

# 17 skills needed to become a hacker

To become a professional hacker you need a lot of knowledge in both engineering and information technology. Here are 17 skills you will need to have if you want to be a good hacker.

Naturally, we recommend learning these skills to become a white hat hacker, making companies, organizations and the internet even more secure.

Besides white hat hackers and black hat hackers, what other colors are there in the hacker world? Is there any genuine work for them?

## Basic skills

These are the most basic things you need to know in order to start hacking something. After mastering the skills in this section, you can move on to intermediate skills.

### 1. Computer skills

To be a hacker, you need to have some basic computer skills. Of course, we're not talking about typing in Word or surfing the web. What you need is the ability to use the command line in Windows, the ability to edit the Registry and set network parameters.



### 2. Network skills

You need to understand the following basic concepts about networking:

1. DHCP

2. NAT
3. Subnet
4. IPv4
5. IPv6
6. Public IP and Private IP
7. DNS
8. Router and switch
9. VLAN
10. OSI model
11. MAC address
12. ARP

Because hackers often have to "machine" things related to the above technologies, you understand them as well as possible.

### **3. Linux skills**

To be a hacker, developing your Linux skills is of utmost importance. Almost all of the tools that hackers use are developed for Linux and Linux to give hackers capabilities that Windows doesn't have.

### **4. Learn how to use Wireshark or Tcpdump**

Wireshark is widely used for sniffer / protocol analysis while tcpdump is a command line sniffer / protocol analyzer. Both are extremely useful in analyzing TCP / IP traffic and attacks.

### **5. Virtual machine skills**

You need to master virtualization software such as VirtualBox or VMWare Workstation. Thanks to these virtual machine creation software, you will have a safe environment to practice your hacking skills before you apply them and get real. Besides, it also helps you to check and test your new discoveries safely.

### **6. Understand security concepts and technologies**

A good hacker needs to understand security concepts and technologies. You need to have in hand basic things like PKI (public key infrastructure), SSL (secure sockets layer), IDS (intrusion detection system), firewalls, .

### **7. Wireless connection technology**

To hack wireless technology, you must first understand how it works. You have to understand things like security algorithms (WEP, WPA, WPA2), four-way-handshake encryption protocol, and WPS. Also, you need to know things like connection protocols and how to authenticate .



## **Intermediate skills**

### **8. Scripting**

Without scripting skills, you will have to use other hacker tools and this is taboo in the hacker world. Not being able to write scripts reduces your effectiveness. Security tools are inherently updated every day, so you have to be able to script to get around them.

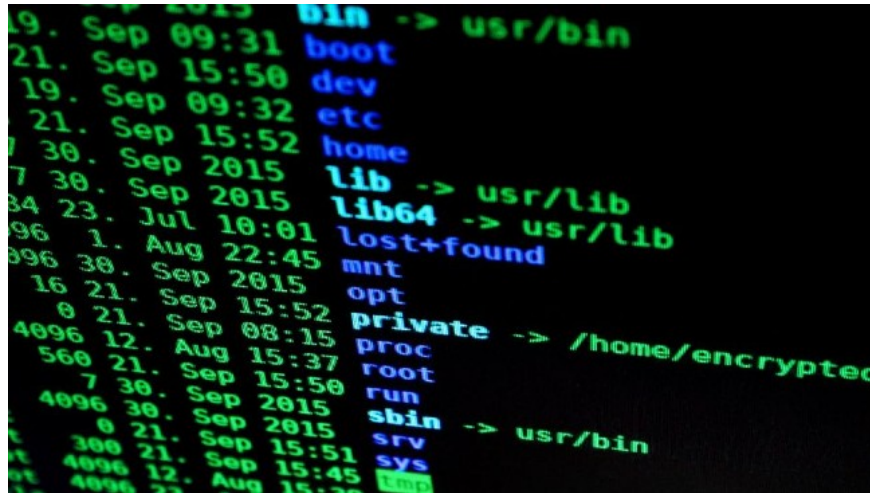
To develop your own unique tools, you need to master at least one scripting language including the BASH shell. You can choose one of the languages ??like Perl, Python or Ruby.

### **9. Database skills**

To get the most out of the system you want to hack into you need to understand the database and how it works. To do this you need to know the SQL language. Expert advice is that you should be proficient in one of the major database management systems (DBMS) like SQL Server, Oracle or MySQL.

### **10. Web application**

In recent years, web applications have been the most fertile ground for hackers. The better you understand how web applications and the databases behind them work, the more successful you will be. Besides, to serve hacking campaigns, you also need to build your own website.



## 11. Digital forensic skills

The best hackers around the world often have a very good grasp of digital forensic skills. With black hat hackers, this skill will help them hide, erase their tracks on the internet. With white hat hackers, digital forensics help them assist agencies and governments in tracking down black hat hackers and cybercriminals.

## 12. Advanced TCP / IP

Beginner hackers must know the basics, but to advance to the mid-range hacker you must have a deep understanding of the TCP / IP stack and protocol fields. These include how the fields in both TCP and IP packets can be manipulated and used to hack into the system and trigger MitM attacks .

## 13. Cryptography

The deeper you understand cryptographic weaknesses and strengths, the easier it will be to hack into systems. Besides, understanding cryptography also helps you to hide your activities from other hackers.

## 14. Reverse engineering

Reverse engineering helps you discover things and understand more deeply about applications, services, and even malicious code. As in software engineering, it is rare for a hacker to build malicious code from scratch but often use the components of existing malware.

A white hat hacker can use reverse malware to investigate and track down black hat hackers and cyber criminals. Meanwhile, black hat hackers can use this technique to bypass IDS intrusion detection system and anti-virus software .

## Invisible skills

Besides IT, computer skills, hackers also need some other invisible skills. These include the following skills:

## 15. Think creatively

A system is always vulnerable and there are ways to hack into it. On the same issue, a creative thinking hacker will come up with different approaches.



## 16. Problem solving skills

As a hacker, you often face problems that seem like there's no solution. This requires getting used to being analytical and problem-solving all the time.

First, you will have to correctly diagnose what anomaly is going on and then break the problem down into separate parts. This skill can not be achieved overnight, but requires regular and continuous training for a long time.

## 17. Persistence, perseverance

A hacker always has to persevere with each campaign. If the first time fails, try again. If that still doesn't work, find a new approach and try again. Only with perseverance can you succeed in a hacker career (including white hat or black hat).

You want to be a hacker?

We hope that this article will provide you with some tutorials, a list of what you need to learn and master to become a mid-range hacker. Of course, to become an advanced hacker or master, you will need other skills. We also wish that you will become the white hat hackers that help the society instead of the black hat hackers.

Currently, white hat hackers can make a lot of money when participating in bug hunting programs organized by companies and corporations around the world.

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