

CASE STUDY:

VERTALI APPOINTED BY GLOBAL CLIENT TO PERFORM INDEPENDENT PRODUCT PENETRATION TESTING

RISK
MANAGEMENT

CLIENT AND PROJECT

The client engaged Vertali to conduct a comprehensive mainframe product penetration test of four mission-critical z/OS-based products developed and maintained by the client.

CHALLENGE

The software owner mandated that any third party developing or maintaining its products must ensure those products were independently tested. Vertali's reputation as a global mainframe security leader led the client to engage its expertise.

The client required assurance the products they maintain were secure, robust, and resilient against modern cyber threats. The challenge was to perform an in-depth penetration testing and code review of the z/OS products, ensuring that vulnerabilities – particularly those unique to mainframe systems – were identified and mitigated.

Key challenges included:

- Identifying any vulnerabilities in the products being tested
- Evaluating cross-system functionality for security risks
- Performing a thorough architecture and security model review

VERTALI SOLUTION

Vertali installed and configured the client's products and deployed its specialist consultants to conduct structured and comprehensive testing:

Network Configuration

- Reviewed the network configuration for security weaknesses, applicable where products had a network component.

z/OS Component

- Assessed the internal structure and configuration of the products, identifying

- Independent software product pentest for global client
- Four mission-critical z/OS products reviewed
- In-depth code and architecture analysis
- Vulnerabilities identified and risks mitigated
- Enhanced client confidence in product security

any exploitable vulnerabilities specific to z/OS environments.

Code Review

- Conducted an in-depth analysis of the source code to identify:
 - Exploitable code including SVCs, PC Routines and all authorised code.
 - Weaknesses in cross-system functionality.
 - Structural and quality issues.
 - Also reviewed the underlying security model for gaps.

The client received a detailed report on the findings for each product, including identified vulnerabilities and remediation recommendations. It also received an Attestation Letter, summarising the approach and the execution timeline.

Vertali's expert-led assessment provided the end client with actionable insights into the security posture of its z/OS-based software products. The engagement not only uncovered previously unknown vulnerabilities but also supported the end client's commitment to secure development practices for its branded solutions.



For more information on Vertali's services, call (0)1527 868380 or visit www.vertali.com