

Honeynet/pot : Testing your infrastructure like the attackers from port scanning to fuzzing

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Testing data control ? data capture ? data collection ?

- ▶ Data Control
 - ▶ The way to contain/limit the attackers. This is the really important part to limit the potential abuse of the attackers.
 - ▶ Test : abuse the network connectivity, ...
- ▶ Data Capture
 - ▶ Capturing the activities inside and around the honeynet/pot without informing the attackers.
 - ▶ Test : overflow the data capture, generate random traffic, ...
- ▶ Data Collection
 - ▶ Collection is used to gather all the data captured in different distributed honeynets/pots.
 - ▶ Test : abusing the network protocols used, fuzzing software used, ...

Assessment of your honeynet/pot ?

- ▶ Standard approach : Vulnerability Scanning, Network Security Assessment and Penetration Testing
 - ▶ Host Enumeration (don't forget to see how your honeynet will be seen by the attackers)
- ▶ Software Analysis : Code Review to Fuzzing
- ▶ Recurring Security Assessment
 - ▶ Be aware of the data collection and the separation of collected data when doing an assessment

Testing your Honeynet/pot software with fuzzing

- ▶ Fuzzing is a simple software testing method that provides random data to the input of software
- ▶ Fuzzing is a kind of "black box" testing as the technique is looking at the behavior of the software based on the input given
- ▶ Based on the failure and the "fuzzy" input given, we could deduce the potential (often security) defect

Testing your Honeynet/pot software with fuzzing - zzuf

- ▶ zzuf is a transparent application input fuzzer.
- ▶ zzuf is intercepting file or network operation and randomly changes the input
- ▶ `zzuf -s1 -r0.01 /bin/cat test-data`
- ▶ zzuf is deterministic (nifty for debugging) -r0.01 is 1
- ▶ can be used to check parsing of configuration file but also network input

Q and A

- ▶ Thanks for listening.