Software Engineering Programme
University of Oxford

Department of Computer Science

www.softeng.ox.ac.uk

ASSESSMENT

STUDENT: **Mayur Pant**

COURSE: **Cloud Security, CLS**

DATES: **22nd– 26th April 2013**

GRADE: **85**

REPORT

Summary: Your answers showed an excellent understanding of the subject. The following are further clarifications per question.

[a & b] We have discussed different security challenges of Clouds throughout the course. Most of these could relate to the provided scenario. I was looking for certain keywords such as: security challenges resulting from insiders, multi-tenant architecture and dynamics of Clouds. The answer should also cover issues relating to trust establishments. Importantly, when discussing the pros and cons I was expecting the discussion to consider the provided application properties: resilience, scalability, reliability and security.

You provided an excellent answer to both parts a and b.

[c] I was expecting the use of the methods and concepts which we covered in the course. In the "trust & Cloud" session we discussed the processes that organizations follow when outsourcing their services at the Cloud and how to establish trust in the outsourced applications and exchanged data to be managed as agreed with the service provider. In this direction, you would also need to cover how this would relate to getting the assurance of BI properties. Following that you would need to discuss how to get an

assurance of the value of the provided Cloud properties as in the case of using provenance mechanism. You could also follow a different route to answer this question building on trusted computing concept – but this was not a requirement.

You provided an excellent answer to this question.

[d] Self-managed services of the Cloud infrastructure require a trustworthy provenance mechanism to provide trusted source of logical input reflecting the state of the infrastructure. Similarly, establishing a provenance mechanism would benefit from provenance-specific self-managed services which, for example, would help in automating the provenance management process and addressing security issues in its operation. Self-managed services and provenance could fully/partially address most of the challenges of question (a & b) but not all of them. For example, such services could lessen the effects of insider threats. I was looking for a correct logical argument covering these points.

In this part you provided too much text which is not directly related to the answer, but overall the answer was very good.

Assessor: Imad Abbadi **Date: June 2013**