
MariaDB
OPEN WORKS
BE UNSTOPPABLE

MOVING GALERA FROM COMMUNITY SERVER TO ENTERPRISE SERVER TO SKYSQL

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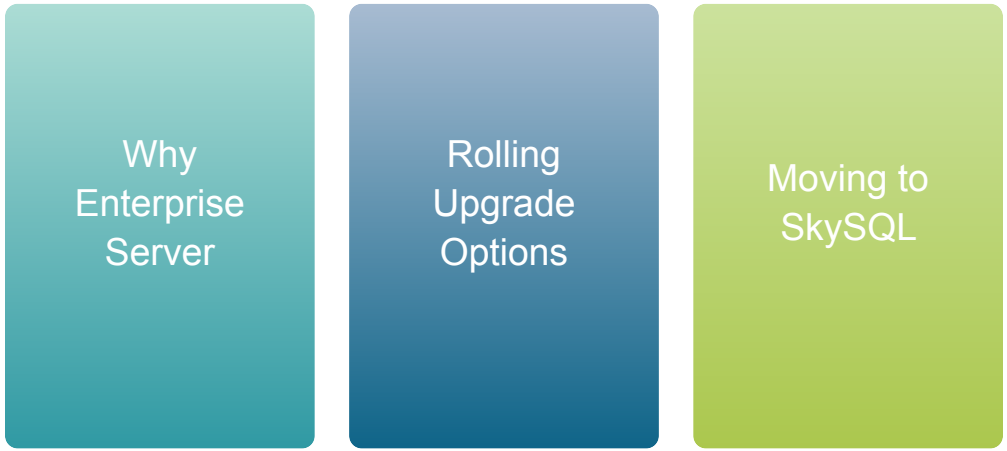
WHAT WE'RE FOCUSING ON



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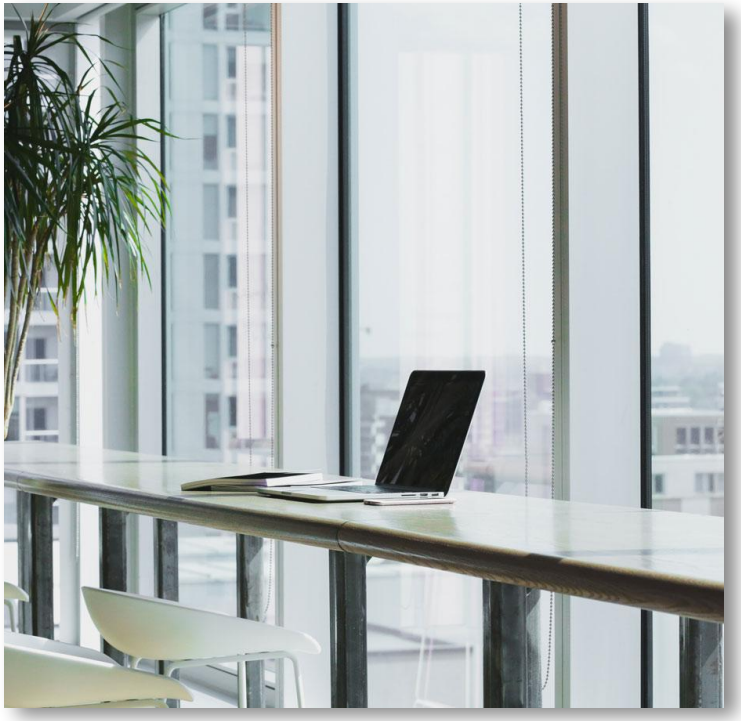
MARIADB SERVER

- 75% of Fortune 500 companies use MariaDB
- High demand:
  - Top 5 databases on Docker Hub
  - 1B+ Docker Hub downloads
  - 60M+ reach via Linux distros
  - 300K+ Twitter followers



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UNSTOPPABLE PERFORMANCE
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MARIADB ENTERPRISE SUBSCRIPTION

Enterprise Server

Enterprise Availability

Support & Services

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MARIADB ENTERPRISE SERVER

- Open source
- At least 5 yrs maintenance
- Managed release cycles
- Includes only supported, stable features
- Built for demanding production environments
- Feature backports to older ES versions
- Available in SkySQL
- Enterprise only features and services including:
  - non-blocking backup
  - improved auditing
  - encrypted buffers
- MaxScale
  - Specific Galera Monitor
  - Single connection for your Application
    - MaxScale forwards traffic to all nodes of cluster

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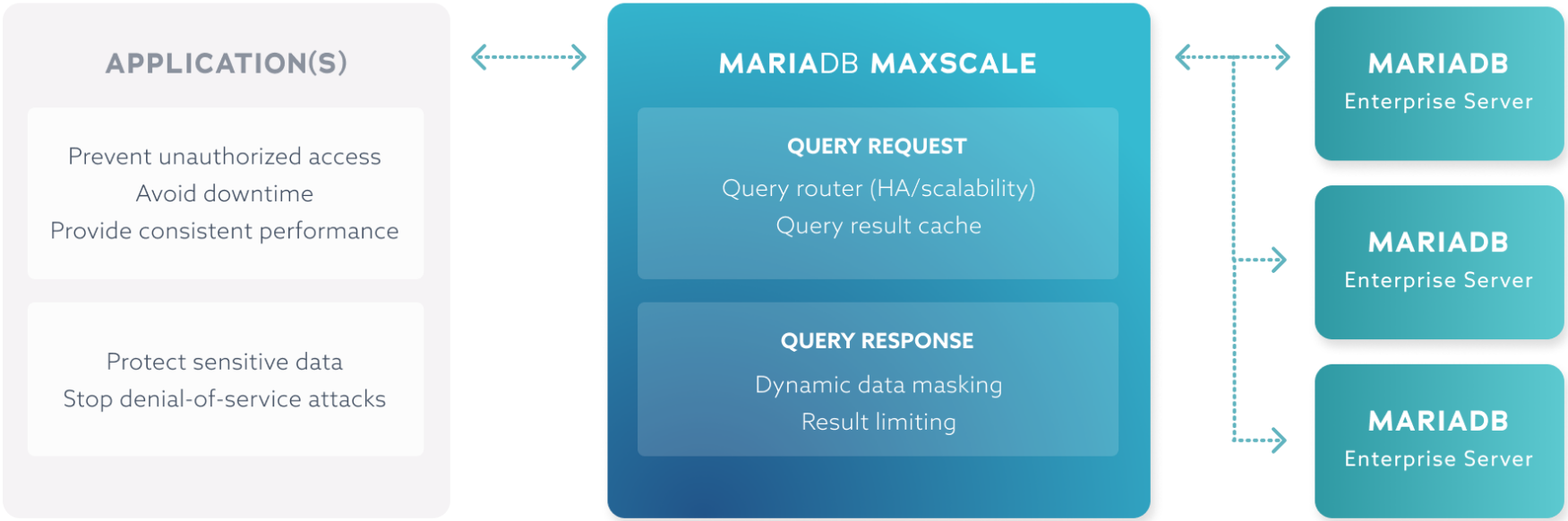

MariaDB MaxScale simplifies application development by abstracting away the underlying database topology.

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ENTERPRISE FEATURES

End to End Encryption

Non-blocking Backup

Improved Auditing

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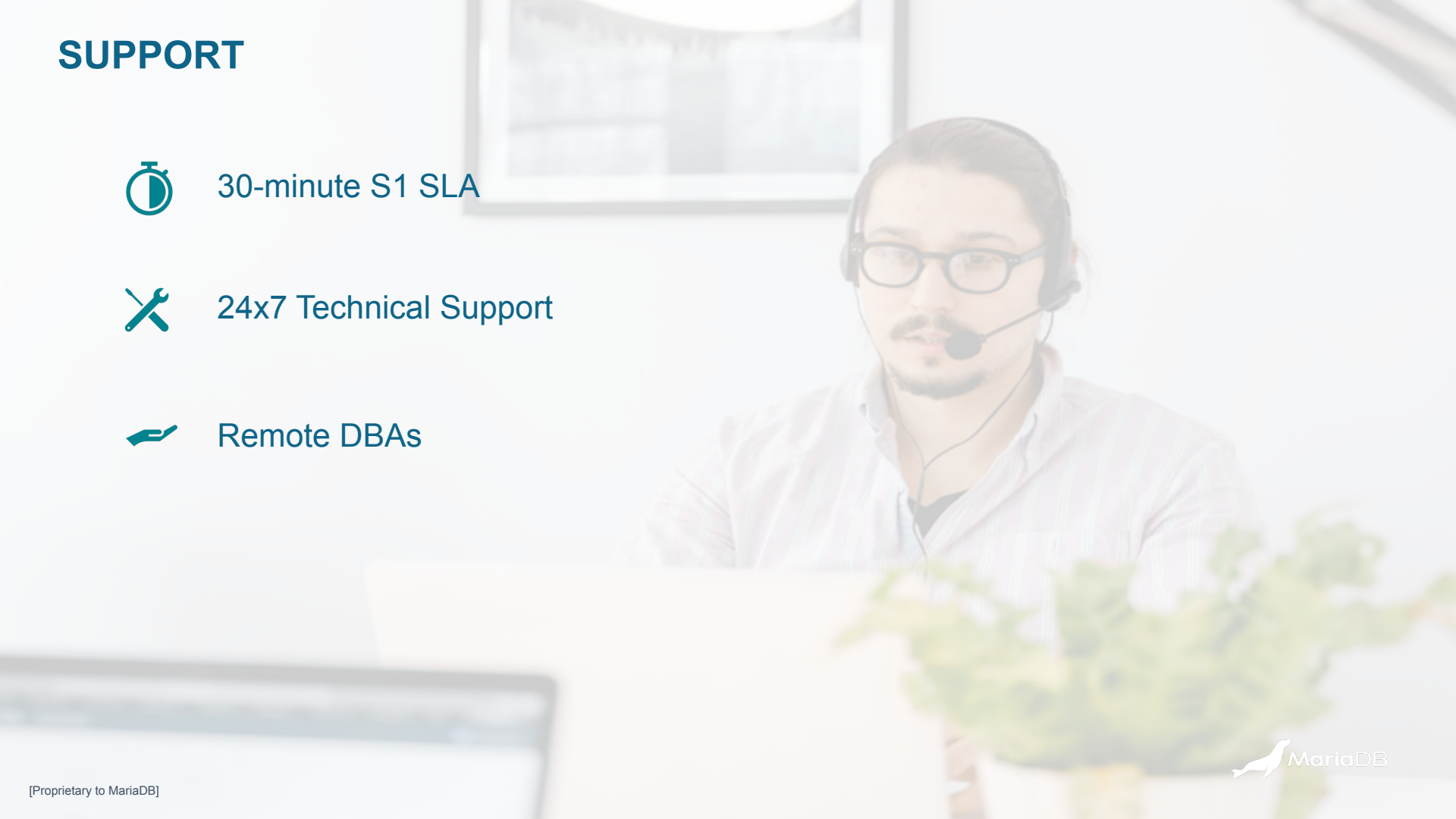
SUPPORT

- 30-minute S1 SLA
- 24x7 Technical Support
- Remote DBAs



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Recap: Why Enterprise Server

- Built for demanding production environments
- Hardened for production deployments
- Secured with default security parameters set to best practices
- MaxScale is included
- Galera buffers are able to be encrypted
- Enterprise backup tool for online backups with little to no impact

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WHAT IS A ROLLING UPGRADE

- Each node is upgraded individually
- The cluster is always operational
- There can be no downtime from the application's perspective
- MaxScale will route traffic to the online nodes
  - Putting node in maintenance mode will prevent MaxScale from sending any traffic to the node

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ROLLING UPGRADE OPTIONS

- Online
  - No downtime is necessary
  - Application allowed to stay online
  - Verify gcache settings first
- Offline
  - Downtime window needs to be scheduled
  - Your application will be unavailable until process is complete
- Applies to both
  - Upgrade one node at a time
  - Be sure to run the mariadb-upgrade after upgrade

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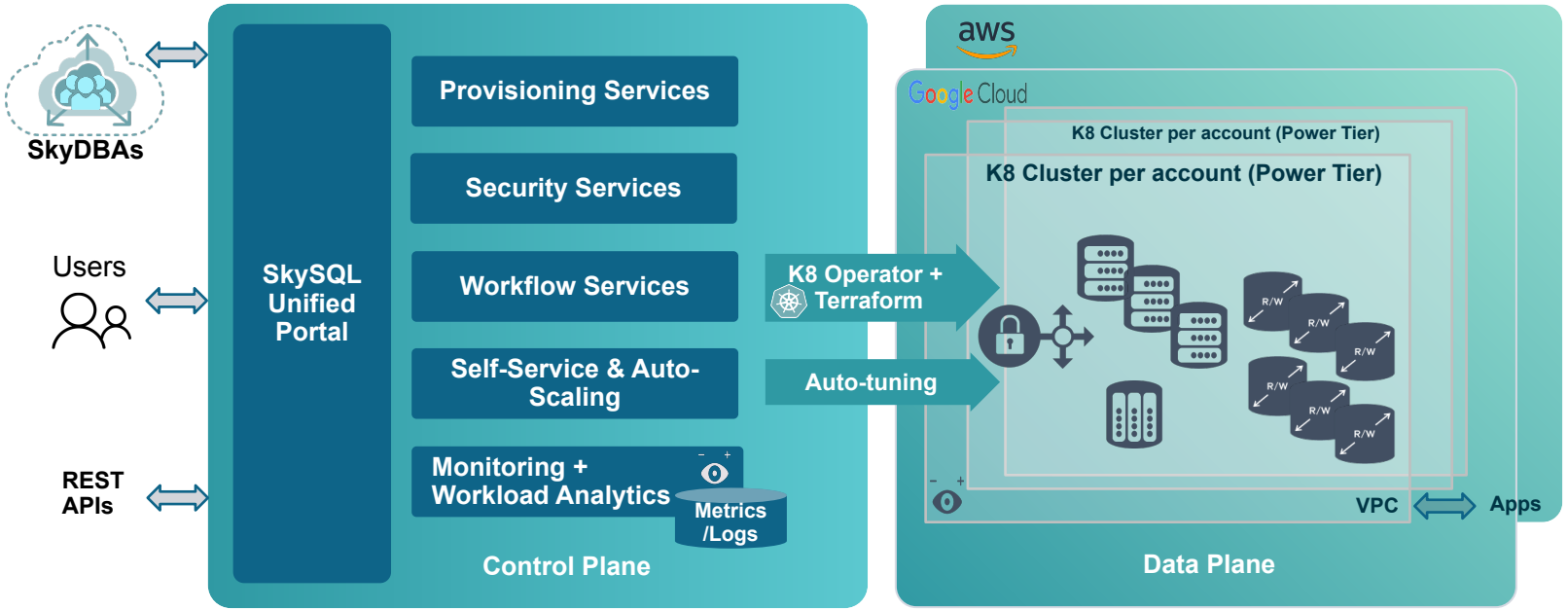
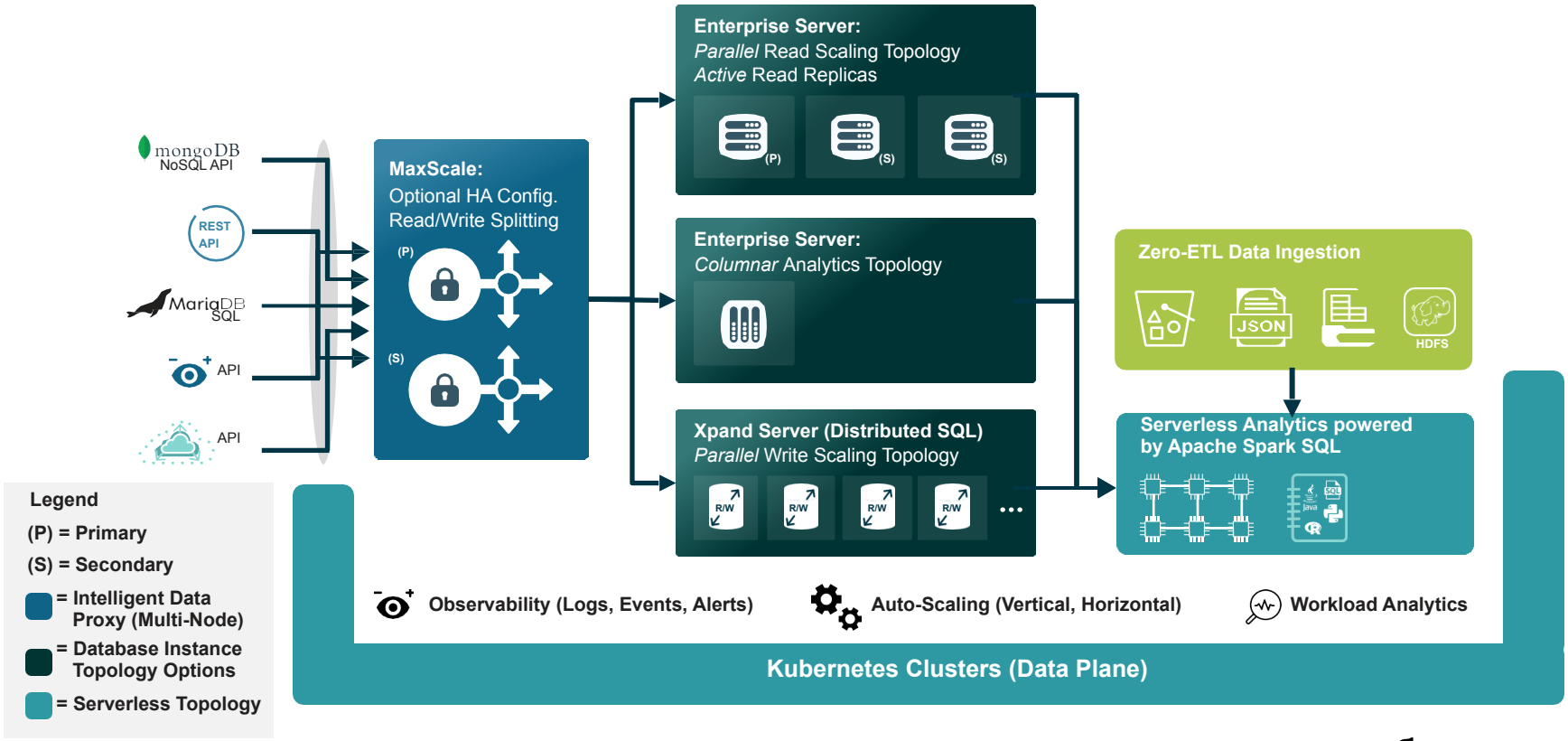
SKYSQL CLOUD DATABASE SERVICE ARCHITECTURE



Legend

- Kubernetes Cluster (AWS – EKS, GCP – GKE)
- MaxScale Intelligent Data Proxy
- Enterprise Server
- ColumnStore Engine
- Xpand (Distributed SQL)
- Observability services

SINGLE SQL DIALECT FOR ANY WORKLOAD AT SCALE



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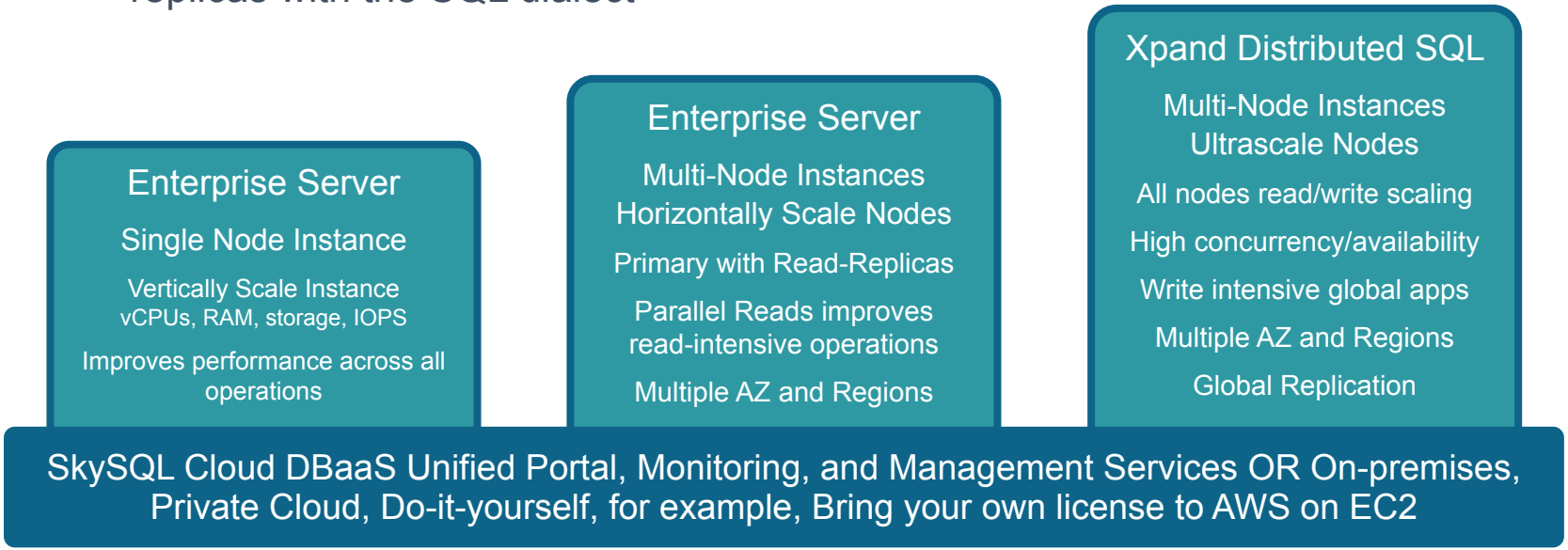
Ultrascale, Supporting Improved Availability and Performance *as You Scale*

- All nodes are active, so you're always getting the ROI you paid for
- Zero code or developer intervention is required to scale, failover, or leverage replicas with the SQL dialect



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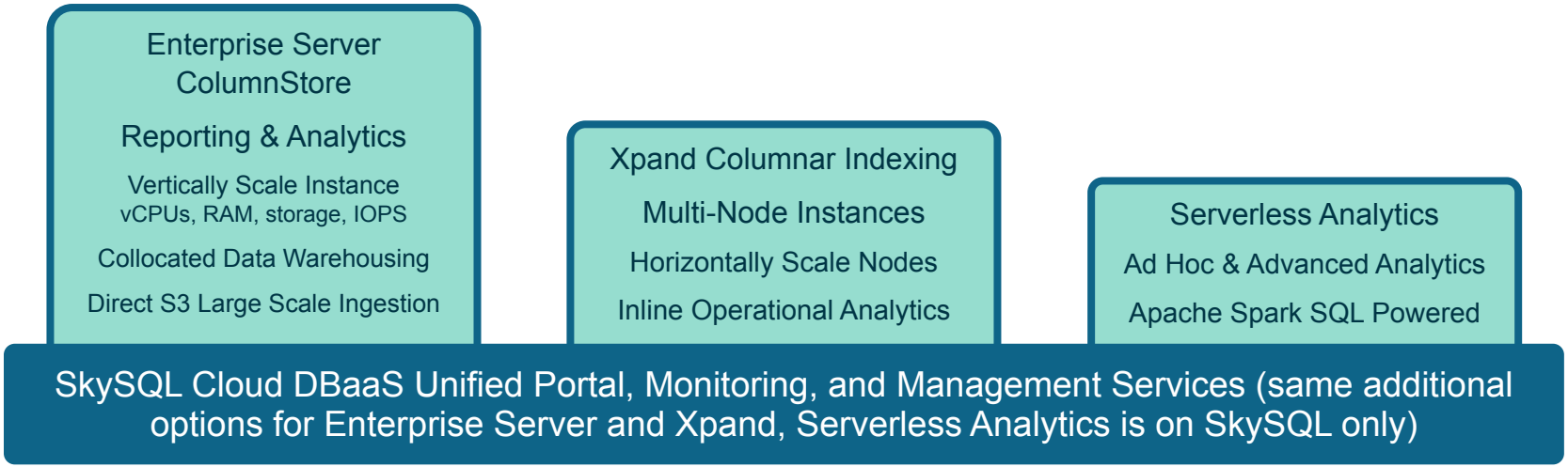
Augmented/Enhanced Transactional Workloads

- Avoid taxing either the operational transactions or overburdened EDWs
- Eliminate/reduce ETL and data pipeline complexity
- Accelerate BI/reporting



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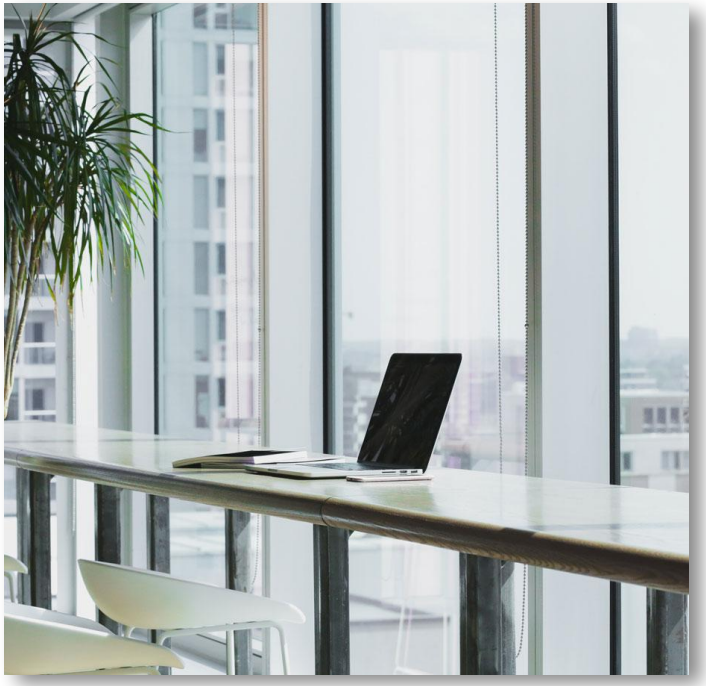
MOVING TO SKYSQL

- Read Heavy
  - Use cases:
    - Product catalogs
    - Reporting
    - Shopping carts
  - Replicated transactions
    - High availability
    - Self-healing
    - Automated split-second failover
    - Read scale replication



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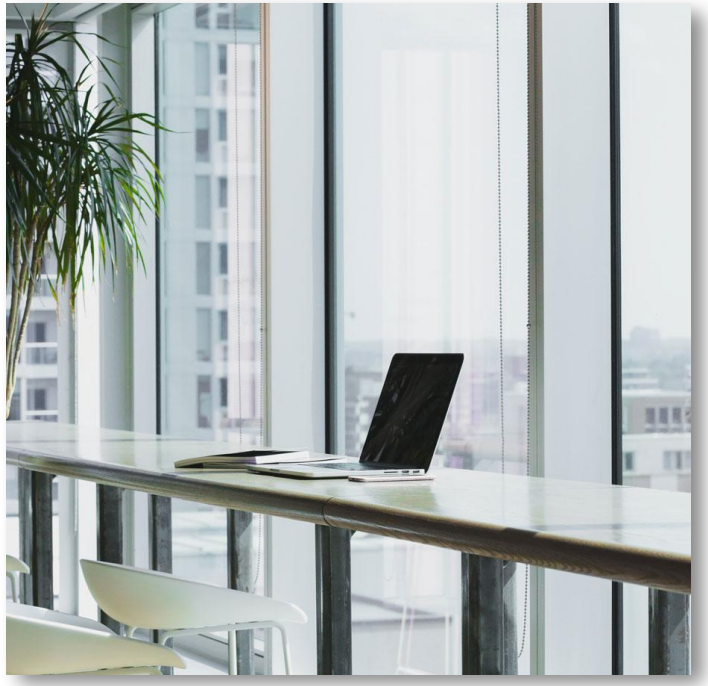
MOVING TO SKYSQL

- Write Heavy
  - Use cases:
    - Payments
    - Customer Profiles
    - Messaging
    - Logging
    - IOT
  - Xpand - Distributed SQL
    - Elastic to millions of transactions per second
    - Automated split-second failover
    - Scale horizontally by adding nodes
    - Read and Write scalable



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WHAT WE COVERED

Why to switch to Enterprise Server for your Galera Cluster

What a Rolling Upgrade is and their options

How to migrate to SkySQL

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NEXT STEPS

Check out these sources to learn more about MariaDB

- For more information on MariaDB Enterprise Server, **check out this datasheet**
- To learn more about High Availability options for MariaDB Enterprise check out this **Guide to high availability with MariaDB**
- For migrating to SkySQL check out this whitepaper **MariaDB SkySQL: Lift-and-Shift Migration**
- To learn more about Xpand please check out the OpenWorks session: ***MariaDB Xpand Under the Hood: From Architecture to Reality*** available on-demand later today

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THANK YOU


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