Cloud Visibility Research Proposal

What is "cloud visibility"?



Virtual infrastructures are dynamic in nature, but we still want to be able to see *all* activity our cloud. This includes inefficient performance and security threats.

Different types of cloud structures have different needs, i.e private vs public vs hybrid

Main Problems

- Security teams struggle to monitor all activity
 - o Dynamic structure, elastic, flexible, expansive
- Cannot protect what can not be seen
- Lack of efficient and responsive response to potential threats
 - Late detection
 - Improper solutions
- Varying types of services lead to varying security needs

Research

I will conduct research into the main questions of the *best* ways to increase visibility in cloud based infrastructures in order to:

- Reduce security risk and vulnerability,
- Improve threat detection
- Efficiently respond to suspicious activity

To do this I will do these steps:

- Find research papers regarding cloud visibility and security
- Further research existing solutions
- Analyze the results

Research Analysis

After collecting the research, I want to analyze the research to find what are the best solutions to improving visibility to improve security in these digital infrastructures.

First, I will evaluate the other research I have found in order to better understand what are the largest areas of concern and where research is lacking.

I plan to analyze the solutions that are already existing to see how effective they are, where they might be lacking, and how they might be improved to further enhance the main issues I want to address.

Questions?