Rubrik and Mellanox — Instant Application Availability at Scale

A Unified, Globally Accessible Cloud Data Management Platform for Enterprises

Data protection and lifecycle management is always at the core of the enterprise business IT infrastructure. With unprecedented data volume growth, forward-looking companies seek to keep data flowing through an agile, scalable infrastructure. However, many IT organizations are hindered by complex, legacy, multi-point data management solutions, which leads to rigid and fragmented infrastructures. Such environments are typically challenged by long and costly deployment cycles, the inability to meet service level agreements (SLAs), a lack of scalability, architectural complexity, and vulnerability to security breaches. As enterprise data centers evolve into clouds, unified data management across hybrid cloud infrastructures has become a requirement.

Rubrik’s Cloud Data Management Platform addresses these challenges, delivering automated data protection, instant data access, continuous application availability, and enterprise-class resiliency and security across hybrid and multi-cloud environments. Taking a software-defined approach, Rubrik decouples data from the underlying infrastructure, bridging the gap between on-premises data centers and clouds. Rubrik is purpose-built for cloud environments, leveraging flash-optimized storage and transparent networking solutions such as Mellanox Ethernet.

Rubrik Cloud Data Management Platform

Rubrik’s Cloud Data Management platform delivers a single software fabric to protect and manage data in the cloud, at the edge, and on-premises for many use cases, including backup, disaster recovery, archival, analytics, test/dev, and more. Hybrid cloud enterprises leverage Rubrik to mobilize applications across clouds, automate orchestration with self-service access, and search and analyze application data at scale. With a cloud-native approach for data lifecycle management, Rubrik drives greater performance and operational continuity at lower costs and with stronger data protection and compliance.

KEY BENEFITS

• Unified data management platform for data protection, recovery and security
• Reliable, non-blocking Mellanox switches delivering efficient network fabric with predictable performance
• Integrated automation ensuring no disruption to business applications in virtualized and multi-cloud environments
Rubrik Cloud Data Management Features

- **Instant Access**: Rubrik enables predictive global search and delivers instant application recovery by unifying data locked within disparate application silos into one globally indexed namespace, while leveraging zero-byte cloning technology to enable on-demand copy data workflows.

- **Instant Recovery**: Rubrik enables near-zero recovery time objectives (RTOs) for virtual machines as well as SQL Server and Oracle databases. With Live Mount, users can mount applications directly on Rubrik with self-service access and without rehydrating production environments.

- **Automated Orchestration**: Rubrik dramatically reduces daily operational management, providing a step function change in simplicity by enabling a single policy engine to orchestrate SLAs across the entire data lifecycle. The Rubrik RESTful API interface automates how data services are created, consumed, and retired across clouds.

- **Security and Compliance**: Rubrik secures data in-flight and at-rest, across all locations throughout its lifecycle. The Rubrik platform delivers granular role-based access control across all cloud data management workflows while providing automated compliance reporting to successfully complete both industry and internal audits. Rubrik’s immutable filesystem protects data from ransomware, while Rubrik’s Polaris Radar can detect anomalies and enables recovery with just a few clicks. With Rubrik’s Polaris Sonar, users can also automate the discovery, classification, and protection of sensitive data for efficient data governance. Sonar applies machine learning to automate sensitive data classification, allowing enterprises to easily identify and lock down data exposure without impacting production environments.

- **Broad Platform Integration**: Rubrik is designed to work for virtualization environments (ESXi, AHV and Hyper-V) as well as physical databases (Microsoft SQL Server and Oracle Databases) and applications. Rubrik also automates protection for cloud and SaaS workloads such as Amazon EC2 and Microsoft Office 365. Deployed as a software instance in cloud, Rubrik extends search, disaster recovery, and archival into the cloud, enabling customers to quickly spin up applications in the cloud for cost-effective recovery and test/development.

**Mellanox’s Ethernet Storage Fabric™**

Networking plays a critical role in data replication, archival, backup, recovery and search. A high-performance network powered by Mellanox’s Ethernet Storage Fabric™ (ESF) with low latency and zero packet loss guarantees instant data replication and application availability per RTO/RPO objectives. Transferring data across the network reliably and efficiently, Mellanox ESF delivers transparent end-to-end networking optimized for the Rubrik solution. Moreover, the Mellanox ESF includes What Just Happened™ (WJH), an event-based network telemetry tool, and Mellanox NEO®, Mellanox’s network orchestration and management software. WJH and NEO provide real-time network visibility and automated networking provisioning, monitoring and troubleshooting. WJH and NEO can be easily integrated with 3rd-party management software. In particular, the Mellanox SN2010 Top-of-Rack (TOR) switches are purpose-built for Rubrik appliances.

Figure 1: Rubrik Cloud Data Management Platform with Mellanox Storage Fabric (ESF)
Benefits of Rubrik Cloud Data Management - Mellanox Ethernet Storage Fabric (ESF) Solution

Smallest footprint
- Half-width, 1RU 2 units in 1RU for HA

Flexible, easy to scale
- 18 x 1/10/25GbE downlink ports
- 4 x 40/100GbE uplink ports

Guaranteed, consistent performance per RTO/RPO objectives
- Line rate at any packet sizes with zero packet loss
- Hardware VTEP for Layer-2 extension across data centers

Easy-to-integrate network management
- Real-time network visibility for monitoring and trouble-shooting
- Automated network provisioning
- REST APIs for 3rd-party software integration

Figure 2: Rubrik Cloud Data Management

About Rubrik
Rubrik delivers a single platform to manage and protect data in the cloud, at the edge, and on-premises. Enterprises choose Rubrik’s Cloud Data Management software to simplify backup and recovery, accelerate cloud adoption, and enable automation at scale. As organizations of all sizes adopt cloud-first policies, they rely on Rubrik’s Polaris SaaS platform to unify data for security, governance, and compliance. For more information, visit www.rubrik.com and follow @rubrikInc on Twitter.

About Mellanox
Mellanox Technologies (NASDAQ: MLNX) is a leading supplier of end-to-end Ethernet and InfiniBand intelligent interconnect solutions and services for servers, storage, and hyper-converged infrastructure. Mellanox intelligent interconnect solutions increase data center efficiency by providing the highest throughput and lowest latency, delivering data faster to applications and unlocking system performance. Mellanox offers a choice of high performance solutions: network and multi-core processors, network adapters, switches, cables, software and silicon, that accelerate application runtime and maximize business results for a wide range of markets including high performance computing, enterprise data centers, Web 2.0, cloud, storage, network security, telecom and financial services. More information is available at: www.mellanox.com