In-Depth Report on

"[Privacy in Cloud Computing Through Identity Management](#)"

Summary of the major results:

- The migration of web applications to Cloud computing platform has raised concerns about the privacy of sensitive data belonging to the consumers of cloud services.

- The lack of security and vulnerabilities were discussed in the paper with regard to the conventional form of security tokens like username/password.

- An approach is proposed to extend Microsoft's CardSpace identity management tool, to include more robust security tokens using the zero knowledge proof concept..

- Windows CardSpace is an Identity-metasystem which provides a way for managing multiple digital identities of a user.

- CardSpace replaces Password-Based Web logins with the use of digital security certificates/ tokens. However, it has its own security limitations.

- To overcome the same limitations, ZKP technique and SAML integration methods are discussed in detail.

Evaluation method(s):

The paper discusses the limitations and security concerns about Cardspace technology, and suggests Zero-Knowledge Proofing technique and SAML to overcome the same.The ZKP approach allows to prove a claim or assertion without actually disclosing any credentials.

Is the evaluation sufficient, and why?
The evaluation method is sufficient but there is a scope for improvement. The Paper states that SAML security token could be modified with ZKK to further improve the security.

The quality of the major result(s) of the paper with justification.

The paper discussed a technique of integration of 2 sub-techniques to improve the security, ZKP, and SAML in SOAP messages.With the use of ZKP in the security tokens, the user can satisfy the relying party's technical policy but tell the party nothing or as little as possible and without disclosing

the actual values of the credentials. In this way the user's privacy is protected in the cases of hijacked passwords or vicious service providers.

The usefulness of the paper to the overall project.

Paper was informative and discussed the limitations and provided the ways to improve the system.