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- Show Name: CEHv11 (312-50)
- Topic Name: System Hacking Phases and Attack Techniques Malware Threats
- Episode Name: Viruses and Worms

Viruses and Worms

Objectives:

- · Define Viruses and and Worms and explain their characteristics
- List the phases of the Virus Lifecycle
- · List and define the common virus types
- · List and explain how viruses and worms are able to infect computer systems
- What is the difference between viruses and worms?

• Virus

- Malicious software that attaches itself to host file or program
- Self-replicating
 - It infects other programs or files
- Requires human interaction to activate
- Worm
 - Spreads independently through software vulnerabilities
 - Doesn't require human interaction
- What are typical goals?
 - Destruction/damage of systems
 - Cyber theft
 - Chaos!
 - Hacktivism
- What are symptoms of infection?
 - Poor system performance
 - Lack of disk space
 - Memory/CPU/Network utilization is high
 - System crashes
 - Missing data
- What are the stages of the Virus Lifecycle?
 - Design
 - Virus dev designs and develops new virus
 - Programming skills
 - Construction kits
 - Replication
 - Virus is released and spreads
 - Launch
 - User downloads and executes virus

- Detection
 - Virus is discovered and analyzed
 - Virus attributes and specifics are cataloged
- Incorporation
 - AV orgs add new virus defenses to their software
- $\circ~$ Execution of the damage routine
 - Removing viruses with AV
- What are some common virus types?
 - Boot sector
 - File
 - Macro
 - Polymorphic
 - Metamorphic
 - Logic Bombs
 - Ransomware