# HONEYPOTS

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#### Definition

"A honeypot is a security resource whose value lies in being probed, attacked, or compromised."

Lance Spitzner

## Advantages

- □ Data
  - Eliminates "noise level" of production systems
  - Provide precise information quickly
- □ Resource
  - Require limited resources
  - Eliminates problems with resource exhaustion
- □ Simplicity
- □ Justify value of security investments

## Disadvantages

- Narrow Field of View
  - Can only detect attacks directed at them
- □ Fingerprinting
  - Attacker can identify true nature of honeypot
- □ Risk
  - Break out of the controlled environment

## Types of Honeypots

- □ Low Interaction
  - BOF
  - Honeyd
  - Specter
- Medium Interaction
  - ManTrap
  - Chroots and jails
- □ High Interaction
  - Honeynets

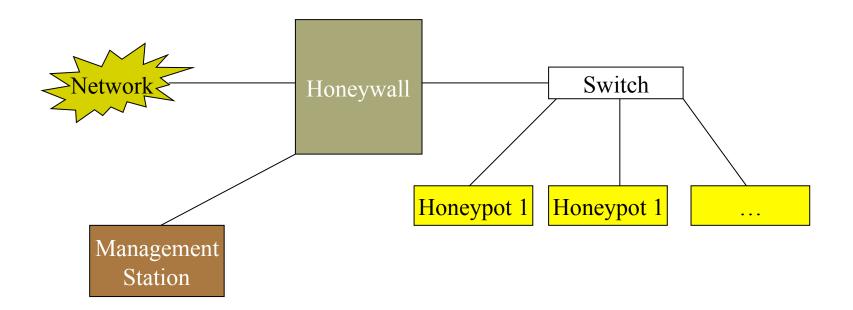
#### Honeynet

- □ A highly controlled network environment
- Provides a high interaction honeypot
- □ Can gather most information about attackers
- Can identify unknown attacks or tools
- Can capture highly skilled hackers
- □ Can connect more than one honeypot

## Gen II Honeywall

- □ A modified Linux install
- □ Acts as an Ethernet bridge
- □ Logs all traffic
- □ Provides data control

# Honeynet Diagram



#### Honeynet CDROM

- □ Bootable CD to install a honeynet
- □ Is almost ready to go; needs customization
- □ <a href="http://www.honeynet.org/tools/cdrom">http://www.honeynet.org/tools/cdrom</a>
- □ Latest version is still in Beta

#### Features

- □ Can provide email alerts
- Walleye web interface
- □ Can limit outgoing traffic (minute, hour, etc)
- Management interface
- □ Snort inline to filter outgoing traffic
- □ Easy to deploy and manage

#### More information

- □ <a href="http://www.honeynet.org/tools/cdrom/roo">http://www.honeynet.org/tools/cdrom/roo</a>
- □ <a href="http://www.honeynet.org/papers/">http://www.honeynet.org/papers/</a>
- □ Books
  - Know Your Enemy, 2<sup>nd</sup> Edition
  - Honeypots Tracking Hackers