# VOTIRC

**EBOOK** 

# The Complete Meme-Guide to Security Compliance for Financial Institutions

# Welcome to The Complete Guide to Compliance for Financial Institutions!

We've designed this guide to simplify complex concepts, provide practical insights, and ensure that compliance isn't just a box to check but a source of strength for your organization - all with a touch of humor to keep things as light as possible!

### Why all the memes?

In financial services, trust is paramount and security breaches can lead to significant reputational and financial consequences. It is crucial for institutions to be at the forefront of compliance and security best practices. **BUT** ... let's face it ... security compliance can often seem like a dry and daunting subject.

Enter: memes.

### Memes has entered the chat.

By leveraging the ubiquitous language of memes, we aim to break down complex compliance concepts while keeping things as high-level as possible.

We'll delve into the evolving regulatory landscape, decode financial regulations, and offer real-world solutions for your institution. Whether you're an executive, compliance officer, or simply interested in compliance within the financial sector, this guide is your go-to resource.



# Section 1: Understanding Security: Going Beyond Compliance in Financial Organizations

Organizations often confuse the concept of being compliant with being secure. They assume that they must be appropriately protected once they have invested the necessary resources to achieve compliance. Considering that meeting compliance mandates are not cheap, averaging \$3.5 million annually. Still, the cost of not meeting compliance mandates is even higher, averaging \$9.5 million, according to the Ponemon Institute. In practice, this is not the case.

Compliance is vital as a foundational framework, setting a minimum standard for security controls within organizations and establishing requirements and regulations to ensure a baseline level of security. However, it takes more than compliance alone to provide a comprehensive assessment of the effectiveness of these controls. Mere compliance does not guarantee that an organization's security measures are fully equipped to combat all potential threats. The dynamic and ever-evolving nature of cybersecurity demands a more proactive and holistic approach beyond mere compliance.



### **Compliance as a Baseline**

Compliance focuses primarily on meeting specific criteria and adhering to established guidelines, often without considering the constantly evolving landscape of cybersecurity threats. Therefore, organizations must go beyond mere compliance and actively assess the efficacy of their security controls to ensure comprehensive protection against emerging risks. This entails conducting thorough risk assessments, implementing advanced security measures, and continually monitoring and adapting security protocols to address the evolving threat landscape.



### **Risk-Based Assessment**

The effectiveness of security measures lies in first conducting a risk-based assessment that compares the threats faced by an organization with its existing controls. A risk-based approach is crucial in evaluating various threats' potential impact and likelihood, using a systematic analysis considering both the probability of an incident occurring and the possible consequences if it were to happen.

Using a risk-based assessment, organizations are not just targeting every threat but instead are identifying and prioritizing the most critical risks, allowing them to allocate resources and implement appropriate controls accordingly. This approach enables organizations to focus on mitigating the threats that pose the most significant potential harm and align their security measures with their specific risk profile. It empowers organizations to make informed decisions and allocate resources effectively to ensure that their security controls are targeted, robust, and tailored to address the most significant risks they encounter.

### **Limitations of Compliance in Addressing Emerging Threats**

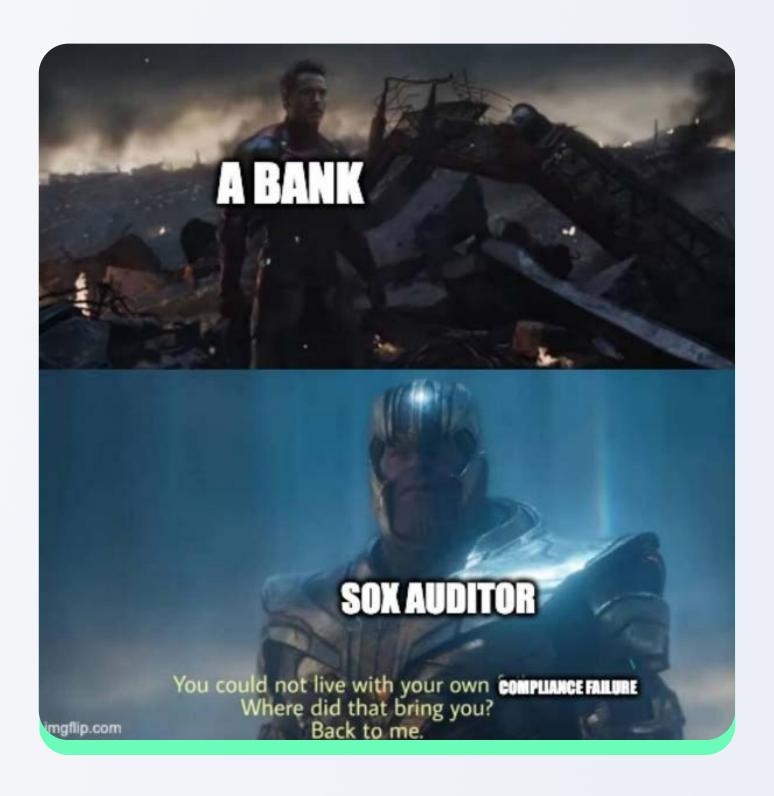
Compliance requirements play an essential role in setting a baseline for security practices, but they have limitations when addressing emerging threats. For instance, consider the compliance requirement of protection against malware, which most organizations meet by using a traditional antivirus (AV) solution. However, these solutions have inherent limitations in addressing new and unknown threats, relying on previous detections of threats in the wild for identification. Cybercriminals know this and continuously evolve their attacks, making new malware on the order of 450,000 new strains daily, making it virtually impossible for any solution to detect 100% of the existing varieties. The new malware often exploits zero-day attacks, which are vulnerabilities unknown to the software vendor or the security community. As a result, traditional AV solutions that rely on signature-based detection cannot detect and prevent such attacks effectively.

Despite organizations being compliant with an AV solution, there is still a need to supplement the compliance effort using security measures beyond traditional AV. Being secure requires supplementing compliance efforts with a more proactive approach to combat the threat of continuously evolving malware. It necessitates strategies that target emerging threats and may protect without the need for detection.



### What Leads to Compliance Failures

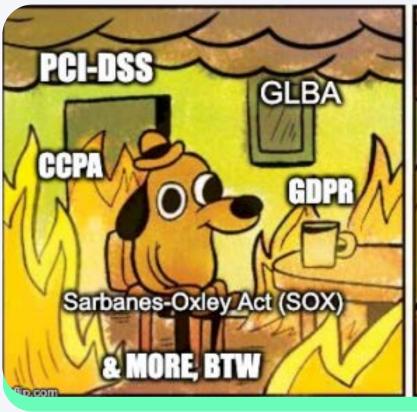
Compliance failure can occur in various ways, ranging from intentional non-compliance to incidents that result in non-compliance. Meeting the standards and best practices outlined in compliance mandates is crucial, and failing to implement them on this level is one form of failure. Additionally, compliance mandates often impose limitations on how sensitive data is shared and disseminated. When breaches, security incidents, or malware/ransomware attacks occur, there is a risk of data exfiltration, which ultimately leads to compliance failure.



### **Direct Cost of Non-Compliance**

Non-compliance with legal or regulatory requirements can lead to substantial direct costs affecting an organization's financial performance. Non-compliance consequences can manifest in the form of penalties and fines imposed for violating specific regulations. To provide insight into the potential financial impact, here are examples of the costs that may arise due to non-compliance:

Regulation	Maximum Penalties
GLBA	Up to \$100,000 per violation
Sarbanes-Oxley Act (SOX) Individuals:	Up to \$5 million
SOX Companies	Up to \$25 million
PCI-DSS	\$5,000 to \$500,000 (varies based on records)
GDPR	0% false positive rate
ССРА	Up to \$7,500 per violation

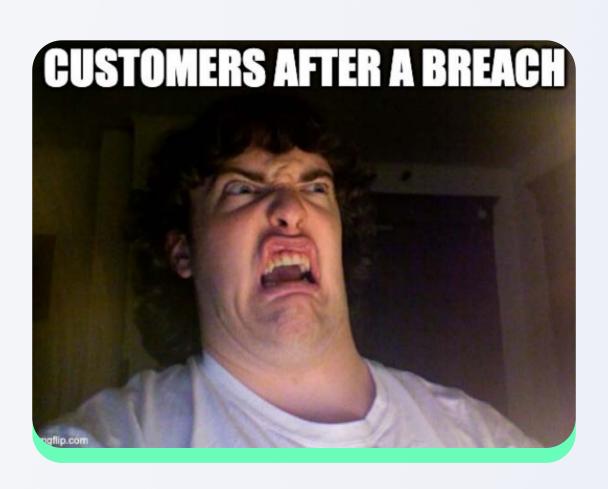




### **Indirect Cost of Non-compliance**

Non-compliance with regulations and data protection standards carries consequences beyond financial penalties. The indirect costs of non-compliance can profoundly impact a company's financial performance. One critical aspect is its effect on customer perception of the organization's security practices. Failing to meet compliance requirements raises concerns about the company's ability to protect sensitive information, eroding customer trust and confidence. This can result in losing existing business relationships and reluctance from potential new customers to engage with the company.

Furthermore, companies that experience data breaches or security incidents due to non-compliance often face long-term implications for their profits. Surveys have shown that in the US alone, <u>83% of consumers</u> say they will stop spending with a business after a security incident. This is evident from research showing that <u>29% of companies lose revenue</u> after a breach and <u>a 7.5% decrease in stock price</u>.



### **Identifying the Risks**

Financial organizations face diverse threats that pose significant risks to their data. Identifying and understanding these risks is crucial for effectively mitigating them. The risk level associated with each threat is unique to each organization, considering their specific IT infrastructure and the controls in place to mitigate the risks. Failure to address these threats can result in data exposure, compromising sensitive information, and leading to non-compliance with regulatory requirements.

### **Internal Threats**

Internal threats pose a significant concern for financial organizations, involving individuals directly accessing sensitive information and systems. These internal actors can range from disgruntled employees who harbor ill feelings towards the company or their job to individuals seeking personal gain by compromising data security. The risk of internal threats is further amplified by external factors, such as organized crime groups, which may exploit vulnerabilities in an organization's defenses. These external entities can employ tactics like bribery or coercion to persuade employees to participate in more sophisticated attacks. The potential damage caused by internal threats is not limited to data theft but also includes deliberate destruction or manipulation of data.



### **Direct Attackers**

Direct attackers pose a persistent and ever-present threat to financial organizations. These cybercriminals employ various tactics and techniques to exploit an organization's infrastructure vulnerabilities and gain unauthorized access to sensitive data. The range of attackers can vary widely, from relatively inexperienced script kiddies to highly sophisticated nation-state actors or organized criminal groups. The size and complexity of the attack surface determine the level of skill and resources the attackers require. Regardless of the attacker's profile, this threat should never be underestimated or overlooked.

### **Hidden Threats in Files**

Financial organizations know the importance of strong perimeter security measures to protect their valuable data. However, cybercriminals constantly evolve tactics, seeking alternate routes to bypass these defenses. One such method is embedding hidden threats in files, which creates a side-channel attack vector for malicious actors. By hiding threats in seemingly harmless files, cybercriminals can exploit the human factor within organizations. Employees may unknowingly open infected files, disguised as invoices, resumes, or partner materials, which can lead to the deployment of various malicious payloads such as ransomware, rootkits, or backdoors. Instead of relying on complex technical exploits, cybercriminals target humans as the weak link in the security chain.



New threats embedded in files can also deceive the security tools and protections in place at an organization.

### **Phishing**

Phishing attacks have become a prevalent and persistent threat in cybersecurity, particularly because they target the weakest link in the security chain: humans. These attacks aim to deceive employees into divulging sensitive information, granting cybercriminals access to valuable data and enabling them to conduct more extensive and damaging attacks. While login credentials remain a popular target for phishing campaigns, attackers increasingly seek more than basic access. They are after valuable information about internal IT systems, including technical details, vulnerabilities, and configurations.

Additionally, they may be interested in gathering knowledge about internal processes and procedures, allowing them to exploit weaknesses and bypass security measures more effectively. Another concern is gathering information on organizational hierarchy, used for whaling campaigns—highly targeted attacks against key individuals, such as executives or decision-makers.

### **Stopping the Threats**

A multi-faceted approach is required to combat the wide range of threats that financial organizations face. Implementing targeted controls that address specific threats is crucial rather than relying on a single control to eliminate all risks. Each threat requires a tailored response considering the organization's unique risk profile and security objectives. Factors such as automation and co-integration significantly enhance the efficiency and effectiveness of these controls.

Automation streamlines processes and tasks, making them easier to execute and reducing the reliance on extensive staffing. By automating repetitive and time-consuming tasks, organizations can allocate resources more strategically and focus on more critical security activities.

Additionally, co-integration allows different security tools and systems to work together seamlessly. This integration reduces the manual effort required to manage multiple tools and enables the exchange of information and the generation of intelligent, actionable insights. The interoperability of solutions creates a more comprehensive security posture and facilitates quicker and more informed decision-making when responding to threats.



Manual workloads to stand up & integrate security products

API-based security tools that easily integrate to improve defense-in-depth

### **Layers of Control**

In building a robust security framework, it is essential to incorporate layers of control that provide overlapping defense mechanisms. This approach recognizes that no single control can guarantee absolute security, as vulnerabilities can exist even in the most robust measures. By implementing multiple layers of defenses, organizations create additional barriers that cybercriminals must overcome, making it significantly more challenging for them to breach the system. Even if one control, such as a firewall, is bypassed, additional layers are in place to impede the progress of attackers.

The goal of security is not to make an organization impervious to breaches but to increase the difficulty level for potential attackers. Overlapping controls enhance the resilience of the IT infrastructure by continually raising the challenge for adversaries and increasing the likelihood of detection and prevention.



### **Prevention to Meet Compliance**

Implementing preventive solutions is crucial for organizations to meet compliance mandates effectively. These solutions fulfill the required controls and demonstrate a proactive approach to security, which is particularly important for regulations such as the Sarbanes-Oxley Act (SOX), which we'll dive deep into in the next section. By implementing robust preventive measures, organizations can significantly reduce the risk of a security breach and accidental data disclosure, thus ensuring ongoing compliance.

Studies have shown that the cost of implementing comprehensive security measures is often about 10% of the potential financial and reputational damage caused by managing a breach and the accompanying penalties. Taking a preventive stance helps organizations avoid the substantial costs and negative consequences associated with non-compliance and data breaches while fostering a culture of continuous improvement in security practices.



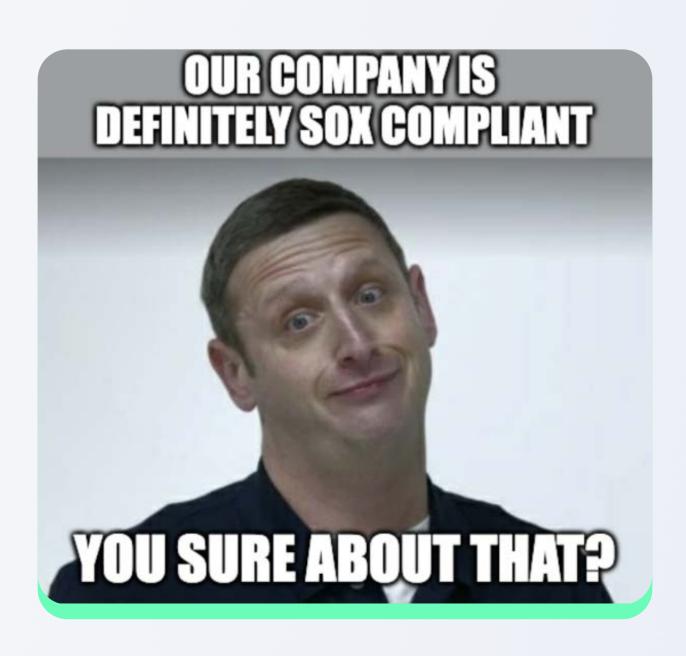
### **Exceeding Compliance**

Achieving compliance is merely the initial phase in the fight against cyber-attacks. Organizations must go beyond compliance and seek tailored solutions that effectively address their specific risks.

# Section 2: The Risks of Non-Compliance as a Publicly Traded Company: Sarbanes-Oxley Penalties and Hidden Threats

Organizations often face significant challenges just keeping pace with cybercriminals. And, in the previous section, we detailed the additional hurdle of staying compliant with rules and regulations while maintaining a security-first culture. Unfortunately, for publicly traded companies in the US, there is an additional challenge due to the regulatory requirements of SOX (Sarbanes-Oxley Act), which sets strict rules for data protection and handling.

On paper, having strict rules for data protection makes sense, but the implementation is challenging as most public organizations have a complex IT environment. They have a diverse array of applications, platforms, and data sources, which complicate the process of implementing uniform compliance across the organization. Limited resources, budget constraints, and a shortage of skilled personnel further compound the struggle for compliance.



Let's dive deep into SOX and explore ways companies can avoid falling victim to hidden threats, which is one of the easiest ways to become non-compliant.

### What is SOX?

SOX, also known as the Public Company Accounting Reform and Investor Protection Act, is a US federal law established in 2002 to strengthen corporate governance, accountability, and financial transparency. It focuses on improving financial reporting and internal controls within publicly traded companies.

A key aspect that SOX addresses is the significance of data security, as it necessitates establishing and maintaining effective internal controls over financial reporting. These controls safeguard sensitive data from unauthorized access, manipulation, and theft. The law mandates implementing robust data security measures such as access controls, encryption, and regular audits. By promoting these practices, SOX aims to foster trust and confidence in the integrity of financial systems and ultimately reduce the risk of fraudulent activities that could otherwise undermine investor confidence.



### What are the Risks of Not Complying?

With SOX, non-compliance is not a viable option. The penalties that come with SOX are designed to deter misconduct and ensure companies take their obligations seriously regarding financial reporting and internal controls. Under SOX, the penalties affect individuals and organizations, ensuring that even the highest levels of a company's leadership are motivated to comply.

Individuals engaged in fraudulent financial practices or obstructing investigations can face fines of up to \$5 million and imprisonment of up to 20 years. Executives, notably the CEO and CFO, must personally certify financial statements accurately, facing fines and potential removal for false certifications.

Companies that fail to comply must contend with civil penalties imposed by the SEC ranging from \$50k to \$2.5 million, which for many would greatly damage their ability to operate. However, the worst offenders may lose their stock exchange listing, which will damage their reputation and lead to legal action from shareholders and investors based on financial misstatements or fraud by the company. With all of these negative impacts in play, companies could face bankruptcy as a result of non-compliance.

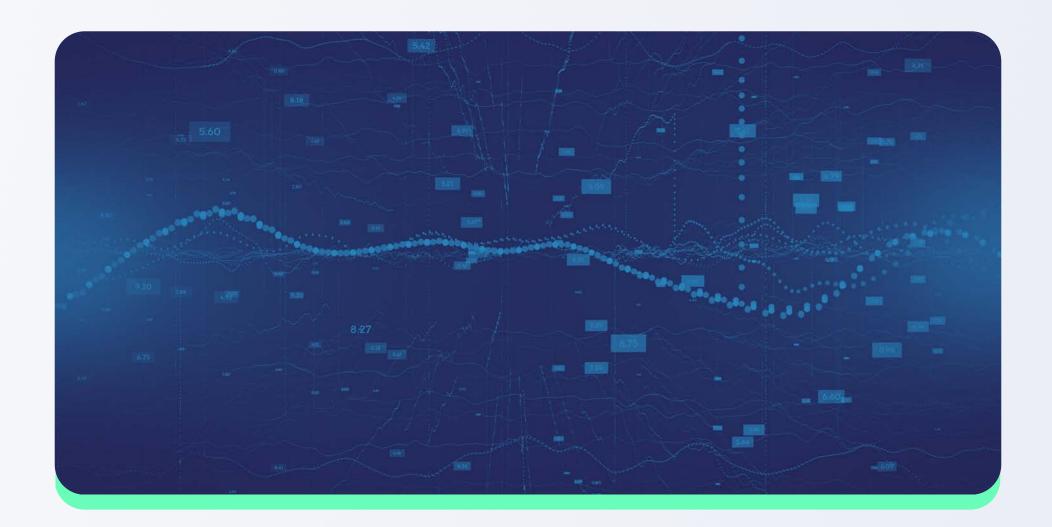
# Leadership when they see the damage caused by not complying with SOX

### **Hidden Threats Lead to Non-Compliance**

Non-compliance in SOX does not just come from organizations choosing not to abide by the mandate but can also stem from being the victim of a cyberattack. For organizations subject to SOX, one of the worst types of cyberattacks to fall victim to are those originating as <a href="https://doi.org/10.2016/journal.org/">https://doi.org/10.2016/journal.org/</a>. These threats include malware, ransomware, rootkits, and keyloggers, which go beyond being a nuisance and can cause serious trouble for companies that are affected by them.

SOX requires companies to establish and maintain effective internal controls over financial reporting, which includes safeguarding sensitive data from unauthorized access, manipulation, and theft. Rootkits and keyloggers allow cybercriminals unauthorized access to sensitive data, which may be stolen or manipulated. Malware and ransomware infecting financial files can compromise critical financial data's confidentiality, integrity, and availability, leading to non-compliance with SOX's data security requirements.

These attacks can also disrupt normal business operations, including financial reporting processes. They may alter or encrypt financial files, leading to inaccurate financial statements and reports. Companies failing to ensure the accuracy of financial reporting due to hidden threats can result in non-compliance with SOX's provisions related to reliable financial disclosures.



### **Stopping Hidden Threats**

The traditional approach of using antivirus software has been effective in detecting and stopping known threats. Still, it faces challenges in keeping up with the rapid evolution of the threat landscape. New malware is constantly being developed, making it difficult for antivirus solutions to stay current.



While AV remains valuable in cybersecurity strategies, relying solely on it may leave systems vulnerable to emerging and unknown threats. To enhance protection against hidden threats, <u>organizations must complement AV</u> with advanced and proactive security measures that can adapt and respond swiftly to the ever-changing cybersecurity landscape.

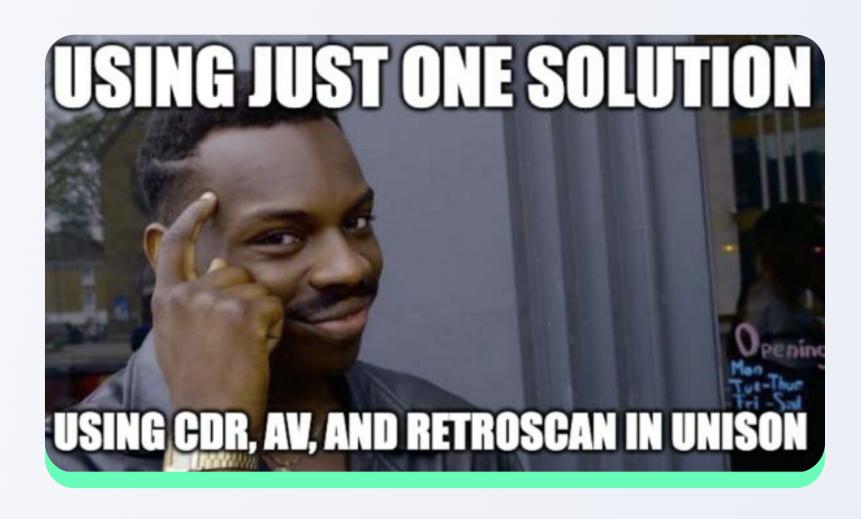
### **Knowing What to Stop**

One of the most significant challenges with AV is that it relies on being able to detect a threat that is present, requiring having seen it before. With the constant evolution of new hidden threats, there is no way to stay ahead. This is where file sanitization, also known as <u>Content Disarm Reconstruction (CDR)</u>, comes into play.

The CDR process addresses this limitation by reconstructing files, exclusively utilizing safe components, rather than solely relying on detection. This approach effectively eliminates high-risk elements, known malicious components, and suspicious code concealed within files, effectively neutralizing potential threats even if they are currently undetectable by conventional antivirus solutions.

### **Using an Effective Strategy**

To overcome this challenge and create a robust defense against hidden threats, a combined strategy incorporating CDR, AV, and retroactive scanning analysis is necessary. AV delivers consistent, fast detection of known threats, augmented by CDR, which by rebuilding from known-safe components, eliminates most other hidden threats. Retroactive scanning provides the optics reviewing original copies of files with an AV engine days or weeks after sanitization to track the effectiveness of the CDR solution.



### **Votiro Is a Unified Solution**

Votiro surpasses traditional CDR in a number of ways, including offering optional integration with AV and RetroScan, which provides auditable tracking of threats eliminated by Votiro as they become detectable by AV. With its well-established CDR solution, Votiro empowers financial institutions to achieve a proven return on investment, meeting rigorous performance requirements while effectively safeguarding customers from hidden threats.

Designed for rapid implementation, Votiro adopts an API-centric approach seamlessly integrating into existing business workflows, providing immediate protection against cyber threats. Impressively short implementation times are achieved, with SaaS installations taking as little as 10 minutes and on-premises installations requiring only 90.



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# Section 3: For Financial Institutions: Conquering GLBA Compliance and Hidden Threats with CDR

According to <u>research by Verizon</u>, ransomware and other threats hidden in files are one of the top risks for financial institutions. Regrettably, for financial institutions in the US, an additional hurdle exists alongside cybercriminals due to the regulatory mandates of <u>GLBA (Gramm-Leach-Bliley Act)</u>, which imposes rigorous stipulations for data security and management.

In theory, enforcing rigid rules for data security appears logical, but the implementation presents many challenges, as most organizations operate within a complex IT ecosystem that often contains quite a bit of legacy technology. This complexity, stemming from various applications, platforms, and data sources, complicates establishing uniform compliance throughout the organization. The struggle for compliance is further intensified by limited resources, budgetary limitations, and a shortage of skilled personnel.





In this section, we will delve into the intricacies of GLBA and investigate how companies can sidestep being ensnared by hidden threats, which serve as one of the most common pathways to non-compliance.

### What is GLBA?

GLBA, or the Financial Services Modernization Act of 1999, regulates how financial institutions handle and protect consumers' private financial information.

GLBA is built on a set of 3 components from which all the different mandates stem:

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### **Privacy Rule**

The GLBA mandates financial institutions to disclose their privacy policies. They must explain how they collect and share personal information and let customers opt out of sharing their data with certain third parties.



### Safeguards Rule:

This rule demands specific actions from financial institutions to create security programs to safeguard customer information based on risk assessment and targeted measures to defend against unauthorized access, data breaches, and identity theft.



### **Pretexting Provisions:**

GLBA prohibits individuals from obtaining customer information under false pretenses, a practice known as pretexting. This provision protects against social engineering attacks and unauthorized access to personal financial data.

GLBA applies to a wide range of financial institutions, including banks, credit unions, insurance companies, securities firms, and other entities that provide financial services to consumers. It aims to balance promoting the efficient functioning of financial markets and protecting consumer privacy.

It's important to note that while GLBA is a US law, other countries may have data protection and privacy regulations for financial institutions.



# Hidden Threats Lead to Non-Compliance Here, Too!



The privacy and safeguards rules are the most significant issues likely to be violated in the case of hidden threats. This is because many threats hidden in data and files have the functionality to damage or steal data. When users open files containing these threats, the payload executes, running whatever malicious code is included and starting the attack. The attack could contain ransomware that often also steals data to send off-site or rootkits, which open backdoors to cybercriminals, allowing them to come in and ransack existing data stores.

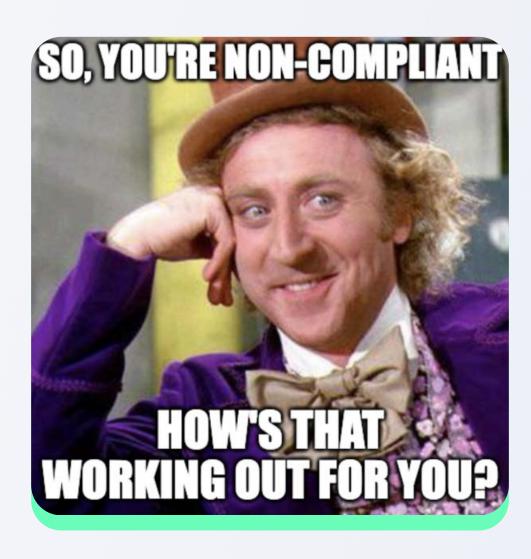
These attacks allow cybercriminals to access sensitive data without any restrictions. Even if data is not stolen, the fact that they could make alterations to files could affect the ability to report financial information or modify customer accounts accurately. Any of which could have wide-reaching implications on customer confidence and organizational reputation.

### What are the Risks of Not Complying with GLBA?

Beyond the damage to reputation, failing to comply with GLBA comes with costly legal, financial, and oversight penalties. It is crucial to note that the level of negligence or failure involved directly affects how impactful these penalties can be.

Enforcement of GLBA falls under various bodies. These include the Federal Trade Commission (FTC), the Office of the Comptroller of the Currency (OCC), the Federal Reserve, and the Consumer Financial Protection Bureau (CFPB). These agencies wield considerable power to conduct investigations and impose heavy fines. The fines rise with non-compliance severity and duration.

Non-compliant institutions also risk heightened scrutiny from regulators, resulting in more frequent audits that can disrupt regular operations due to their time-consuming and resource-intensive nature. In extreme cases of non-compliance, regulators have the power to revoke an institution's license or charter, effectively halting their operations.



Customers can even sue institutions for compromising their private financial information due to non-compliance, potentially leading to costly legal liabilities.

# Section 4: Ensuring PCI-DSS Compliance Amidst Hidden Threats

In online transactions, a treasure trove of payment card information is continuously zipping across networks and nestling in storage vaults. To cyber thieves, this torrent of data is the golden goose – if they can crack the code.

Why is payment card information their Holy Grail? It's the versatility of its illicit uses. With pilfered card details, fraudsters can party on someone else's dime, creating a spree of fraudulent purchases. If they feel entrepreneurial, they can churn out counterfeit cards or peddle the stolen data in the dark alleys of the web where there's a flourishing underground market.

But the potential harm doesn't stop there. Payment card data is often the key that unlocks Pandora's box of personal information, such as names, addresses, and email addresses. In the hands of identity thieves, this information could be used to open new accounts or, in a worst-case scenario, commit crimes under an unsuspecting victim's name.

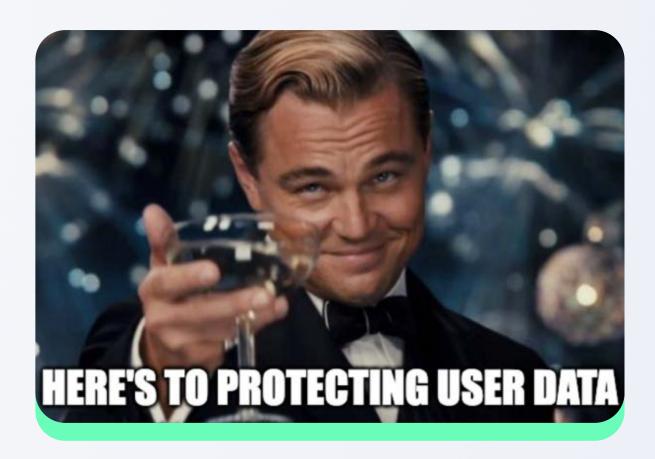


Unsurprisingly, given the rich pickings, cybercriminals are forever sharpening their skills, devising new schemes to breach the fortresses erected by businesses and financial institutions. With vast caches of payment card data under their watch, these organizations are irresistible targets to attackers.

Enter the <u>PCI-DSS</u>, the cyber knight in shining armor. This essential standard provides a shield wall of security measures designed to safeguard this precious data and slash the risk of a data breach.

### So, What Exactly is PCI-DSS?

PCI-DSS stands for Payment Card Industry Data Security Standard – a code of conduct set by major credit card companies to protect cardholders' sensitive data during transactions. Far from being optional, this set of requirements is mandatory for all organizations processing credit card transactions, ranging from quaint local merchants to colossal financial institutions.



### Staying Afloat in a Digital Sea: The Role of Data Security

The boom of online transactions has led to an avalanche of credit card information being stored and transmitted. Riding this digital wave demands robust data security measures like those mandated by PCI-DSS. Adherence to these standards maintains the payment card industry's integrity and helps keep consumer trust from going under.

### How Does PCI-DSS Stand Out from Other Compliance Mandates?

Unlike other compliance mandates imposed by governmental bodies, PCI-DSS is a creature of the payment card industry. Although there are no legal penalties for flouting these rules, the consequences of non-compliance are no less severe. Offending organizations face the prospect of being cast adrift, unable to process payment card transactions—a potentially devastating blow, especially for businesses heavily reliant on online sales.

### The Legal Gravitas of PCI-DSS

While PCI-DSS is not enshrined in law, its mandatory nature and the serious implications of non-compliance make it as potent as any legal requirement for organizations dealing with payment card data.

### Navigating the PCI-DSS: Six Guiding Principles

The PCI Data Security Standard is built on six cardinal rules, serving as the lighthouse guiding businesses to safe data handling.

### **Construct a Secure Network**

Fortify your data fortress with firewalls, secure router configurations, and individual, secure passwords for network devices.

### Safeguard Cardholder Data

Treat sensitive data like a secret message, encrypting it during transmission and storage. Secure cryptographic keys make your data a mystery only authorized users can solve.

### Forge a Vulnerability Management Program

Like a weather forecast for cyber threats, these programs involve regular scanning for system vulnerabilities and keeping security software up-to-date.

### **Implement Strong Access Control Measures**

Exercise the principle of least privilege, granting system access only to those who genuinely require it. Make your access keys exclusive and secure.

### **Constantly Monitor and Test Networks**

Keep an eagle eye on your network using logging mechanisms and intrusion detection systems. Regular testing ensures you can spot signs of intrusion or weakness swiftly.

### **Draft an Information Security Policy**

Create a comprehensive charter communicating how to protect cardholder data to all employees. Keep it dynamic with regular updates and strict compliance.

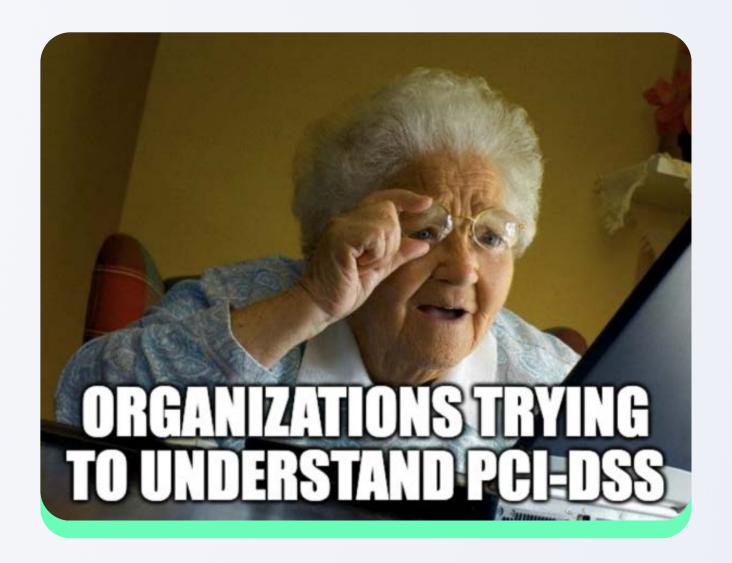


Complying with these principles isn't just about ticking the PCI-DSS checklist—it's about forging a trust pact with your customers.

Why PCI-DSS Compliance Matters PCI-DSS compliance isn't merely a requirement—it's your business's pledge to safeguard your customers' sensitive information. It's your assurance to customers, saying loud and clear, "Your data is under lock and key with us." Betray this trust, and you open Pandora's box of potential data breaches, fraud, and a whirlwind of financial and reputational havoc.

Avoiding the Pitfalls: Common PCI Violations

The labyrinth of PCI-DSS compliance can be a treacherous path. Even with the best intentions, companies often stumble into traps, undermining their compliance efforts and attracting the unwanted attention of auditors.



Hidden threats embedded within files represent one of the most formidable challenges organizations encounter in their journey of PCI-DSS compliance. Such concealed dangers aren't merely limited to benign errors or accidental oversights. Instead, they manifest as malicious entities like ransomware, which can lock critical data and demand ransoms; keyloggers that discreetly record every keystroke to steal sensitive data; and rootkits, which can grant unauthorized users access to a system without detection.

These threats easily infiltrate an organization's systems via email, shared files, and web portals. They compromise the integrity and confidentiality of payment card data, resulting in catastrophic breaches leading to non-compliance.



For businesses striving to uphold the gold standard of PCI-DSS, it is crucial to add preventative mechanisms to sanitize files and identify threats before they cross into the organization.

Hidden threats in files are only one of the vectors of attack. Other common threats to PCI-DSS compliance include:

### Weak Passwords and Authentication

Robust passwords and sturdy authentication methods are your first line of defense against intruders.

### **Unsecured Remote Access**

In the era of remote work, ensure remote access points are barricaded with firewalls, encryption, and strong authentication.

### **Lack of Proper Encryption**

Your data is a sitting duck without encryption. Ensure strong encryption practices to secure data in transit and at rest

### **Inadequate Security Policies and Procedures**

Consistent adherence to security practices is vital. Ensure enforceable security plans are in place.

### **Excessive Data Exposure**

Strict data access based on business needs and secure data storage practices is crucial to prevent unnecessary exposure.

Steering clear of these pitfalls ensures PCI-DSS compliance and reinforces customer trust, showing them their data is in safe hands.

### **Price Tag of Non-Compliance**

Non-compliance with PCI-DSS standards doesn't just cost in dollars—it costs in customer trust. Data breaches and fraud can trigger a ripple effect of financial and reputational damage. Non-compliance penalties can range from \$5,000 to \$100,000 per month. But more significant than these fines is the erosion of customer trust, with studies showing a majority of customers lose faith in an organization post-breach.



### Stop the Threats to Maintain PCI-DSS Compliance

Traditional antivirus software, though essential for addressing recognized threats, finds itself outpaced by the swiftly changing nature of cyber risks. Organizations require a broader, proactive stance for a truly fortified defense against hidden menaces.

Incorporating <u>Content Disarm and Reconstruction</u> or file sanitization into cybersecurity measures is paramount. Distinct from AV, CDR doesn't depend on existing threat intelligence. It reconstructs files using safe elements, effectively countering potential threats that AV might overlook.

Part of this all-encompassing approach is retrospective scanning. This allows organizations to analyze the original versions of files after sanitization, assessing the potency of their CDR implementations. With CDR as its foundational pillar, this integrated approach empowers organizations to stay abreast of the continuously shifting cyber threat environment.

# Section 5: Improving Compliance and Preventing Breaches with Votiro's Zero Trust DDR

While Votiro's products will not solve all of your compliance requirements, Votiro's Zero Trust Data Detection and Response (DDR) platform is the standard for preventing fileborne malware and privacy risks.

Foundational to its ability to prevent zero-day threats from reaching endpoints, Votiro stands out as an industry leader in content disarm and reconstruction. The patented Positive Selection® technology demonstrates Votiro's unwavering commitment to deliver top-quality solutions rather than an ancillary feature within a toolset. Votiro's technology generates high-quality file reconstruction by rebuilding files while preserving their full functionality, including macros. This meticulous approach ensures that no essential context or functionality is lost during reconstruction.

As a DDR platform, Votiro goes beyond malware prevention to protect the private data that flows in and out of organizations, such as PII, PCI, and PHI. This ability to mask sensitive information in motion further increases an organization's security posture by keeping it compliant with stringent data regulations.



With Votiro, organizations can achieve a proven return on investment, meeting strict performance requirements while effectively safeguarding themselves and their customers against hidden threats and privacy risks.

Votiro also integrates AV capabilities to further bolster security, while utilizing RetroScan to generate auditable tracking of the unknown threats eliminated by Votiro as they become discovered by other tools. With Votiro's established solutions, companies can achieve a proven ROI, meeting their strict performance requirements while effectively safeguarding themselves and their customers against hidden threats and data leaks that can result in hefty fines, large ransomware payouts, and irreparable reputation damage due to the loss of customer data and company secrets.

# Votiro Seamlessly Integrates Into Your Existing Architecture

Easy implementation: just about 10 minutes for SaaS and less than 60 minutes for on-prem

Open API offers seamless integration with existing solutions

Blazing fast: ultra-low latency

Zero training required



Votiro sets the bar for addressing hidden threats in files to keep your organization secure while maintaining compliance.

To learn more about Votiro's Data Detection and Response capabilities, sign-up for a <u>one-on-one demo</u> of the platform, or <u>try it free for 30 days</u> and see for yourself how Votiro can proactively defend your data's security and privacy.

### VOTIRG

# **Try Votiro Free** for 30 Days

Take a free 30-day trial and see how Votiro stops threats and privacy risks before they ever reach your endpoints.

