

Malicious Program vs. Vulnerable Program

The program has been designed to compromise the security of the operating system

The user executes a malware

The program has not been designed to compromise the security of the operating system may can enable the

The user executes a legitimate program that may be coerced into executing a malicious payload. The program is potentially exploitable.

• Arbitrary Code Execution Vulnerability: a vulnerability that can be exploited to execute a malicious payload (code)

Malicious Program vs. Vulnerable Program

The program **has been** designed to <u>compromise the security</u> of the operating system

→ The user executes a malware

The program has not been designed to compromise the security of the operating system may can enable the

- → The user executes a legitimate program that may be coerced into executing a malicious payload. The program is potentially exploitable.
- Arbitrary Code Execution Vulnerability: a vulnerability that can be exploited to execute a malicious payload (code)

What is a secure system?