Linux Forensics

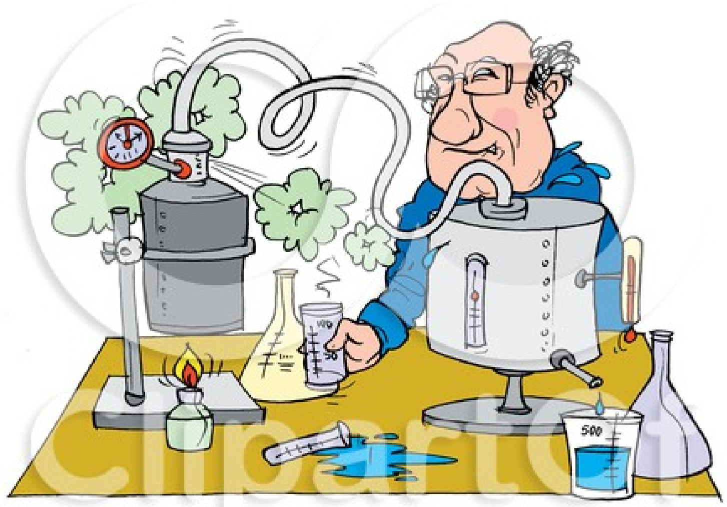
Dr. Phil Polstra
PhD, CISSP, CEH

@ppolstra
http://philpolstra.com

Certifications:
http://www.securitytube-training.com

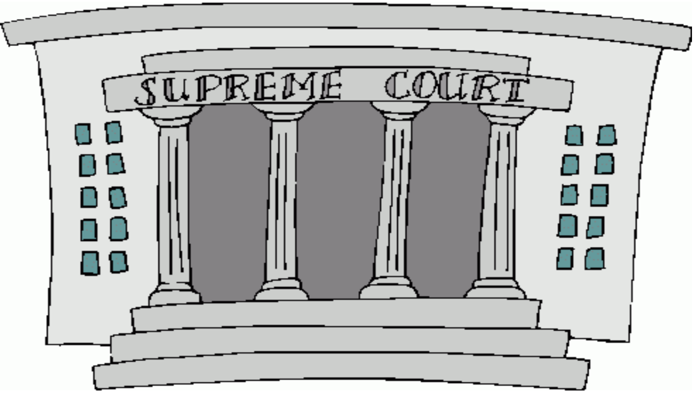
Pentester Academy: http://www.PentesterAcademy.com

Forensic Basics: Background



What is Forensics?

- Merriam-Webster: Forensic (n) belonging to, used in, or **suitable to courts** of judicature or to public discussion and debate
- Forensic science or forensics is the scientific collection of evidence of sufficient quality that it is suitable for use in court

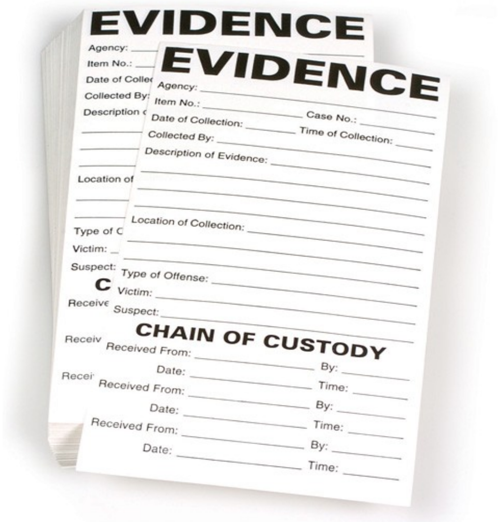


Kinds of Forensics

- Physical
  - Transfer
  - Fingerprints
  - DNA
- Digital
  - Network
  - Data storage
  - Small devices
  - Computers

General Principles

- Maintain integrity of evidence
- Maintain chain of custody
- Document everything
  - Handwritten is better
  - Work with a partner if possible
- Follow standard practices



EVIDENCE

Agency: ______________________ Case No.: ______

Item No.: ______________________

Date of Collection: ______________ Time of Collection: ______

Collected By: ______________________

Description of Evidence: ______________________

Location of Collection: ______________________

Type of Offense: ______________________

Victim: ______________________

Suspect: ______________________

CHAIN OF CUSTODY

Received From: ______________ By: ______

Date: ______________ Time: ______

Received From: ______________ By: ______

Date: ______________ Time: ______

Received From: ______________ By: ______

Date: ______________ Time: ______

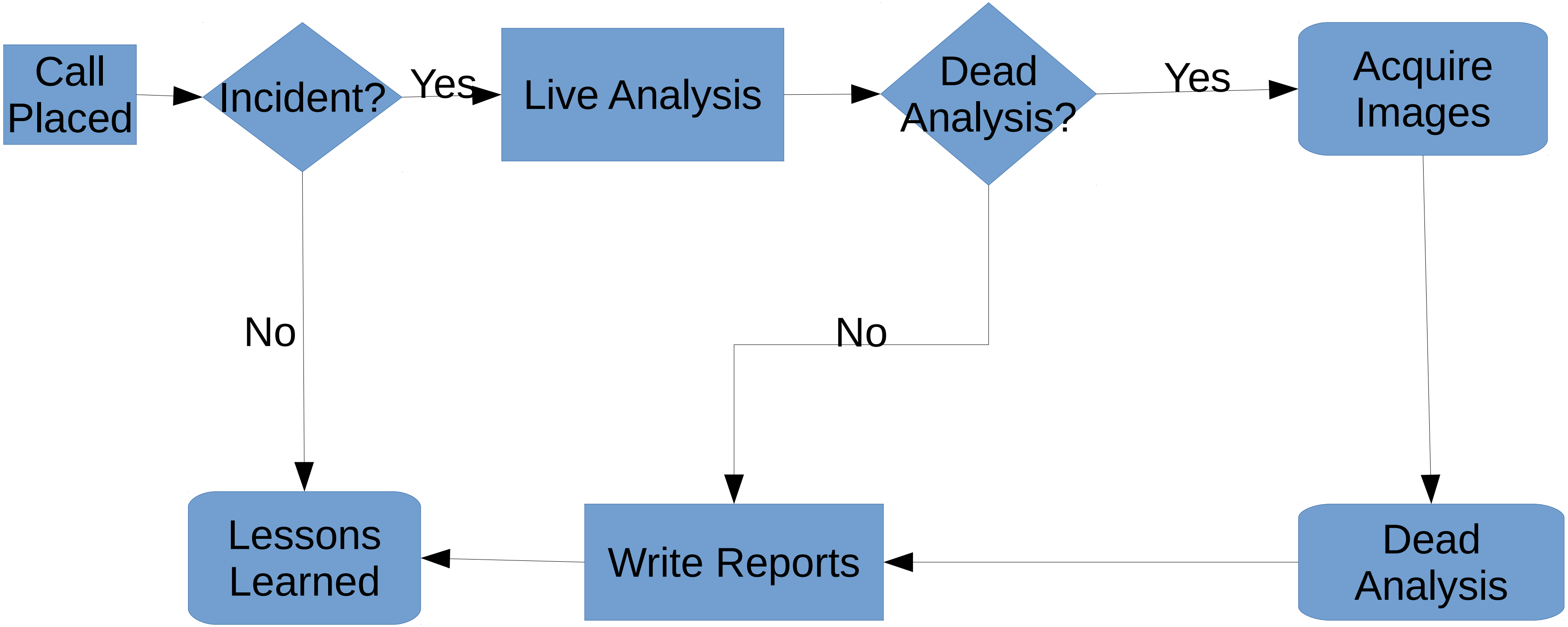
Phases of Investigation

- Evidence preservation
  - First do no harm
- Evidence searching
  - More complicated as storage has increased
- Event reconstruction

Incident Response

- First validate that there was an incident
- Then proceed with preservation, searching, and event reconstruction
- Might need to do some preliminary investigation to determine if there was an incident
- Not done till reports are complete

High Level Process



©SecurityTube.net