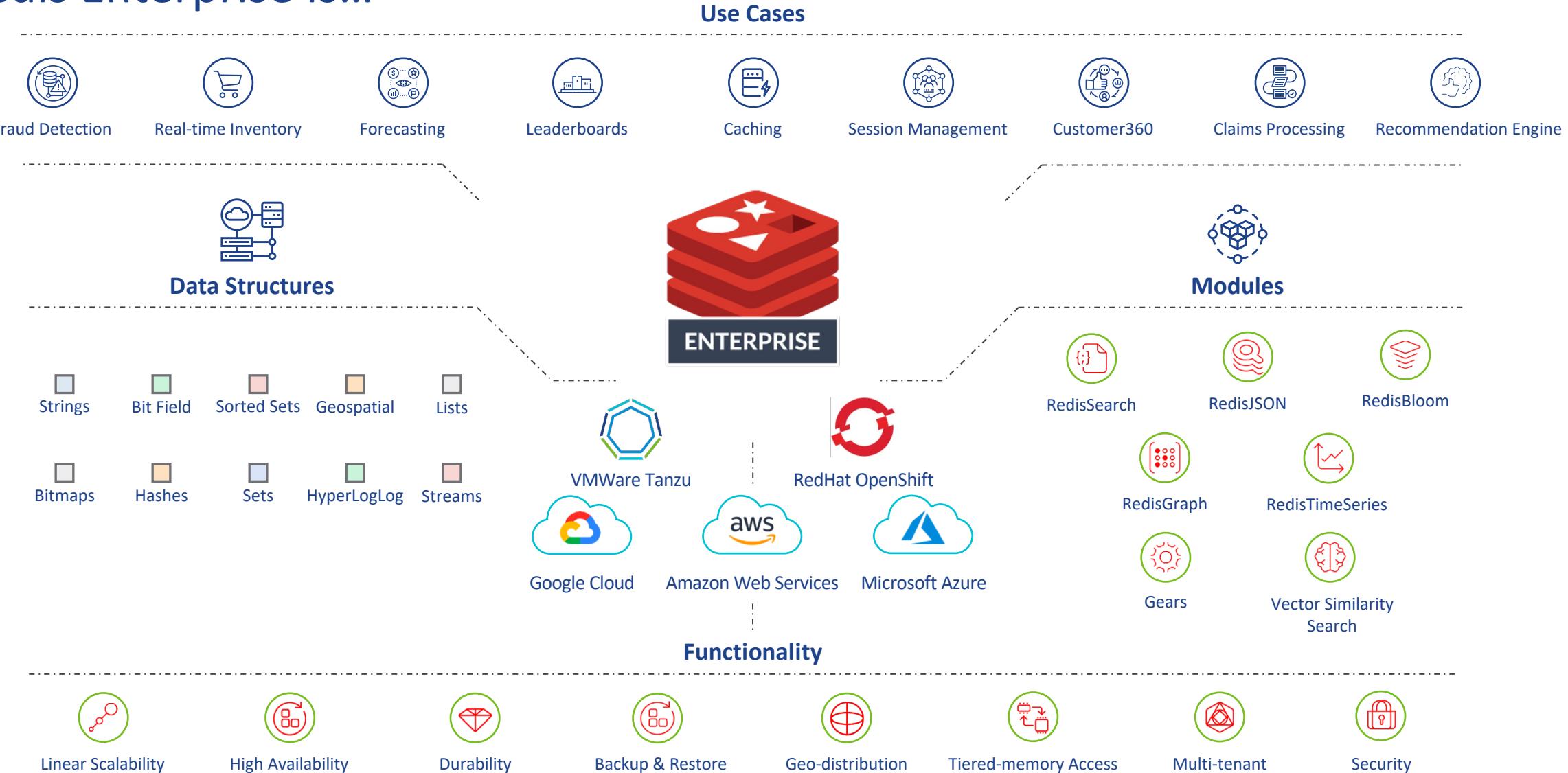


Durability



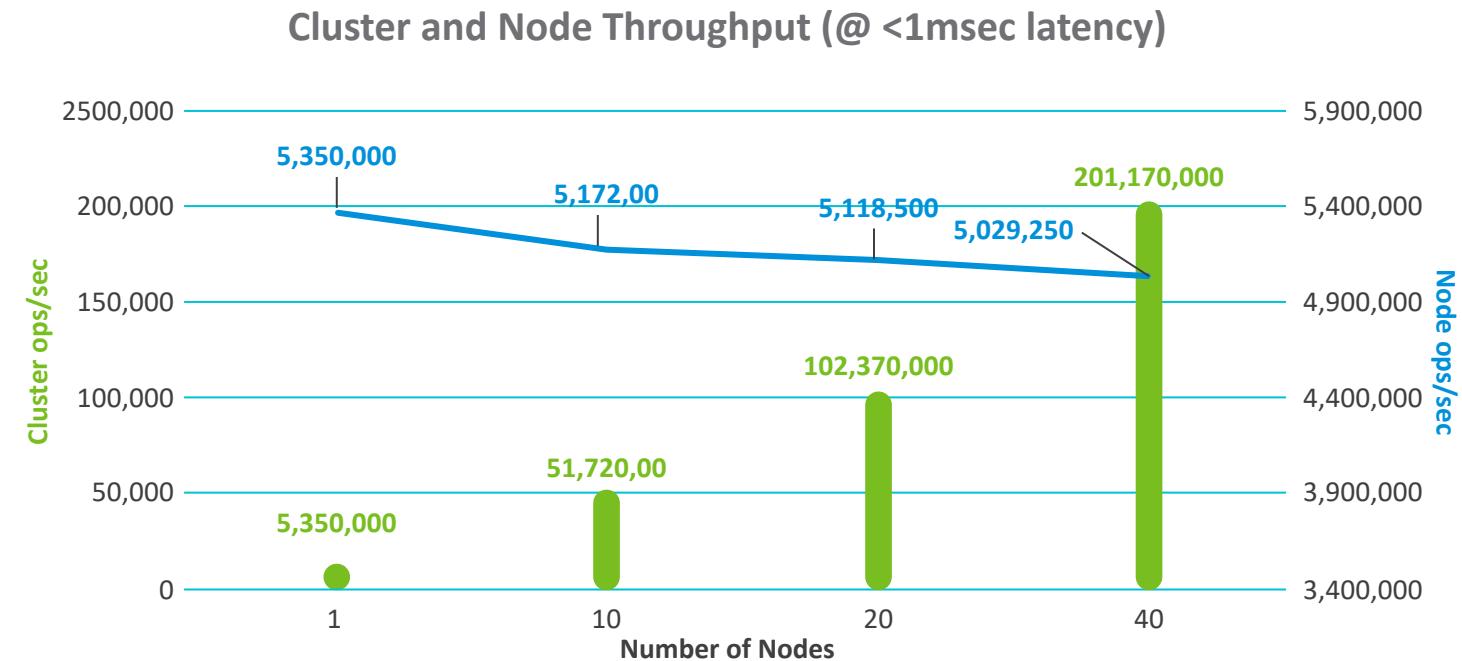
Backup & Restore

Redis Enterprise Is...



Redis Enterprise brings the Most Loved Database to Petabyte Scale

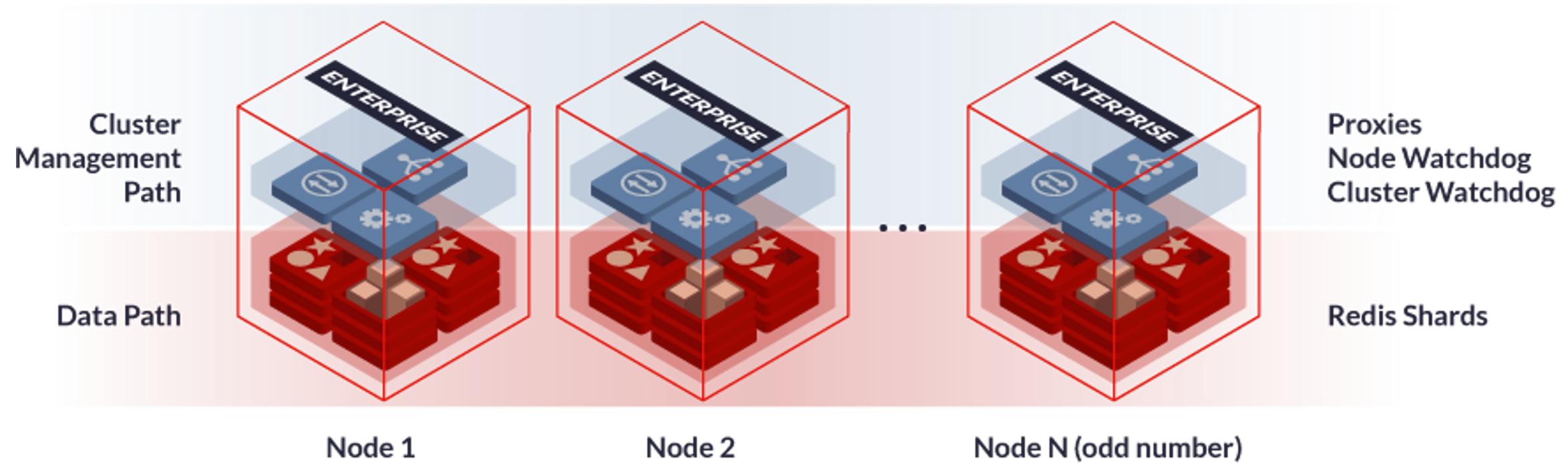
- Shared-nothing architecture to enable **near linear scaling**
- Fully utilizes **multi-core / multi-node** architecture for vertical and horizontal scaling
- **Scaling and resharding** without downtime



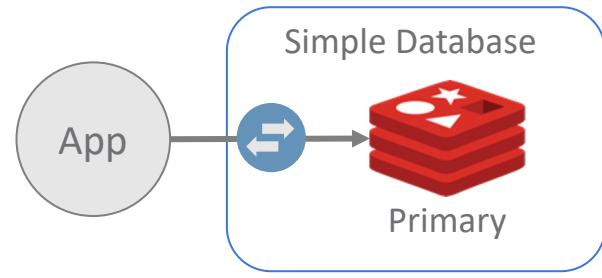
Redis Enterprise with **200M ops/sec @ <1ms latency**
on 40 AWS instances

Redis Enterprise + Tanzu = Geo-Distributed Modern Apps

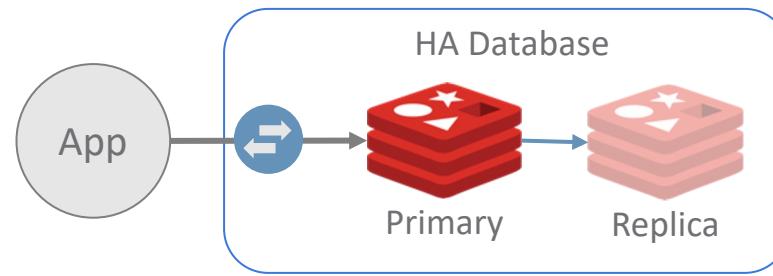
Redis Enterprise: Cluster



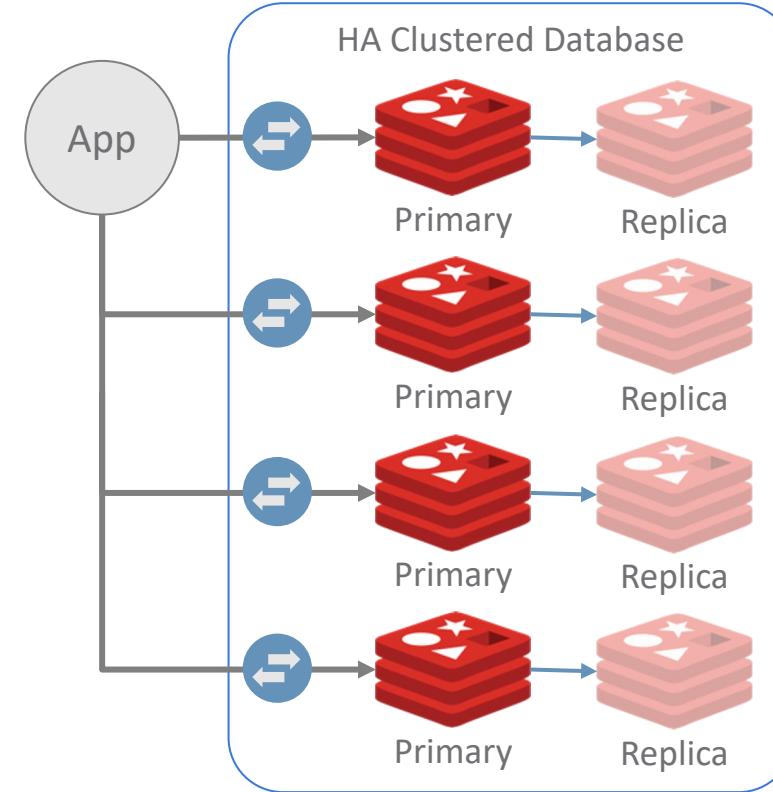
Redis Enterprise: HA, Scale, Geo-Distributed AA



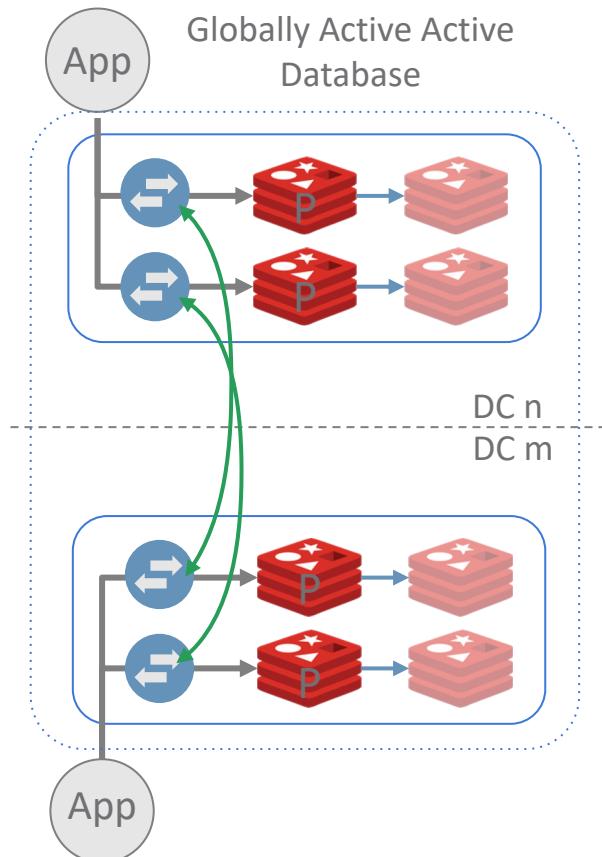
Suitable for :
Dev/Test/MVP



Suitable for Production:
Most internal apps (< 100k users)
(< 20GB, < 20k Ops/sec @ 1ms)

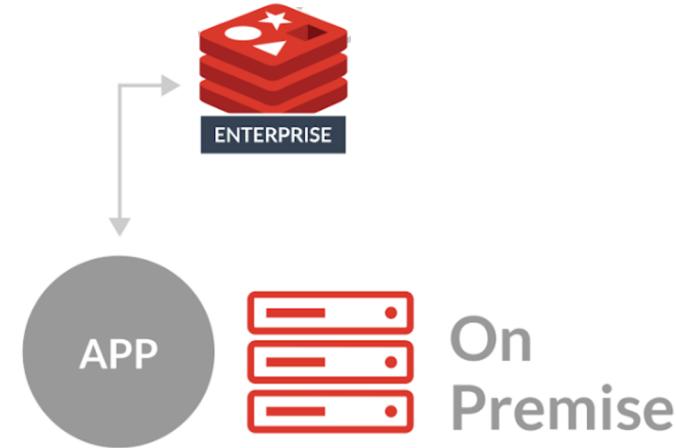


Suitable for Production:
External Apps w > 100k users
(> 25GB, > 25k Ops/sec @ 1ms)

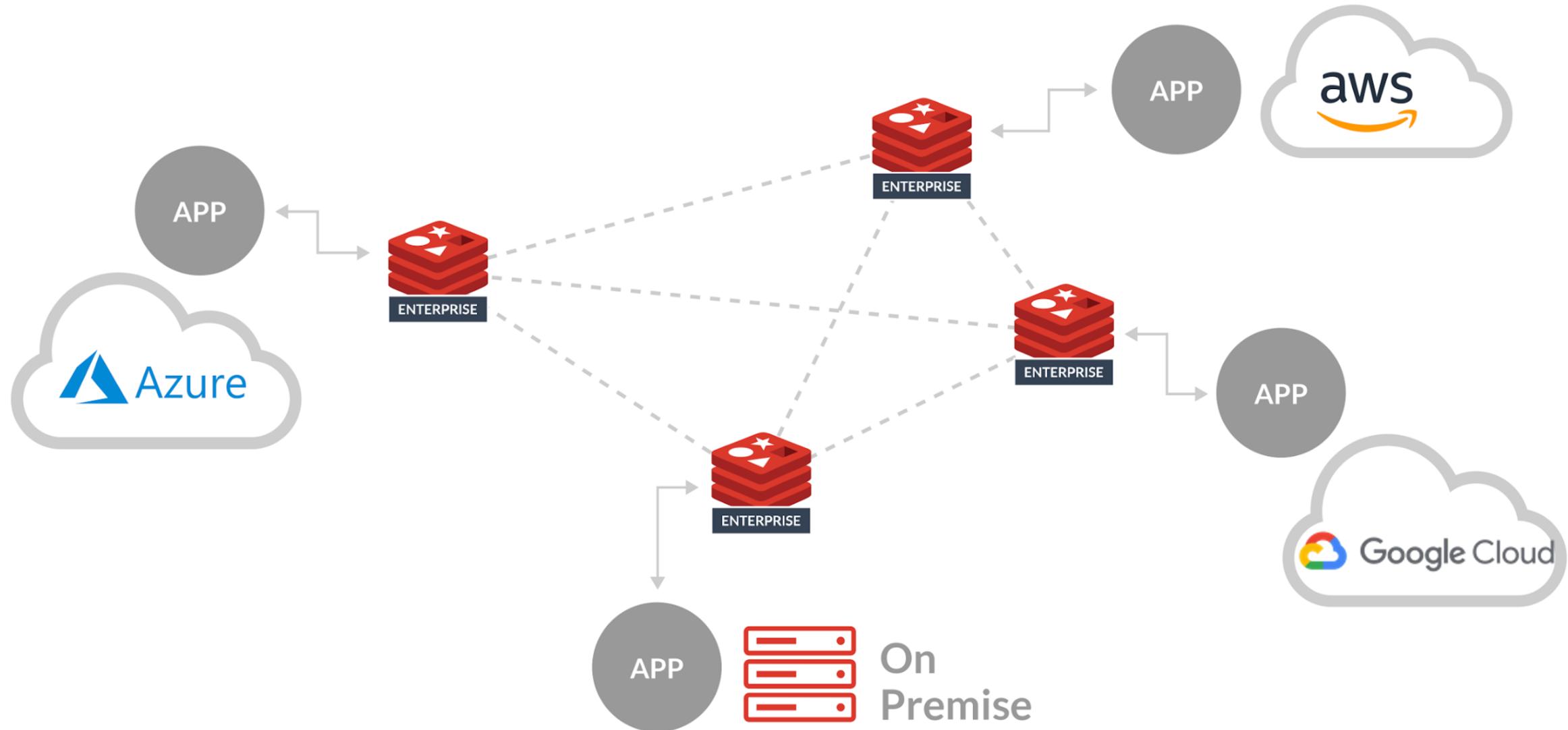


Suitable for Active Active
Production Applications

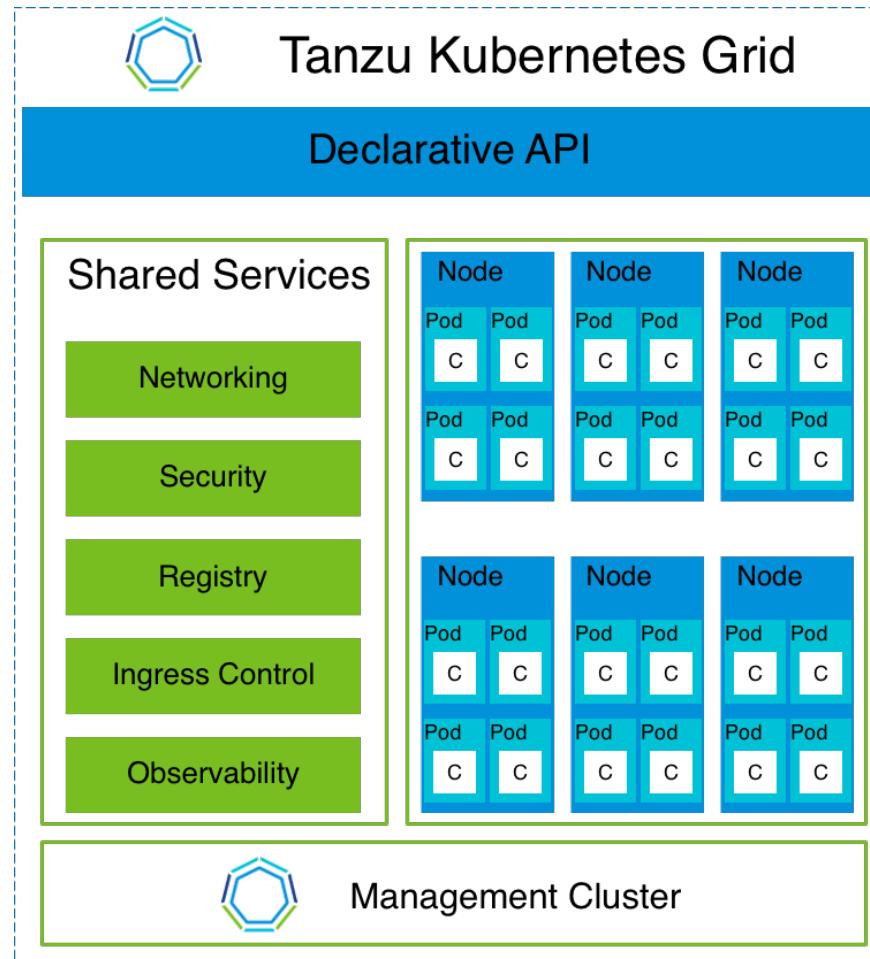
Redis Enterprise: On Premise



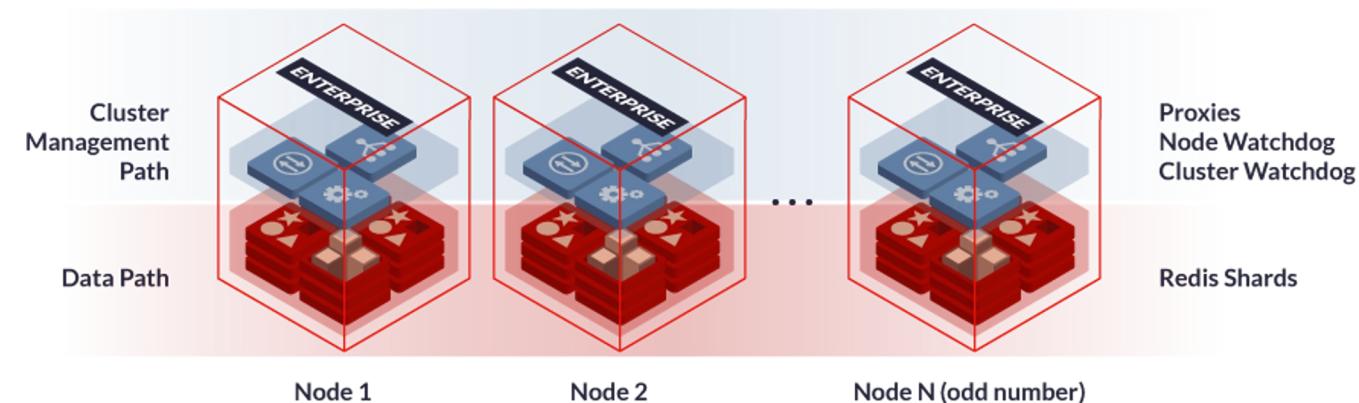
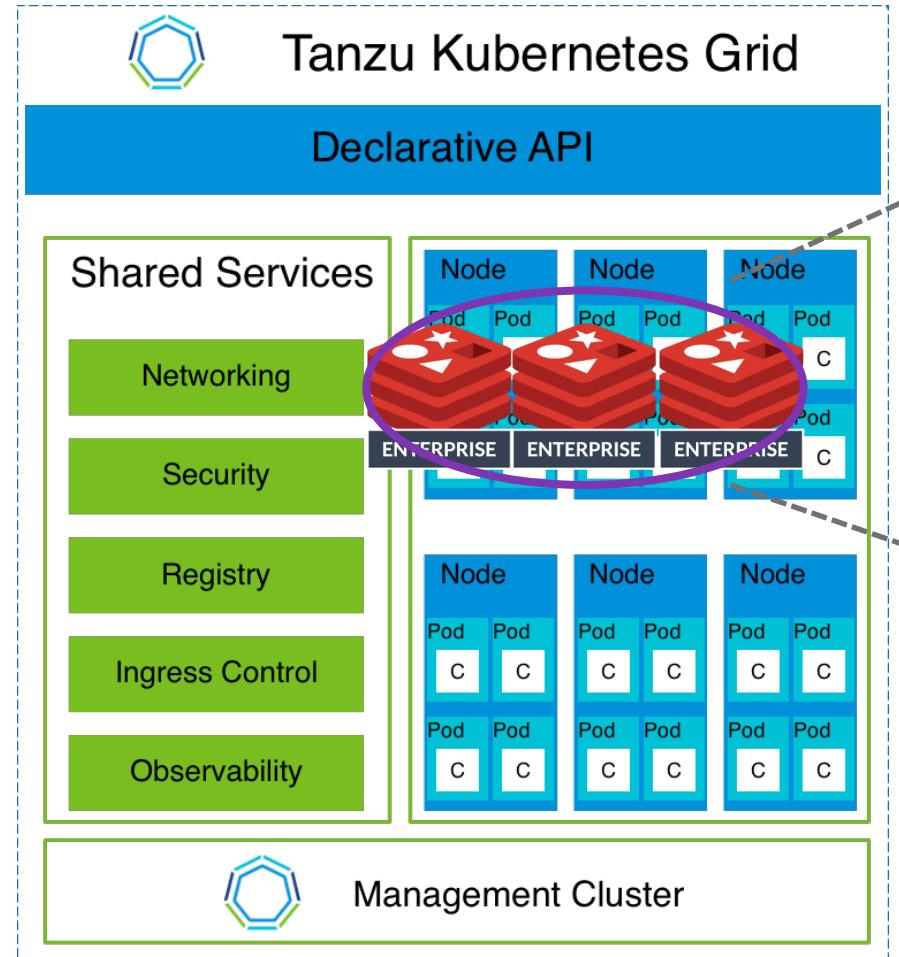
Redis Enterprise: On Premise, Hybrid Cloud, Multi Cloud



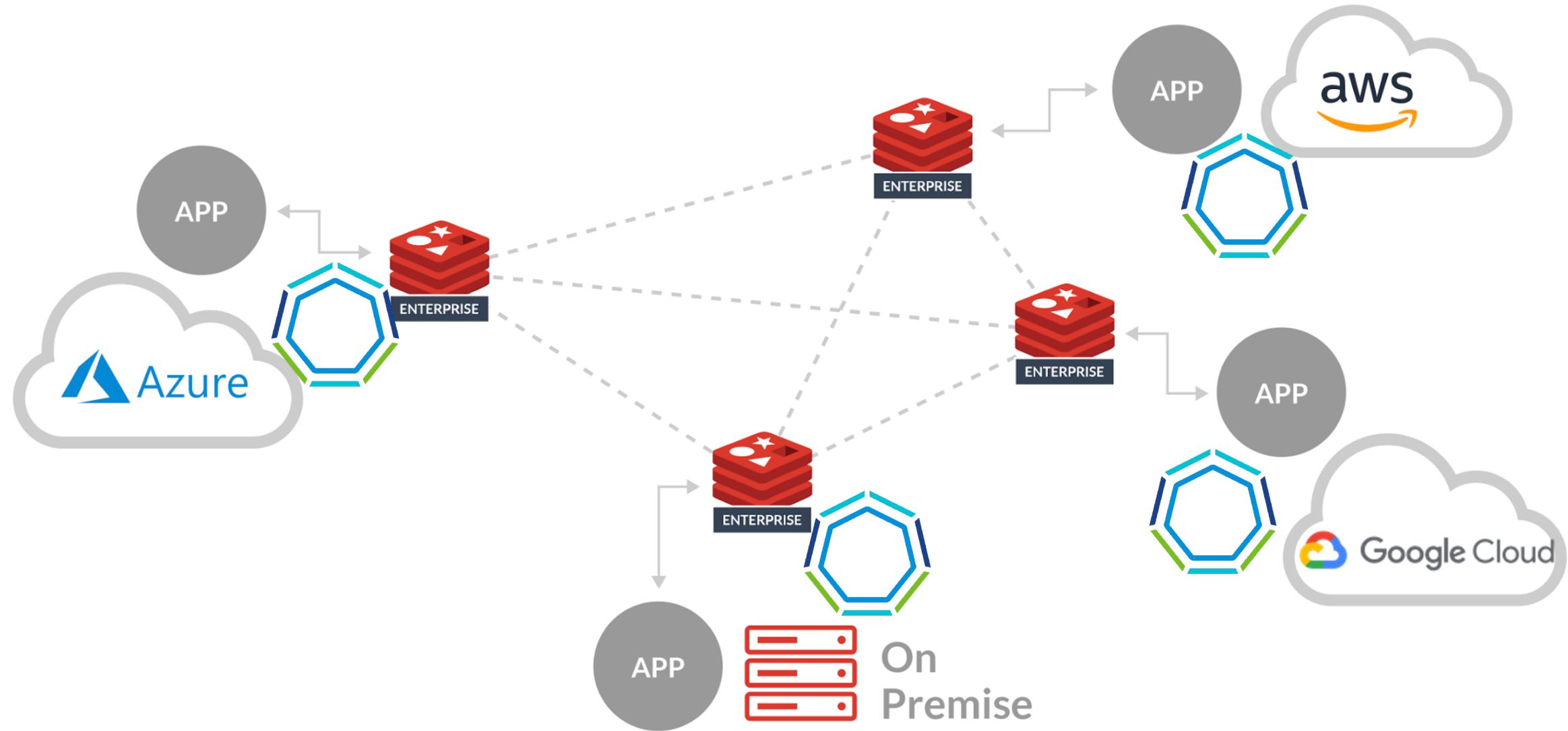
Tanzu: Universal Infrastructure



Redis Enterprise + Tanzu



Redis Enterprise + Tanzu: One Deployment Pattern Everywhere FTW



Demo!

Please take
your survey.



Thank You

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VMware Marketplace Overview



VMware Marketplace is a one-stop shop for **first-party** solutions, **third-party** solutions, **free open source** solutions, and curated, **hardened open-source images** for users.

780+

Publishers

2,300+

Published solutions in the catalog

15+

Solution categories

The screenshot shows the VMware Marketplace website. At the top, there are three main features: 'Certified and Validated Solutions' with a purple checkmark icon, 'Discover, Try, Buy, Deploy' with a blue dotted icon, and 'OVAs, Helm Charts, Containers, and more' with a green cloud icon. Below these is the product listing for 'Redis Enterprise'. The listing includes a thumbnail of a red Redis logo, the product name 'Redis Enterprise', a brief description, and links for 'KUBERNETES', 'DATABASES', and 'LISTING'. On the left, there's a sidebar with 'Product Status' (PUBLISHED), 'Deployable Platforms' (Kubernetes), and 'Operating System' (RHEL, UBUNTU, CENTOS). The main content area has tabs for 'Overview' (selected), 'Pricing', 'Resource & Support', and 'Request Info'. The 'Overview' tab contains sections for 'Description' (a robust, in-memory database platform), 'High Performance Caching' (a high-performance application-caching layer), and a note about 'Active-Active replicated Redis databases (CRDB)'. To the right, there's a 'Features' section with a bulleted list: 'High availability with health monitoring; zero-touch upgrades', 'Simplified access to your data layer with persistent storage', and 'Rapidly deploy Redis Enterprise into Kubernetes clusters'. A 'SIGN IN' button is located at the top right of the page.

Link to Listing: <https://marketplace.cloud.vmware.com/services/details/redis-enterprise-1?slug=true>