

ACC2400 Homework 3- Week 6 (bring it to Tutorial in Week 6)

Based on Week 5 Lecture (Chapter 8) - Romney & Steinbart (2018)

Answer the following questions on a piece of paper (do not forget to include your personal details as your tutor MIGHT collect it)

Question 1

Discuss ONE (1) benefit of penetration testing AND also discuss TWO (2) limitations (if any) of relying on the results of penetration tests to assess the overall level of security.

Penetration testing is an authorized action of running tests to exploit the vulnerabilities in the system in order to evaluate the effectiveness of defensive mechanisms and security procedures. It allows IT management to better prepare for emergent security threats and prevents unauthorized access to their system and data.

However, the organisation has to be careful with how it implements penetration tests and who it entrusts the process to. These security attempts could lead to a potential backfire and damage to their own system if the party they have hired tries to abuse their knowledge and skills.

Also, employees are likely to prepare for a test that they know is going to happen. If realistic test conditions are not employed, this may not reflect the realistic strength of security of the system if the organisation completely relies on these results to assess the overall level of security.

Question 2

a) Choose any of the following cloud software vendors:

Salesforce (<http://www.salesforce.com/au/>)

Acumatica (<http://www.acumatica.com/>)

Kony solutions (<http://www.kony.com/>).

Then, review two (2) types of cloud products offered by the cloud vendor and describe each of those cloud solutions.

Salesforce is a cloud computing company that offers cloud products related to customer relationship management. One of them is Marketing Cloud, which focuses on the personalized customer journey through all connected devices on every channel. It combines customer data with behaviours in real time to enable marketers to deliver the customized messages to strengthen customer relationships.

Next, Salesforce offers Sales Cloud, which improves sales by centralizing customer information and automating processes to drive productivity. The customizable cloud gives a real-time visibility into sales managers' activities, which eases sales forecasting. It helps keep track of all up-to-date customer information and see all relevant customer activities to make smart decisions.

b) Describe three (3) security risks associated with cloud computing.

Firstly, one of the security risks associated with cloud computing could be data loss. Accidental deletion of data by the cloud service provider (CSP) or natural disasters, can cause permanent loss of customer data. If a customer encrypts its data before it's uploaded to the cloud but loses the encryption key, the data will be lost.

Next, insufficient due diligence by organisations when migrating to the cloud could create potential security risk. Moving data to the cloud without understanding its full scope and the security measures required, can cause mistakes while operating the cloud and lead to system crashes.

Finally, cloud services could be used as a vector of data exfiltration. Attackers could encode malware into files to exfiltrate sensitive data via the cloud. File sharing services can also be utilized to deliver malware to target via phishing. Detecting activities throughout the cloud is also difficult.

Bibliography

1. <https://lp3.com/tips/5-benefits-of-penetration-testing/>
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3. <https://www.salesforce.com/eu/products/marketing-cloud/faq/>
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