# Financial Cybersecurity & Certification



It's well-known that the valuable assets of financial institutions are prime targets for cybercriminals. A prominent European Private Bank acknowledged this risk and realized the importance of enhancing its cybersecurity defenses. The bank was grappling with problems related to quality, inadequate penetration testing coverage and the shortcomings of using unvetted subcontractor services. In response, it pursued a comprehensive solution to protect its operations and accelerate its market readiness. This case study delves into how the bank teamed up with the CybrOps team, focusing on thorough penetration testing and a strategic alliance to strengthen the bank's cybersecurity stance.

### At a Glance

Organization: —

**Industry:** Finance **Location:** Europe

Product/Service: Banking



## **Engagement Background**

The bank faced significant challenges in attaining the KPIs of its Penetration testing Target Operating Model, primarily due to the absence of comprehensive testing coverage. The fundamental reason for initiating this partnership was the failure of prior engagements to fulfill the bank's required standards of testing coverage. Because of this, the bank was forced to conduct re-examinations, or potentially starting the entire process from scratch, if significant gaps or systemic issues in the cybersecurity framework were identified. These challenges threatened not just the bank's security but also its operational effectiveness and market performance. Acknowledging the importance of a proactive approach to cybersecurity, the bank sought to collaborate with a provider who could offer detailed and practical findings via extensive penetration testing.

## Objectives

- (I) Obtain necessary compliance with internal and external regulations.
- (1) Achieve complete coverage of the penetration testing plan.
- (1) Address critical vulnerabilities to reduce the risk of cyber-attacks.
- Enhance communication between service providers and internal stakeholders.
- (!) Align cybersecurity measures with organizational objectives.

### Solution & Implementation

CybrOps effectively addressed the bank's cybersecurity challenges by providing access to highly skilled professionals who conducted in-depth manual penetration testing. This meticulous approach was guided by the OWASP Application Security Verification Standard, ensuring that the testing adhered to globally recognized best practices for application security. By going beyond the capabilities of automated tools, CybrOps was able to identify and mitigate sophisticated vulnerabilities that automated tools cannot detect or exploit.

CybrOps introduced their in-house developed tools, including specially developed command and control communication and data exfiltration channels. Leveraging internal research kept our team at the forefront, mirroring advancements in real-world ethical hacking. This ensured that the penetration testing and security assessments were not only thorough but also reflective of the latest trends and threats in the cybersecurity landscape.

CybrOps established a robust communication framework with the bank's internal teams, including Project Managers, DevOps, and IT Development. This testing plan not only guaranteed a seamless implementation but was also integrated into the bank's application development lifecycle from the start. CybrOps' extensive experience in the Financial Services Industry, particularly in Penetration Testing, Red Teaming, Information Security, and Information Risk Management, facilitated a smooth integration with the bank's existing security team.

### Results

The strategic partnership with CybrOps significantly enhanced the bank's cybersecurity, achieving faster application rollouts and comprehensive vulnerability coverage. The majority of engagements resulted in multiple critical vulnerabilities, with our team members actively participating in both the remediation and subsequent retesting phases. In recognition of our effort for the critical Odays identified, our team members were credited with multiple CVEs and also received excellent feedback from the DevOps and product teams.

This partnership resulted in a fortified cybersecurity stance, a reduction in false positives, and more efficient development processes, all of which helped in adhering to regulatory standards. Ongoing security evaluations and their integration into the application development lifecycle ensured that applications were secure before deployment, mirroring the most current threats and trends in the industry. This alliance has not only bolstered the bank's current defenses but has also prepared it to face future cybersecurity challenges effectively.

### The bank's partnership with CybrOps resulted in:

- Support in achieving the necessary compliance with internal regulations and standards such as NIS, PCI-DSS, TIBER-EU, DORA.
- Faster time-to-market for secure applications.
- Comprehensive penetration testing coverage, identifying critical and high-risk vulnerabilities.
- ② Enhanced cybersecurity posture with a significant reduction in false positives.
- Streamlined development processes, allowing teams to focus on functionality rather than security issues, leading to faster secure application deployment.









### Summary

The alliance between the European Private Bank and CybrOps highlights the imperative for financial institutions to proactively improve the delivery of their cybersecurity testing plan. Staying compliant with financial regulations and ensuring a high maturity level in terms of cyber resilience. As banks modernize and scale, the integration of advanced cybersecurity services ensures that their applications are shielded from cyber threats, thereby safeguarding their operations and customer trust.

This case study demonstrates that investing in cutting-edge cybersecurity is not just about protection—it's a strategic move that supports growth, compliance, and resilience in the dynamic financial landscape.

CybrOps not only strengthens your cybersecurity defenses but also helps you obtain essential compliance with financial industry regulations. Contact CybrOps to safeguard your operations and ensure compliance efficiently.

### **Let's Connect**

Fortify Your Defences: Book An Assessment Now

Request Assessment ----



Cybersecurity Tailored for the Financial World



CybrOps.io is an active member of OWASP (The Open Web Application Security Project), committed to embedding secure coding principles in every software project we undertake.

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#### Seal of Expertise

















