ECHOLEAF SAFEROOM™ USE CASE FOR THE EDUCATION INDUSTRY

THE CHALLENGE

School districts around the world are increasingly becoming targets for sophisticated ransomware attacks. According to a survey of 5,000 IT/Cybersecurity leaders by Sophos[i] in 2024, 63% of lower education and 66% of higher education organizations were hit by ransomware last year. In addition, 95% of educational organizations hit by ransomware said that the cybercriminals attempted to compromise their backups during the attack. With 71% being successful!

A typical mid-sized US district serves 8,000-15,000 students across multiple schools and must deal with limited budgets, stretched resources, and a shortage of IT skills, all while maintaining valuable data from both students and employees coveted by identity thieves and others including:

- **Student information** systems with personal and academic records.
- **Financial management** systems processing millions in budgets.
- **Digital learning platforms** and curriculum resources.
- **Administrative communications** and scheduling systems.
- **Health records** and special education documentation.

Given these challenges, investing in a non-disruptive, easily implemented solution that provides strong protection, rapid recovery and low TCO, while requiring little IT support, can considerably reduce the overall financial impact of cybercrime on educational organizations.

THE ECHOLEAF SAFEROOM™

The patented EchoLeaf SafeRoom™ solution leverages drive virtualization and compartmentalization and adds value and ease of use to Linear Tape-Open (LTO) technology, which has been a mainstay in data storage for decades and is renowned for its reliability, longevity, and cost-effectiveness.

Intelligently managed and immutable write-once/ read-many storage, adds a crucial layer of security by ensuring that data, once written, cannot be altered or deleted. This feature makes it an ideal choice for compliance, protection against ransomware and other cyber threats, both known and unknown, and archival storage.

Whether districts look for a large central and shared repository, distributed systems, or a combination of the distributed systems linked to a central master archive, the EchoLeaf SafeRoom™ provides the flexibility and easy scalability needed to meet organizational needs today and tomorrow.

A school or district implementing EchoLeaf's SafeRoom™ will establish a fundamentally more resilient security posture through:

- **A Physically Isolated Cyber Vault** that shields data from ransomware.
- **Neutralized attempts at Malicious Encryption,** data corruption, theft, and

destruction. Don't be held hostage by cyber criminals.

- **Extremely rapid system recovery** to pre-attack data.
- **Higher Performance w/ Lower Costs** & energy use vs. disk or cloud.
- **Automated Archive Management**
- **Simplified Implementation:** Non-disruptive integration with existing IT infrastructure through standard protocols (NFS/CIFS) without requiring specialized expertise.
- **Recovery Orchestration:** Establishing predetermined recovery processes designed to restore systems in order of priority.

THE RECOVERY SCENARIO

In the event of a ransomware attack, a school or district with an EchoLeaf's solution in place would experience a dramatically different outcome vs those without:

- **Immediate Response:** Rather than facing an impossible choice between paying ransom or enduring months of disruption, the district could immediately begin recovery operations.
- **Rapid System Restoration:** Critical systems can be restored within hours or days rather than weeks or months, allowing educational activities to continue with minimal interruption.
- **Complete Data Recovery:** Student records, financial systems, and educational resources would be fully recovered from the air-gapped archive, eliminating data loss.

- **Operational Continuity:** Administrative functions, classroom activities, and assessment processes would continue with minimal interruption.

- **Cost Avoidance:** The district would avoid both the ransom payment (8x higher when backups are compromised) and the operational costs of extended recovery (typically multiple times the ransom amount).

WHY EDUCATIONAL INSTITUTIONS NEED THE ECHOLEAF LEVEL OF PROTECTION

Educational organizations face unique cybersecurity challenges that make EchoLeaf's solution particularly valuable:

- **Targeted Vulnerability:** School districts store extensive data on minors & employees while typically operating with limited security resources, making them attractive targets.

- **Resource Constraints:** A September 2024 study from Action1[ii] found that 44% of schools devote only 10% of their IT budget to cybersecurity and the majority of schools (78%) do not employ cybersecurity specialists, thus raising the need for cost-effective solutions that are simple to implement and maintain.

- **Community Impact:** Disruptions affect thousands of students, families, and staff members, extending well beyond the direct financial impact.

- **Regulatory Requirements:** Educational institutions must comply with various data protection regulations (FERPA, COPPA, state laws) even during cyber incidents.

- **Budget Limitations:** Schools need cost-effective solutions that provide enterprise-grade protection without enterprise-level price tags.

SUMMARY

The unique EchoLeaf SafeRoom™ solution delivers unparalleled security and the strongest defense against malware and ransomware through complete data isolation, dramatically fast disaster recovery, and rapid non-disruptive deployment, and provides a cost-effective and scalable solution for anyone concerned with cyber threats and disaster recovery.

For schools accessing EchoLeaf through partnerships like BOCES, or from our resale partners, this critical protection becomes accessible even with limited IT resources and budgets, providing the last mile of defense when other security measures fail.

Echo Your Data Today™!

To learn more, please visit www.echoleafsystems.com.

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[i] Sophos - The State of Ransomware in Education 2024
[ii] Action1 – September 2024 Survey of IT leaders across the US and UK