Rubrik Mosaic
Speed, data mobility and storage efficiency for NoSQL data protection

MOSAIC SOLVES NOSQL DATA MANAGEMENT
Rubrik Mosaic™ solves the unique data protection challenges of NoSQL databases. Designed specifically to answer the issues of eventual consistency and replicated data sets characteristic of NoSQL, Rubrik Mosaic is a data protection and data management software solution that delivers speed, scale, management flexibility, and storage economy unlike traditional backup applications. Organizations that deploy large-scale Apache Cassandra, DataStax Enterprise or MongoDB applications on-premises, in the cloud, or hybrid, benefit from improved application availability, cloud data mobility, faster development cycle times, and storage savings with Rubrik Mosaic.

SPEED AND SCALE
Up and running in minutes, cloud or on-premises. Start using a database while recovery is taking place.

DATA MOBILITY
Application-centric data management means backups are always consistent and can be restored to dissimilar topologies.

STORAGE ECONOMY
Rubrik introduces semantic deduplication to reduce multiple database replicas into a single always-consistent backup image.

RUBRIK MOSAIC REFERENCE ARCHITECTURE

DATA SOURCE (CLUSTER 1)

DATA SOURCE (CLUSTER 2)

SECONDARY STORAGE

Consistency & Deduplication

Control Plane

Parallel Data Streaming

Test/Dev Refresh

Control Plane

Node 0

Node 1

Node 2

Node 3

Node 4

Node 5

Node 6

Application Listeners

Application Listeners

Dev Ops

Oracle Cloud

AWS

Microsoft Azure

Google Cloud

Control Plane
SPEED AND SCALE TO MEET ENTERPRISE Demands

• Parallel data streaming directly to and from backup storage without any in-line media servers or other bottlenecks means improved RPOs and the ability to deliver aggressive RTOs for the largest enterprise applications. Incremental forever backup reduces RPOs.

• Because it’s an elastic, software-only solution designed for the cloud, Mosaic can scale up and down on demand. Deploy Mosaic on-premises or in the public cloud including AWS, Azure, Google, and Oracle. With Mosaic, you choose the most cost-effective storage.

• Mosaic offers multi-faceted data mobility. Mosaic can recover all or just a subset of the data to dissimilar database topologies, from on-premises to the cloud, or to different clouds.

• Mosaic lets you restore to an original cluster even when the topology changes – either planned or unplanned. Dissimilar topology restore is achieved without a performance impact and without the need to repair the database.

• Restore to different sized clusters in downstream environments to support automated test/dev refresh and speed development cycle time. Transaction data is always restored in a consistent state from the production database irrespective of where data is restored.

• Mosaic lets you perform a query and restore only the data you need from virtually any point in time. Queryable recovery with Mosaic’s data masking capability reduces the risk of confidential data exfiltration in test databases.

• Support for all major public cloud providers, combined with Mosaic’s global metadata catalog give you the independence and control to store backup and archive data anywhere – and move it where and when you need to.

EFFICIENT BY DESIGN

• Ultralight connectors, or NoSQL Application Listeners accelerate large scale backup and recovery for Apache Cassandra, DataStax Enterprise and MongoDB. One license, based on database node count, manages all supported databases across on-premises or cloud deployments.

• Mosaic elastic scale-out architecture is used by customers to automatically scale up during peak demand, and to scale back during slack periods to save costs. When deployed in a clustered configuration, Mosaic also ensures high availability for the most demanding enterprise applications.

• Rubrik introduces semantic deduplication, an industry first, to deliver storage efficiency that other solutions cannot. Mosaic identifies identical data fragments (such as a database entry) so that only one copy of the data is stored. This allows Mosaic customers to achieve up to 70% backup storage reduction for multi-replica datasets.

CUSTOMERS RELY ON RUBRIK MOSAIC TO SCALE NOSQL

“We have been using Rubrik Mosaic to protect our critical customer facing cloud-native applications deployed on MongoDB databases on Amazon Web Services (AWS). Rubrik Mosaic helps us protect our MongoDB databases against logical errors, realize important test/dev use cases critical for our application and developer teams, and achieve significant cloud storage cost savings.”

Brian Diette
Director of Engineering
Maxwell Health

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SP Naidu
Director of Data Technologies Engineering
Digital River