



Threat Actor Trends and Your Most Important Security Controls



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Heath Renfrow is Co-Founder and CISO of Fenix24 (a Conversant Group company), an industry-leading cyber disaster recovery and restoration company battling threat actors as *The World's First Civilian Cybersecurity Force*. Heath has more than two decades of experience as a high-level information security specialist, much of it as CISO in the United States Department of Defense, where he tackled some of the nation's most significant cyber challenges.



WE ARE ON THE BATTLEFIELD EVERY DAY GATHERING REAL-TIME INTELLIGENCE OTHERS CANNOT



Fenix24 is on the front lines every day, battling cyber terrorists, allowing unique insights into the changing tactics used by TAs.



Athena7 constantly assesses the tools, processes, and policies organizations are currently using to successfully protect against cyberattacks.



Grypho5 leverages data from both current TA tactics and proven cyber tools and processes to offer the most comprehensive and evolving protection.



Argos99 is an automated software platform that gives businesses unmatched visibility into their assets, critical dependencies, and policies.



Credit Union Breaches in the News

August 2024: California-based Patelco Credit Union breached

Breach impacts 726,000 customers and employees

RansomHub ransomware group steals databases

Threat actor auctions data containing personal information when financial settlement cannot be reached

Backups rendered useless; Recovery Time Objectives shattered



Credit Union Breaches in the News

August 2024: First Commonwealth Credit Union breached

Breach impacts 99,000 customers

Meow ransomware claims responsibility for attack

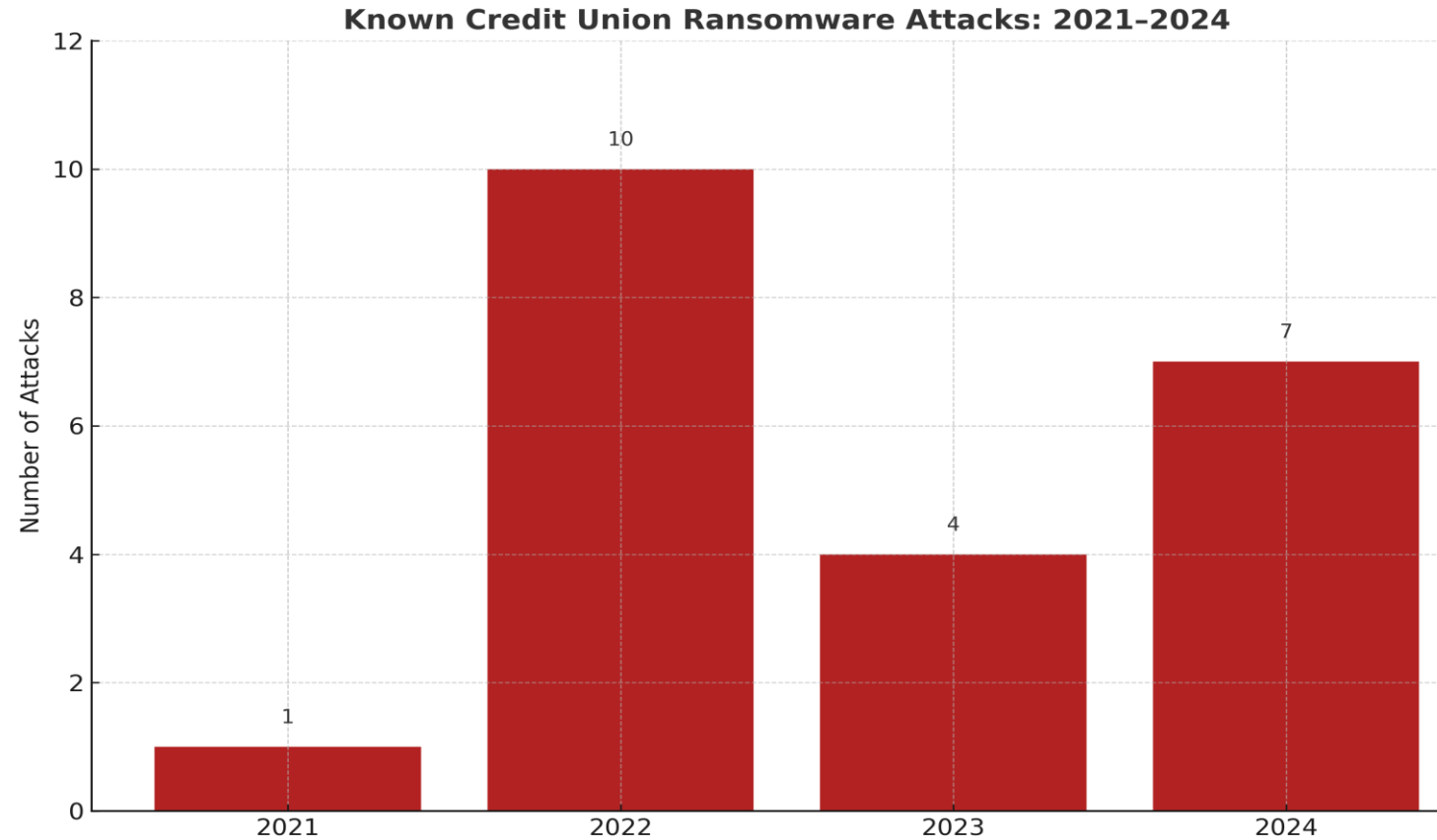
Threat actor steals over 400GB of data, including contracts, accounting records, bank files, financial details, and tax info

Breach is believed to have occurred on June 26, 2024, but consumers not notified until August 2



Credit Union Known Attacks

National Credit Union Association
reports CUs suffer 892 cyber
incidents between September
2023 and May 2024.



Examples: 2021: Clinchfield Federal CU; 2022: Lake Charles Telco CU, Mid-Hudson Valley FCU, Unknown CU Breaches (7); 2023: SRP Federal CU, Lafayette FCU, Cross Valley, DataHEALTH CU Clients; 2024: Patelco CU, FedComp Supply Chain, Multiple NCUA-Reported CU Events (5)



What is Ransomware Backup and Resiliency Assessment (RBRA)?

RBRA is a first-of-its-kind, intelligence-led evaluation born from real-world incident response experience.

Fenix24 has reverse engineered more than 200 of the world's most devastating cyberattacks, using firsthand knowledge to build this specialized assessment. It's not theoretical. It's what actually happens when ransomware hits.



What the RBRA Delivers

**Backup Survivability
Testing Against
Ransomware: Not just
disaster recovery, but
destructive attack
simulation**

**Credential
Compromise Risk
Assessment:
Understand how
identity exposure
impacts recovery**

**Critical Business
Application
Survivability Heat Map:
Know which apps will
recover, and which
won't**

**Real-Time RTO Analysis
& Recovery
Recommendations:
Stop guessing & start
planning with hard
data**

**Backup Solution
Evaluation: Insights into
what's truly restorable,
and what's just noise**



Runtime Objectives (RTOs) for Credit Union Cybersecurity: Ensuring Operational Resilience and Data Protection

What are RTOs?

RTOs refer to the expected system behavior and security posture during live operations.

RTOs are essential for maintaining trust, uptime, and compliance.

RTOs focus on real-time monitoring, threat detection, and resilience.

Why RTOs Matter to CUs

Handles sensitive member financial data.

Must comply with regulations (NCUA, GLBA).

High expectations for availability, integrity, and confidentiality.

Downtime or breaches damage reputation and trust.



Key Runtime Objectives

Continuous Monitoring

- Real-time visibility into systems, networks, and transactions
- Detect anomalies, intrusions, and policy violations

Threat Detection & Response

- Runtime behavior analysis (e.g. EDR)
- Immediate isolation or mitigation of threats

Secure Application Execution

- Validate runtime permissions, control access, sandbox apps
- Prevent execution of unauthorized code



Best Practices for Credit Unions

**Regularly update
runtime security
policies**

**Conduct runtime
incident drills**

**Integrate monitoring
tools with fraud
detection systems**

**Train staff on
recognizing and
responding to live
threats**



Console Segmentation and Readiness — By the Numbers

Fenix24's Athena7 battalion found, that of assessed organizations:

73% have critical consoles assessable from user segments

100% have critical consoles co-joined to production AD

55% had non-existent or non-restricted MFA

45% had access to IPMI/iLO/iDRAC

65% had same consoles AD joined

87% had no IP restrictions on publicly accessible systems



Console Segmentation and Readiness: Risks Abound

Athena7 assessments showed that nearly all had these risks...

Using daily driver accounts from production AD for critical console access

Allowing credential caching in browsers

Allowing IT password vaults to be production AD SSO joined

Allowing prod AD joined IT password vaults to store critical console creds, such as break glass

Having self-service password (users & admins) reset enabled

No lateral movement protections for admin functions (e.g., MMC, WMI, RDP, PowerShell)

No admin segment/VLAN for critical consoles

Critical consoles accessible from production AD creds

Immutability is not configured, and if it is, it will likely not hold up in breach as configured



Vendor “Immutability” Is Not Enough

IMMUTABILITY: A security principle that states the data in storage cannot be changed, encrypted, or deleted by any means. Even if a threat actor were able to gain access to the data, they would not be able to modify or destroy it because there are no IT administrative technical overrides to the retention lock.

In Fenix24's (2000+) actual breach experiences, of data thought to be immutable...

84%

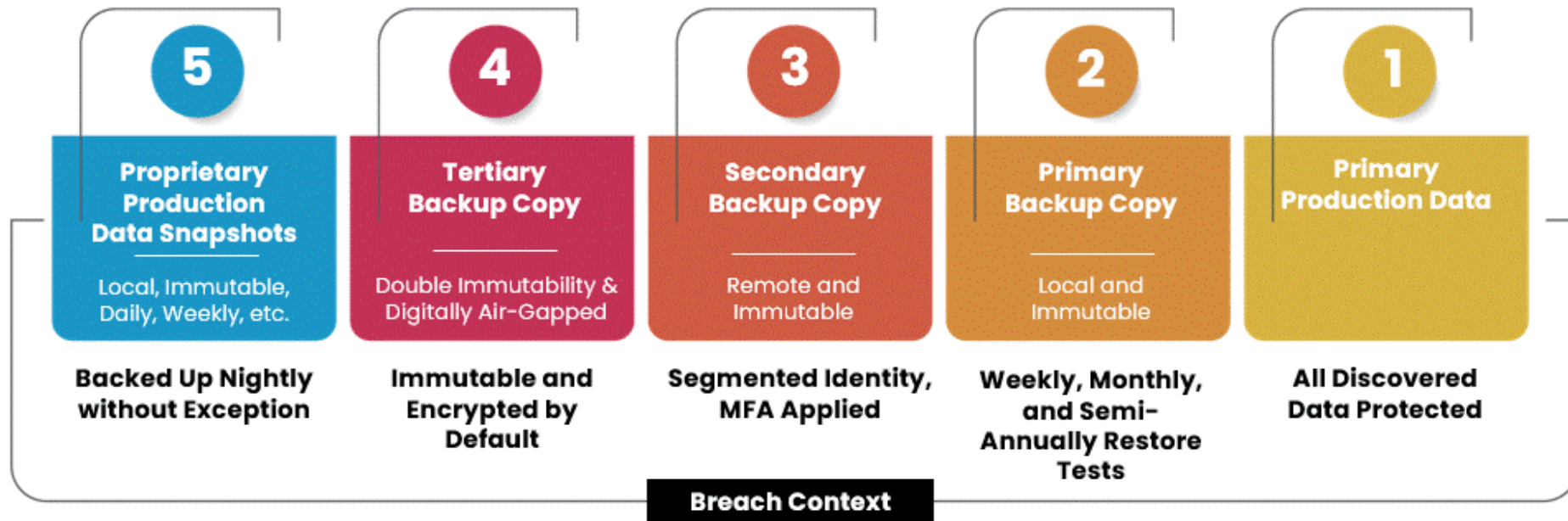
DOES NOT SURVIVE!

If threat actors gain access, they can change settings and destroy / encrypt data believed to be “immutable.”



Survivability, 5-4-3-2-1

5-4-3-2-1 Grypho5 Proprietary Method:



Why Traditional Cybersecurity Defenses are Failing

Improper data backup orchestration — *or no backups at all*

Alert fatigue and resource constraints

Gaps in defense

- Blind spots in cloud, SaaS, and OT environments
- Slow response to lateral movement
- Limited visibility and detection gaps
- Lack of asset inventory
- Insufficient breach alignment
- Insufficient complexity of IT access



EVERYONE THINKS BACKUPS WILL SURVIVE... But Reality Serves Up a Wake-Up Call

Fenix24 Intel:



Athena7 Intel:



Harden in Reverse: Assured Recovery



Resist The Threat Actors

Assure Recovery

Compromise
Credentials

Persistent
Access

Elevated
Access

Lateral
Movement

Data
Exfiltration

Backup
Destruction

Mass
Encryption/
Destruction



WHAT TO DO NOW: Actions Credit Unions Can Take

Assess the CU's recovery capabilities against breach contact (Athena7).

Establish retainer with a restoration company (Fenix24).

Align leadership to mass recovery realities – point and time (Athena7).

Prioritize mass recovery. Mass destruction most likely form of disaster for CUs.

Establish a recovery zone where mass restoration can be safely tested and RTO measured (Grypho5).

Regularly test and harden recovery capabilities to establish predictable recovery timelines (Grypho5).

Complicate and obfuscate critical console administrative identity (Grypho5).

