

## **Malware Types & Behaviour Analysis**

### **Malware:**

A malicious file or software which is designed to harm a system or steal data or spy on users or disrupt services.

### **Types of Malwares:**

1. Virus
2. Worm
3. Trojan
4. Ransomware
5. Spyware
6. Adware
7. Backdoor
8. Rootkit
9. Botnet Malware
10. Fileless Malware

### **Virus:**

Attached with legitimate files and spreads when the file runs. It needs user action for do this work.

### **WORM:**

It spreads automatically. It spread with the entire network without user action.

### **Trojan:**

It looks legitimate but it has malicious inside it. It does not self-replicate.

### **Ransomware:**

It encrypts files and demands payment for decrypt it.

### **Spyware:**

It is a malicious file used for secretly monitors user activities like keystroke logging, screenshot capturing.

### **Adware:**

It used to display unwanted ads like browser Pop-ups, Redirects.

## **Backdoor:**

It creates a secret access to the system. It gives remote access for the attackers.

## **Rootkit:**

It used to hide malware from the system. It needs deep system access to do its work.

## **Botnet Malware:**

It turns the affected system into bot. It communicates with C2 server.

## **File less Malware:**

It runs in memory, not as a file. It uses PowerShell or scripts.

## **Malware Research:**

**Tool:** Virustotal.com

### **Hash:**

275a021bbfb6489e54d4718899f7db9d1663fc695ec2fe2a2c4538aabf651fd0f

The screenshot shows the Virustotal analysis interface for the specified hash. The main summary card displays a Community Score of 65 / 67, which is highlighted with a red circle. The file is identified as "File distributed by Offensive Security" and is a "EICAR.com-5987". The analysis details show it's a PowerShell script (powershell) with various detection tags: direct-cpu-clock-access, detect-debug-environment, idle, attachment, via-tor, known-distributor, and long-sleeps. The file size is 68 B and was last analyzed 10 minutes ago. Below the summary, there's a "Code insights" section explaining EICAR is a test string used to detect and test antivirus software. It's noted that it's not a real virus and is harmless. A "Show more" link is present. Further down, the "Popular threat label" is listed as "virus.eicar/test". Threat categories include virus and trojan. Family labels include eicar, test, and file. The "Security vendors' analysis" section lists vendor detections: AhnLab-V3, Virus/EICAR\_Test\_File, Alibaba, and Virus:Win32/EICAR.A. A "Do you want to automate checks?" button is also visible.

This report shows that the hash has 65/67 detection ratio. So, it is a high-risk threat. It is a fileless malware and it works on PowerShell. The high detection ratio clearly confirms that the analysed hash represents a known and confirmed malicious threat, despite the absence of a traditional executable file.