



A comparative analysis between low and high level Honeypots

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What is Honey Pot ?

Lance Spritzner defines Honey Pot as:

“a security resource whose value lies in being probed, attacked or compromised”





Honeypots

- ▶ A **honeypot** is a computer system that is set up to act as a decoy to lure cyber attackers, and to detect, deflect or study attempts to gain unauthorized access to information systems.



The prompting behind HoneyPot

The encouragement behind HoneyPot is providing **a secure network of networks** which is Internet.





By 2020,
there will be
more than
3.8 Billion
internet users.



The aim of this paper

- ▶ The main idea behind this paper are to make a comprehensive and analytical review on the low and high interaction Honeypots.

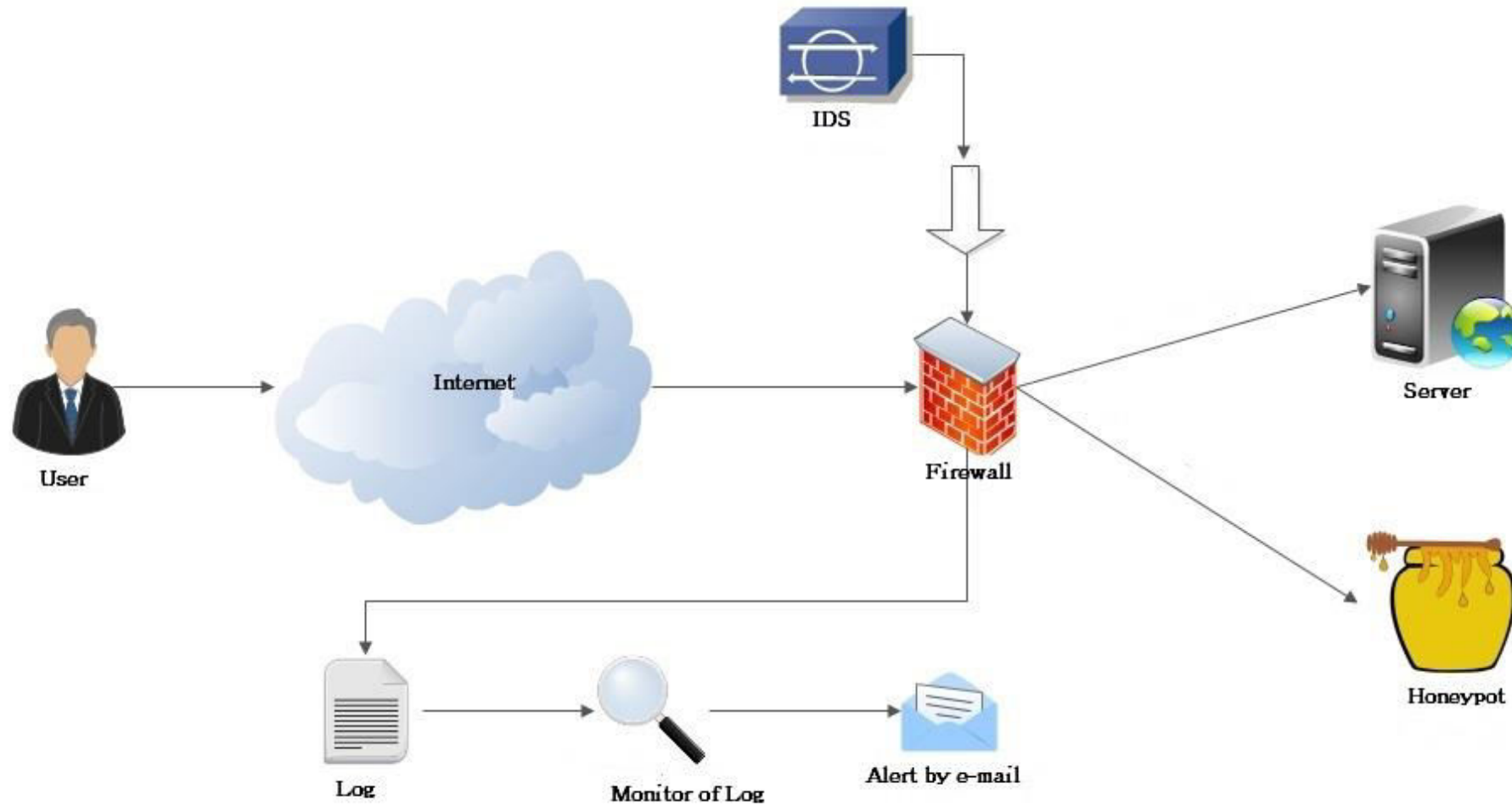


As a matter of fact, the community doing research around Honeypots focuses on comparison of Honeypots within a single aspect of Honeypot whether it is Implementation, effectiveness or limitation.

Author believes that there are no critical review done which contain all the above mentioned aspects of Honeypot, hence makes a gap in this research area.

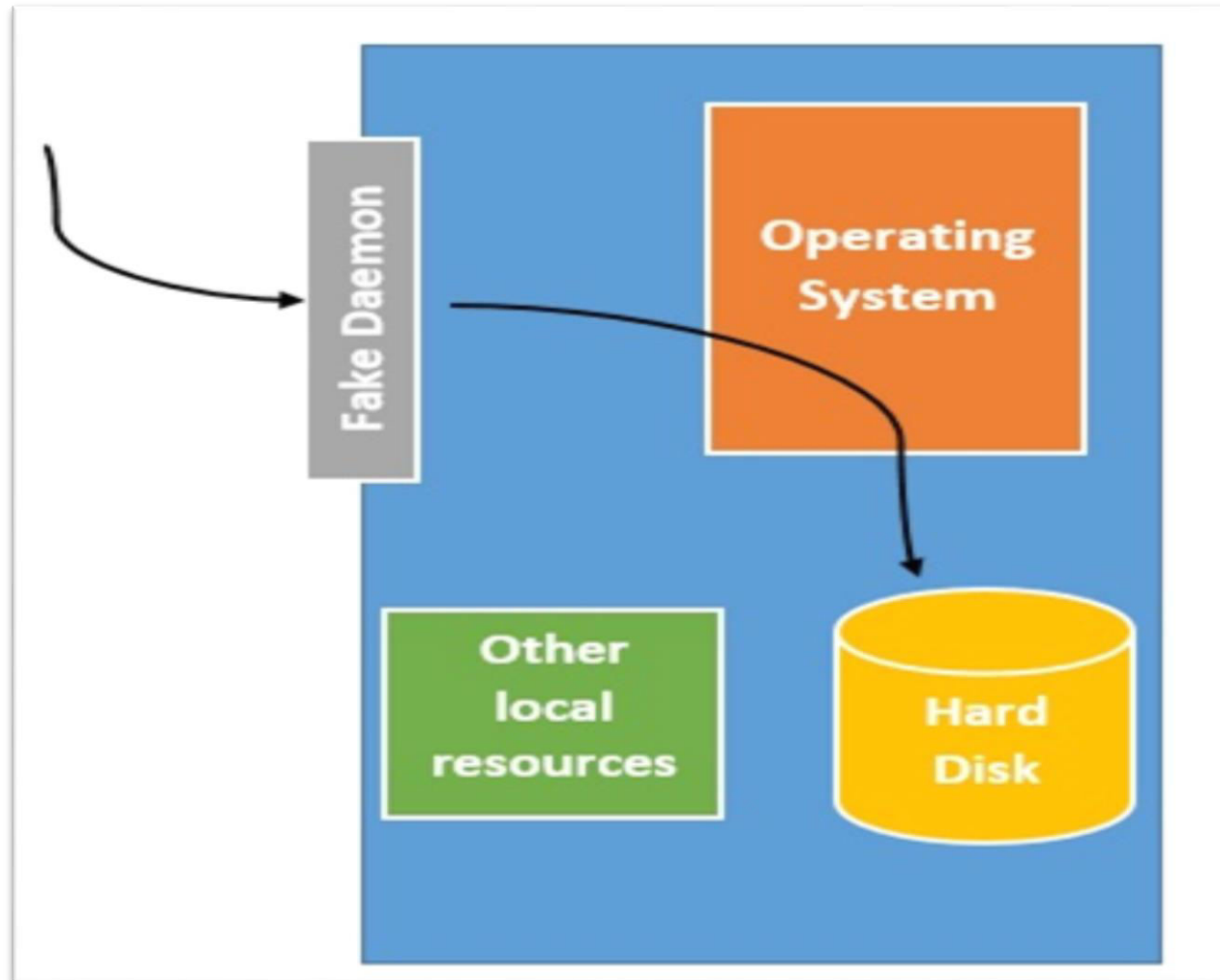


Honeypot Architecture



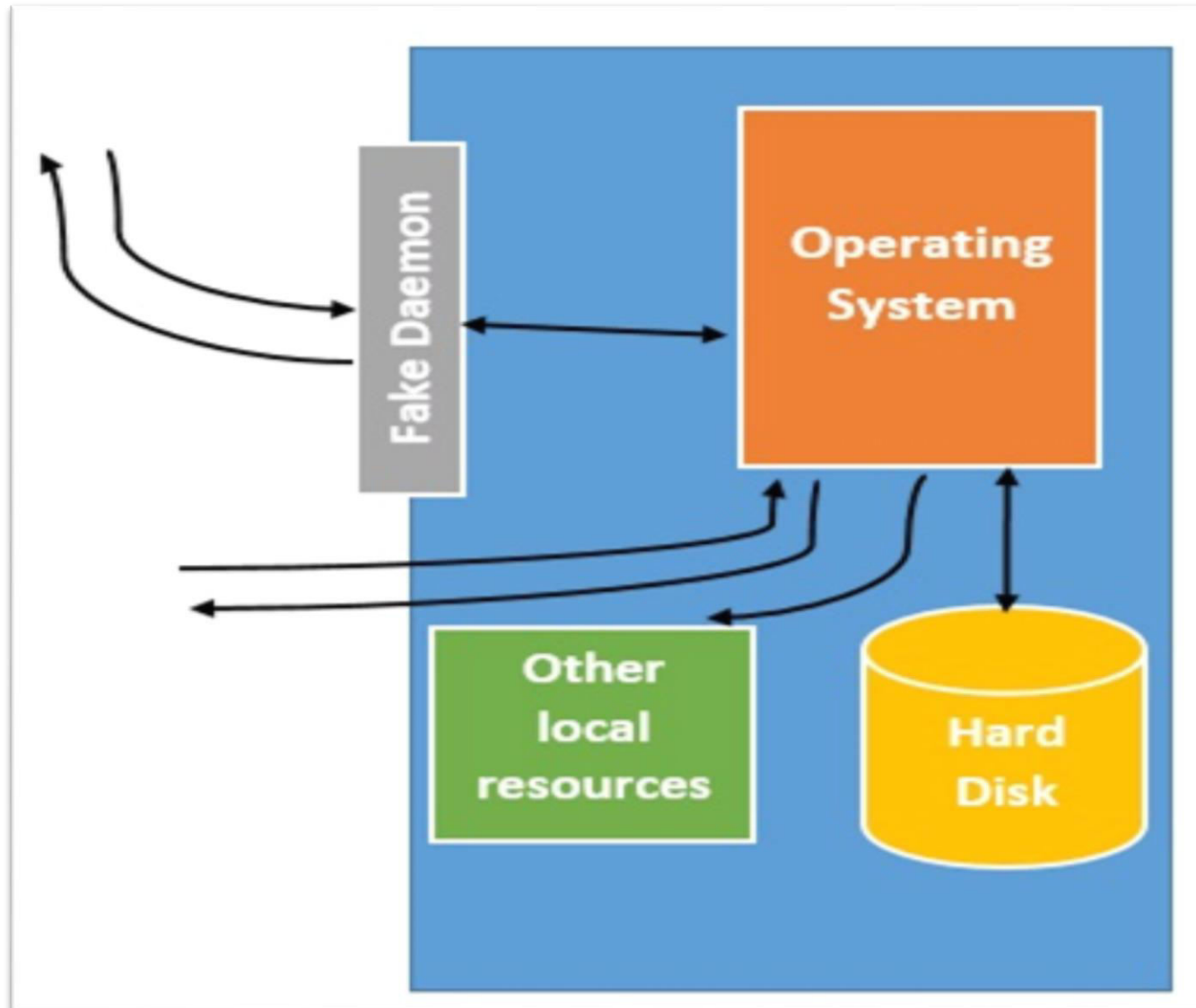


Honeypot Types : Low Interaction Honeypot(LIH)





Honeypot Types : High Interaction Honeypot(HIH)





Comparison between Low and High interaction Honeypots

Categories	Low Interaction	High Interaction
Implementation	Simpler, easier to deploy	Complex , difficult to deploy.
Effectiveness/ Performance	Failure is more, doesn't cost much.	Failure is less, much costly when fails.
Limitations	Not provide enough information on attacker	Collects sufficient information



CONCLUSIONS

- ▶ HONEYPOT IS ONE OF THE SIGNIFICANT TOOLS USED FOR DETECTING INTRUDERS
- ▶ IN TERMS OF **IMPLEMENTATION**, HIH ARE COMPLEX AND DIFFICULT TO DEPLOY, WHILE LIH ARE EASIER TO BUILD
- ▶ WHEN **FAILING**, HIH COSTS THE ENTIRE SYSTEM WHILE LIH COSTS LESS.
- ▶ THE INFORMATION GATHERED BY LIH IS MORE LIMITED THAN THE ONE COLLECTED BY HIH.
- ▶ THE ANALYTICAL COMPARISON IN THIS PAPER OPENS THE DOOR FOR RESEARCHERS AS A FUTURE WORKS TO IMPLEMENT OR IMPROVING ANY TYPE OF HONEYPOT.



Thank you!