

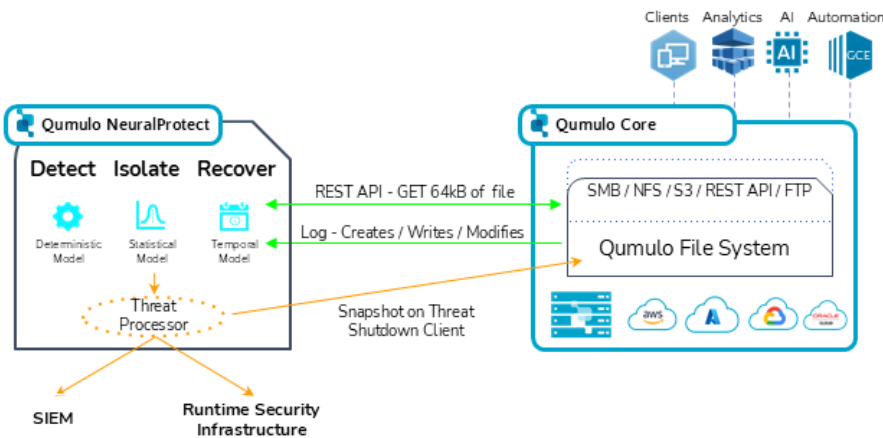


# NeuralProtect: Real-Time Ransomware Protection Stopping Attacks Before Files Are Compromised

ANY DATA  
ANY LOCATION  
**TOTAL CONTROL**

## EXECUTIVE SUMMARY

Ransomware and malware are among the biggest threats to enterprise data, yet most protection strategies, such as backup platforms, endpoint security, and entropy-based detection, remain reactive, responding only after production data is at risk. Qumulo NeuralProtect™ changes this by delivering built-in, real-time ransomware and malware protection directly at the storage layer. It performs deep file inspection on every file at the point of write, detecting known and zero-day threats before data is encrypted or corrupted. When a threat is detected, NeuralProtect instantly isolates the attack, creates defensive snapshots, and enables rapid recovery, preventing damage rather than requiring a lengthy restoration after a loss.



## THE CHALLENGE

Modern enterprises face a growing ransomware threat fueled by:



AI phishing & credential theft



Faster lateral attack spread



Attacks on unstructured data



Growing risk across critical files



Backup and endpoint tools react too late

## KEY BENEFITS

Qumulo NeuralProtect:

- Prevents ransomware before encryption spreads to production data—eliminating the costly gap between detection and recovery
- Detects both known and zero-day threats with 100% and 95+% accuracy, respectively
- Inspects actual file contents, reducing false positives to less than 0.01%.
- Automates real-time detection, alerting (SIEM), blocking, and response
- Eliminates separate infrastructure or add-ons required

Most security solutions focus on recovery rather than prevention. By the time ransomware reaches production storage, the business impact has already begun.

## THE SOLUTION: NEURALPROTECT

Qumulo NeuralProtect delivers proactive ransomware and malware defense by protecting live production data directly at the storage layer.

Unlike traditional approaches, NeuralProtect inspects every file at the point of write using deep file inspection and a mixture-of-models detection engine:

- Deterministic Model for known ransomware families
- Statistical Model for zero-day ransomware detection
- Temporal Model for sophisticated attacks designed to evade entropy detection
- Integrated Bitdefender Virus Detection Engine for malware detection

This content-based inspection dramatically improves detection accuracy while minimizing false positives.

## IDEAL USE CASES

Qumulo NeuralProtect is ideal for organizations with high-value unstructured data, including:

- Healthcare and life sciences
- Media and entertainment
- Financial services
- Government and public sector
- Manufacturing and industrial operations
- Research and higher education

Any environment where file-based production data is mission-critical benefits from storage-native ransomware prevention.

## WHY QUMULO

### Protect the Data Itself

Most vendors protect endpoints or backups. Qumulo protects live enterprise data where the real risk exists.

### Native Integration Into Primary Storage

With Qumulo, the real-time ransomware protection is natively integrated directly into the storage platform.

### Better Than Entropy-Based Detection

Unlike solutions such as NetApp ARP, which rely on entropy and metadata analysis, NeuralProtect

performs deep inspection of file contents for more accurate detection of zero-day and sophisticated attacks.

### Proven Results

Across billions of inspections in 2025:

- 48,000+ ransomware threats stopped
- 4,000+ malware threats intercepted
- Zero ransoms paid



## PRICING & DEPLOYMENT

NeuralProtect is priced as a 25% uplift on CNQ or ANQ \$/TB pricing. On-premises licensing is currently TBD. NeuralProtect is deployed on a separate VM.

## KEY TAKEAWAY

Qumulo NeuralProtect changes ransomware protection from reactive recovery to proactive prevention.

Instead of waiting for backups to restore what was lost, NeuralProtect stops attacks before production data is encrypted, corrupted, or compromised—delivering the strongest possible protection where it matters most: the data itself.

## ABOUT QUMULO

Qumulo is the leading provider of cloud file data platforms, offering unrivaled performance, scale, and data management solutions. Qumulo's platform is trusted by Fortune 500 companies and global enterprises to manage petabytes of data, unlocking its value and driving innovation. For more information, visit [www.qumulo.com](http://www.qumulo.com)