

Red River Supports FedRAMP Certification with Complete Storage, Backup and Recovery



CHALLENGE

For nearly 30 years, NetComm has served as a solutions provider to a wide range of government and commercial clients. A Woman-Owned Small Business (WOSB), we specialize in information management and analysis software solutions tailored to support each client's organizational mission.

FedRAMP requires full backups of user-level and system-level information and information system documentation including security-related documentation be performed weekly and incremental backups be performed daily. FedRAMP also requires maintaining at least three backup copies, one of which is available online. Additionally, the confidentiality, integrity and availability of backup information must be protected.



SOLUTION

NetComm has contracted with Red River to manage an alternate storage capability for storage and retrieval of Beacon backup information. Red River accomplishes all required backup and recovery in the AWS GovCloud by leveraging the local CloudBerry application, AWS CLI tools and AWS S3 storage. The backup storage capability is approved and accepted by the JAB.

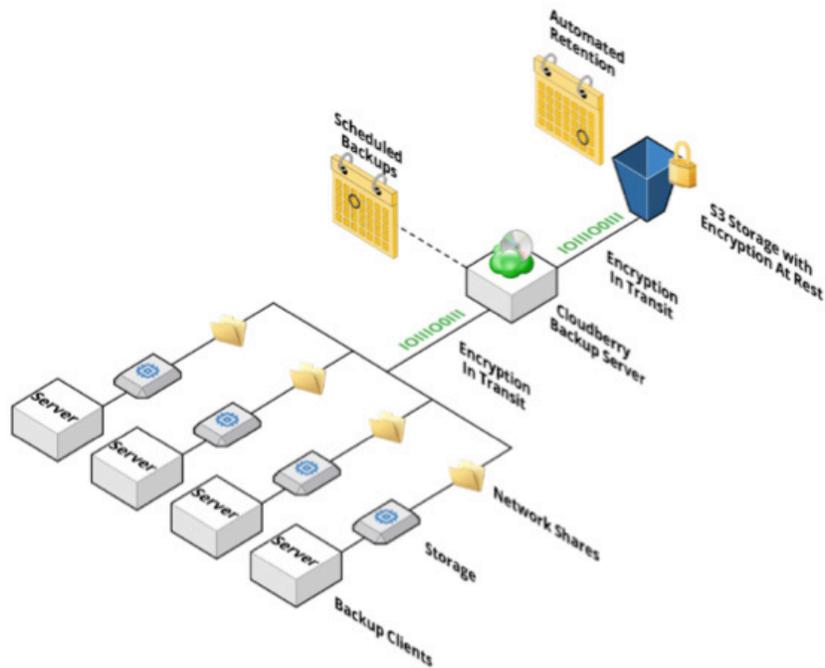
NetComm, through Red River Managed Services, provides for the recovery and reconstitution of the Beacon system to a known state after a disruption, compromise or failure. Recovery involves executing Beacon contingency plan activities to restore critical/essential mission and business functions. Reconstitution follows recovery and includes activities to return Beacon to a fully operational state, as well as deactivation of any interim Beacon capabilities that may have been needed during recovery operations. Reconstitution also includes assessments of fully restored Beacon capabilities, resumption of continuous monitoring activities, potential Beacon system reauthorizations, and activities to prepare the Beacon system against future disruptions, compromises or failures.

With NetComm generating nearly 160 TB of AWS storage consumption, Red River implemented a multi-tier backup strategy by combining the use of daily Cloudberry Backups, daily database backups, daily AWS Snapshots and monthly AMI golden images. These backup strategies utilize retention policies to ensure storage consumption does not run out of control. To ensure that NetComm maintains FedRAMP compliance and adheres to the System Security Plan (SSP), Red River developed custom coding and scripts to generate specific data for reporting requirements and implemented additional third-party tools, including CloudCheckr, Alert Logic and Tenable Nessus, to scan its environments on a continuous basis and adhere to strict compliance guidelines

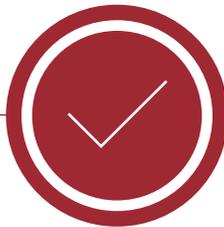
A management VPC was implemented to maintain these backup strategies and compliance requirements across three unique environments; production, test and development. VPC peering was implemented between the management VPC and each of the three environments. The production, test and development environments are isolated from one another with unique login credentials, and unique VPN's. The environments are then accessed from air-gapped jump boxes to keep the AWS environments completely isolated from Red River's corporate network. Internally, Red River developed

specific policies and guidelines addressing how to monitor and manage this unique customer to ensure all compliance standards were achieved.

To guarantee security is always maintained, Red River instituted dynamic alerting and reporting on real-time activities with automated responses. This allows the Red River NOC (Network Operations Center) to automatically disable accounts that pose a potential threat through machine-learning and predictive analysis.



CloudBerry Backup Reference Architecture



RESULTS

Red River delivered Netcomm a FedRAMP compliant backup solution that adheres to their System Security Plan (SSP). Designed to be secure, durable and scalable, it meets Netcomm’s current needs but will also meet any future needs they may have. Netcomm was able to reduce their storage costs by 17% and guards against environment sprawl. By implementing automated backup retention, which aligned to Netcomm’s retention SLAs, the customer further realized a reduction of manual labor required each month performance data governance activities.

Red River Managed Services provides 24/7 ongoing support and maintenance of the environment. These services consist of optimization of the environment, applying patching, monitoring and alerts. When Red River Managed Service receives alerts, the support team immediately responds to the issue to meet the SLAs defined by Netcomm.



ABOUT RED RIVER

Red River brings together the ideal combination of talent, partners and products to disrupt the status quo in technology and drive success for business and government in ways previously unattainable. Red River serves organizations well beyond traditional technology integration, bringing 25 years of experience and mission-critical expertise in security, networking, analytics, collaboration, mobility and cloud solutions.

Learn more at redriver.com.