

Capstone Project

Peer Review 2

IT 489

Nov. 6th, 2015

Is cloud computing secure for mass storage?

Cloud Storage vs. Physical Servers

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Writing & Intellectual Content

Disclaimer: This is a great topic and has tons of potential; however, a more thorough review of the topic is needed. Excited to see the final product, and fully understand this is a draft. The reviewer of this paper has nearly a decade of cyber-security experience. I by no means am trying to be critical, but rather provide context from a seasoned professional. It is my hope that this review provided some insight and value.

The writing within the document was sound and well done. There were no substantial or outstanding grammatical issues.

There are several structural errors and content inconsistencies.

1. The page numbering is not accurate, as in page 10 states its page 1.
2. No stated hypothesis that is measurable.
 - a. I was unable to clearly find any metrics driven or testable model.
 - b. The hypothesis appeared to be based on opinion or overview vantage point.
3. Reference page has number 13 blank and out of format.
4. Page 8, bottom section in parenthesis, is correct. Facts, data points, and tested metrics are an imperative for an academic paper.
5. Page 7 does not contain any analysis of the citation. Inclusion of why the statement is relevant and how it impacted your project.
 - a. Section is unclear; ex. "Cloud services have advanced over the past few years providing COTS solutions which can meet any industries compliance standards in addition to support small business."
6. Page 6, the project plan had a sound timeline, yet the hesitation to provide contradictions is flawed. The very essence of academic inquiry is to find a contradiction to disprove a hypothesis. In your paper, you seem to later conclude your initial findings were incorrect, which confused the reader from the initial project plan comments.
 - a. Find flaws that can be supported by data. In doing so a sound conclusion can be derived. Only when all options to disprove the hypothesis have been explored then it can be proclaimed true.
 - b. http://www.sciencebuddies.org/science-fair-projects/project_scientific_method.shtml#overviewofthescientificmethod (see this as a starting point)
 - c. http://teacher.nsrj.rochester.edu/phy_labs/appendix/appendix.html
7. Systemic issue
 - a. Analysis of how secure data is on local servers is lacking.
 - b. If the cloud is less secure, then how secure is local hosting?
 - c. If it is more secure, which in most cases it isn't (cost, lack of human capital, infrastructure requirements) then some level of analysis needs to be done on what normal security measures should be in place for a local hosted platform, then are those or comparable measures available via the cloud?

8. If the theory is that local hosting is more cost effective and safe then metrics are needed. How much does burstable web hosting on AWS cost for a mid-cap business? These type of questions and statistics are needed.
9. Ensure correct terminology, for example page 4 “ The report will point out the benefits of cloud computing, security vulnerabilities, created by using the cloud, and the pros and cons of cost and user effectiveness vs. traditional network storage (physical network drives).
 - a. Cloud computing is not just for storage, it encompasses, compute for sale, hosting, data transfer, application hosting, etc. A more complete picture of what specifically is being tested should be defined.
 - b. It appears the intent is for NAS to be tested, however, the issue is that NAS is a small portion of why the cloud is popular and viable solution for businesses.
 - c. NAS/Physical storage relies on substantial infrastructure to run and maintain, and depending on the use may have no value when locally hosted.
10. The last element which is recommended for review is cryptography, the author mentions data breaches as a catalyst for the research, if that is the case, the primary issue with data breaches is not the breaches, but the lack of salts or proper crypto.
 - a. <https://securityintelligence.com/the-impact-of-a-data-breach-can-be-minimized-through-encryption/>
 - b. <https://nakedsecurity.sophos.com/2013/11/04/anatomy-of-a-password-disaster-adobes-giant-sized-cryptographic-blunder/>

References

The author met the citation requirements and addressed the long term plan for research. The author appears to be venturing into a new area of study with limited knowledge. Substantial further research is needed to draw a sound conclusion.

Tables and Figures

As addressed above, the author needs to focus more heavily on data and metrics to support a testable hypothesis. Costs, security posture, pervasive use, and

implementation of cloud solutions need to be examined and presented in a factual and objective manner.

Format

Should the author follow through on the above recommendations and complete their research, all requirements should be met.

Length

The length is in line with course requirements and should only increase with further inquiry of the subject.

Topic

The topic can be completed within a semester, but a more structured approach and defined hypothesis is needed should a conclusion be reached within the specified course timeframe.