

# Why Build a Penetration Testing Lab?

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If your job is to conduct penetration tests for companies or you are just a security researcher that wants to test a new vulnerability or a new tool then you might want to consider the construction of a **Penetration Testing Lab**.

The first reason that you want to do this is the need to stay ethical and legal. Testing a new tool or just run some exploits inside the network of your company can damage the target host or can lead you to disclose confidential information. Then two things will happen:

1. Lose your job
2. Legal implications

Another thing that a penetration tester needs to consider is the network bandwidth. Aggressive scanning, brute force attacks and Denial of Service attacks can produce huge network traffic causing the network to operate slowly.

Some other factors like testing a new patch or deploying a new exploit that you have developed are also good motives for setting up a lab. The last thing you want is to be responsible for a major outage on the production network of your company or your client's.

Except of the reasons that have been mentioned above the benefits of having a penetration testing lab are many like:

- Study for a Certification
- Job advancement
- Gain further Knowledge and Skills
- Experimentation
- Evaluation of new tools
- Identify vulnerabilities

**Conclusion:**

A laboratory is vital to any penetration tester or computer security specialist. You cannot start a penetration test in your company's network without authorization so having a field of action that you can develop your skills will enhance certainly your career and you will be a great asset for your company.