Lab - Researching PenTesting Careers

# Objectives

In this lab, you will complete the following objectives:

* Conduct a Penetration Tester Job Search
* Analyze Penetration Tester Job Requirements
* Discover Resources to Further Your Career

# Background / Scenario

When preparing for any career, it is important to understand the prospective job market. The help wanted postings on internet job boards contain a wealth of information regarding the qualifications and preparation required for the jobs that you will be applying for. For careers in ethical hacking, you can see the certifications, knowledge, and skills that are required along with descriptions of what the ethical hacker will be doing for the company. In addition, you can see the kinds of organizations that hire ethical hackers, their locations, and other corporate information that is useful to know when applying for positions.

# Required Resources

* Kali VM customized for Ethical Hacker course
* Internet access

# Instructions

## Conduct a Penetration Tester Job Search

In this part of the lab, you will conduct a search for ethical hacker/penetration tester jobs on various internet employment sites.

### Search internet job boards.

* + - 1. Open a browser and search for jobs related to ethical hacking and penetration testing. Use employment sites such as **indeed.com**, **glassdoor.com**, **linkedin.com**, **monster.com**, etc.
      2. Consult at least three different employment sites. Search specifically for entry-level postings, although feel free to look at more senior positions. Find some jobs that look interesting to you.
      3. Complete **Table 1: Jobs Table** with at least five jobs that you have found from different employment sites. You can complete the tables in this document or recreate the tables in another file or on a piece of paper.
      4. Bookmark these jobs or open each job in a new tab. Keep the sites available for the next part of the lab.

## Analyze Penetration Tester Job Requirements

Now that you have collected some jobs that are interesting to you, go through and complete **Table 2: Duties and Required Training and Certification**.

### Complete the table.

* + - 1. Copy the five jobs from Table 1 into the **Job Title** column in **Table 2: Duties and Required Training and Certification**.
      2. Read through the job postings and summarize the duties that you would be responsible for in the position. Focus on the diversity of duties that are required by the different positions.
      3. What skills are required? Focus on the pentesting-related skills, but also any general skills that are required.
      4. Explore the postings further and complete the Required Experience column. What kind of experience is required for each job? How many years of experience do they require? If the employment site interface permits, filter or search for entry-level positions that require no experience. There are some out there!
      5. Finally, what certifications are mentioned as required or desirable?

## Discover Resources to Further Your Career

You likely noticed several certification and training requirements that were mentioned in the job postings. In this part of the lab, you will investigate pathways to gain the level of training and the certifications that are suitable for the type of job that you are looking for.

#### questions

* + - 1. Which certifications are most commonly required?

<Type your answer here>

* + - 1. Investigate training options for the certifications that you identified as being appropriate to the prospective positions. Where can you take courses to prepare you for those certifications?

<Type your answer here>

# Reflection

From your internet search results, please answer the following questions.

* 1. Do you find that jobs are concentrated in any one area, or are they distributed?

<Type your answer here>

* 1. What are the most common duties mentioned?

<Type your answer here>

Table 1: Jobs Table

| **1 – Job Title** | **2 – Company Name** | **3 - Level (Entry, Mid, Senior)** | **4 – Location** | **5 – Internet Job Board Source** |
| --- | --- | --- | --- | --- |
| Security Enginerr (Red Team) | amlT Global Solution Jakarta | Mid-Level | Jakarta | **indeed.com** |
| IT Auditor | DOKU, PT NUSA SATU INTI ARTHA Jakarta | Mid-Lavel | Jakarta | **indeed.com** |
| **IT SECURITY OFFICER** | **InterActive Surabaya** | Mid-Lavel | **Surabaya** | **indeed.com** |
| **Cyber Security Engineer** | **PT.intikom Berlian Mustika Jakarta** | Mid-Lavel | **Jakarta** | **indeed.com** |
| **Web FE Engineer (Middle - Senior)** | **AMK Technology Sdn Bhd Jakarta** | Mid-Lavel | **Jakarta** | **indeed.com** |
|  |  |  |  |  |

Table 2: Duties and Required Training and Certification

| **Job Title** | **Duties** | **Required Skills** | **Required Experience** | **Required Training and Certification** |
| --- | --- | --- | --- | --- |
| Security Enginerr (Red Team) |  |  | * At least 2 years experience in Vulnerable Assessment, Penetrating Testing and Red Teaming * Having Cyber Security certifications like CEH (Certified Ethical Hacker) or similiar is a plus * Proficient in using Macbook with an M series chip for iOS application penetrating testing * Willing to work onsite at Sunter, North Jakarta |  |
| IT Auditor | * Develop IT audit programs, create audit checklists, and perform IT audits on various IT systems and platforms. * Execute efficient and effective IT audit procedures, ensuring compliance with audit standards and methodologies. * Establish IT audit plans based on identified risks, ensuring that high-risk areas are regularly reviewed. * Review, evaluate, and test IT controls to determine the exposure to risks and provide strategies for improvement. * Provide recommendations and guidelines on identified IT security risks and control weaknesses. * Prepare and coordinate audit review reports and test results for internal and external stakeholders. * Follow up on audit findings (internal and external) to ensure timely implementation of corrective actions. * Monitor the execution of remediation plans based on audit findings to ensure compliance and improvement. * Assist in managing internal and external audits and support the IT Compliance and IT Security teams in improving processes. * Ensure compliance with regulations such as PCI DSS v4.0, ISO 27001:2022, and Bank Indonesia standards. |  | * Bachelor’s degree in Information Technology, Computer Information Systems, or a related field * Minimum 3 years of experience as an internal or external IT auditor * One or more professional certifications such as Lead Auditor, CISA (Certified Information Systems Auditor), CIRSC, CEH (Certified Ethical Hacker), or CISSP (Certified Information Systems Security Professional) * Proficient in IT audit methodologies, risk-based auditing, and internal control frameworks * Strong knowledge of PCI DSS v4.0, ISO 27001:2022, and Bank Indonesia regulations * Experience in auditing network security, IT infrastructure, and various IT platforms, operating systems, and applications * Familiarity with IT Application Control Reviews, Data Analysis, and SDLC (Software Development Life Cycle) processes * Strong understanding of IT risk management and cybersecurity * Knowledge of IT audit tools and methodologies to assess control effectiveness * Strong analytical and problem-solving skills * Excellent communication skills, both written and verbal * High initiative and the ability to work effectively in a team environment * Strong attention to detail and the ability to work under pressure * Ethical conduct and strong interpersonal skills * Awareness of current cybersecurity trends and vulnerabilities * Ability to translate technical requirements into actionable audit steps |  |
| **IT SECURITY OFFICER** |  |  |  |  |
|  |  |  |  |  |
| **Web FE Engineer (Middle - Senior)** | § Architect and implement web front end and back end with efficiency, speed, quality & robustness in mind  § Architect and implement web UI/UX based on provided wireframes and business requirements  § Gather, document and analyze business requirements in order to help define scope of software development initiatives. May include web/mobile page mock-ups and interaction prototyping.  § Produce and maintain documentation related to application (e.q. scope requirements, logical and technical designs, testing and implementation plans).  § Troubleshoot and implement bug fixes related to client and user reported issues.  § Play proactive support role and take ownership of technical issues, and work with internal/ cross functional/ external team to resolve more advanced issues when necessary.  § Collaborate with team members in all aspect of software design, coding, testing, documentation & deployment  § Deliverables in agile scrum approach | § Detail-oriented with eyes sensitive to the aesthetics of UI layout.  § Self-starter & team player  § Analytical & good problem solving skills  § Good verbal, written and interpersonal skills |  |  |
|  |  |  |  |  |

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