OCDTECH

Penetration Testing

Identify, Exploit, and Mitigate Organizational Risks with Penetration Testing

In a penetration test, the OCD Tech team analyzes an organization's environment and leverages the found vulnerabilities, misconfigurations, and the functionalities available to a low privileged user. This process will take advantage of the results identified via a vulnerability assessment. Rather than simply reporting identified vulnerabilities, the assessment team will attempt to exploit these vulnerabilities, and demonstrate the potential exposure with the goal of reaching the highest possible level of privilege and gaining access to sensitive information. While our goal for the simulated attack may be reaching the highest level of privilege, our ultimate goal for an engagement is to identify risks and make recommendations for remediation that will strengthen your security posture. We provide plain English executive summaries of our findings, as well as actionable technical recommendations for addressing identified deficiencies.

Methodology

The methodology presented below is broad, and a carefully defined scope will drive the actual components of the test.

| Active Reconnaissance | 01 R 02 | Passive econnaissance Social | Passive Reconnaissance Leverage sources of Open Source Intelligence to collect information about the organization and its employees. Active Reconnaissance Characterize the target network and target systems to identify potentially exploitable vulnerabilities or misconfigurations. | | | |
|--------------------------|------------|------------------------------------|--|--|--|--|
| Exploitation | 03 | Engineering | <i>Social Engineering</i> Target end-users in an attempt to recover sensitive information or install malicious software. This can take several forms. | | | |
| | | Post Exploitation | Exploitation Gain unauthorized access to target systems. | | | |
| Privilege | 05 PO | | <i>Post Exploitation</i> Use the newly established foothold to gather information specific to the level of privilege gained that was previously not available. | | | |
| Escalation | 07 | Lateral | <i>Privilege Escalation</i> Gain administrator-level access to target systems. | | | |
| Maintain | 08 | Movement | <i>Lateral Movement</i> Leverage collected data to move throughout the network, with a focus on obtaining access to critical systems. | | | |
| Access 09 | | Cover Tracks | Maintain Access Depending on the scope of the test, ensure that compromised systems may be accessed throughout the test. | | | |
| Reporting | 10 | | <i>Cover Tracks</i> Depending on the scope of the test, ensure that all traces of attacker activity are removed. | | | |
| | | | <i>Reporting</i> Compile all information gathered during the penetration test for management. | | | |

Braintree | Winchester Tel: 617.471.1120 • www.ocd-tech.com • Twitter: @TheOCDTech

Report Preparation and Delivery

Our final deliverable will include risk-ranked findings, based on the NIST 800-30 Guide for Conducting Risk Assessments, assessment scale. This scale determines the level of risk based on a combination of likelihood and impact. Each observation will be categorized as VERY HIGH, HIGH, MODERATE, LOW, or VERY LOW, based on the intersection of impact and likelihood of exploitation by a threat actor. All findings will have corresponding recommendations for improvement and remediation.

| Likelihood (Threat Event Occurs and Results in Adverse Impact) | Level of Impact | | | | | |
|---|-----------------|----------|----------|----------|-----------|--|
| | Very Low | Low | Moderate | High | Very High | |
| Very High | Very Low | Low | Moderate | High | Very High | |
| High | Very Low | Low | Moderate | High | Very High | |
| Moderate | Very Low | Low | Moderate | Moderate | High | |
| Low | Very Low | Low | Low | Low | Moderate | |
| Low | Very Low | Very Low | Very Low | Low | Low | |

Industry Contributions

OCD Tech Staff regularly speak and provide research to the industry on our numerous product lines including penetration Staff provided insight and research findings on testing. Domain Name Collisions at BSides Boston 2020 and the NoVA Hackers Invitational. In addition, OCD Tech performed a password cracking demonstration at the 2020 ISACA AGM event. Lastly, check out our article entitled "A Crash Course Presented at the Domain Name Collisions at BSides in Splunk and Security" featured in Pentest Magazine's Best of 2020.







Boston 2020

Presented at NoVA Hackers Invitational 2020

Performed Password Cracking Demonstration at 2020 ISACA AGM

Published articles featured in PenTest Magazine

To see the latest news from the industry and beyond, make sure to check out our blog at https://ocd-tech.com/blog/

CVE Identifications

During penetration testing engagements, OCD Tech has identified and publicly disclosed six (6) new CVEs over the past three years. By working with the software vendor to fix the vulnerability, and MITRE for public disclosure, OCD Tech seeks to maximize the reach of each vulnerability discovery for the InfoSec community as a whole, while minimizing risk to existing users of the vulnerable software. More information on the vulnerability disclosures listed below can found online at https://cve.mitre.org/

| Number | Description |
|----------------|--|
| CVE-2018-11628 | Data input into EMS Master Calendar before 8.0.0.201805210 via URL parameters is not properly sanitized, allowing malicious attackers to send a crafted URL for XSS. |
| CVE-2019-7004 | A Cross-Site Scripting (XSS) vulnerability in the WebUI component of IP Office Application Server could allow unauthorized code execution and potentially disclose sensitive information. |
| CVE-2019-19774 | Zoho ManageEngine EventLog Analyzer 10.0 SP1 before Build 12110 security restrictions bypass. |
| CVE-2020-12679 | A reflected cross-site scripting (XSS) vulnerability in the Mitel ShoreTel Conference Web Application |
| CVE-2020-13998 | Citrix XenApp 6.5, when 2FA is enabled, allows a remote unauthenticated attacker to ascertain whether a user exists on the server, because the 2FA error page only occurs after a valid username is entered. |
| CVE-2020-51332 | SonicWall SSL-VPN products and SonicWall firewall SSL-VPN feature misconfiguration. |

About Us

OCD Tech is the IT Audit, Security, and Assurance division of O'Connor & Drew, P.C. Comprised of a team of IT industry veterans, OCD Tech utilizes OCDTECH 1 industry recognized frameworks and leading practices to assess your company's technology risks and provide expert analysis and recommendations 0'Connor for actionable improvements to protect your systems, data, and your overall business from cyber threats and attacks. We have provided penetration testing services to countless organizations just like yours and would welcome the opportunity to answer your questions and address your specific needs.

Contact Us



Michael Hammond, Principal CISA, CRISC, CISSP Phone: 844-OCDTECH Email: mhammond@ocd-tech.com



Robbie Harriman, Senior IT Audit Manager CISA, ISACA CSX, CompTIA Phone: 844-OCDTECH Email: rharriman@ocd-tech.com

Braintree | Winchester Tel: 617.471.1120 • www.ocd-tech.com • Twitter: @TheOCDTech