

41. Cloud Computing - A Unified Approach for Surveillance Issues

NASA Astrophysics Data System (ADS)

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2017-08-01

Cloud computing describes highly scalable resources provided as an external service via the Internet on a basis of pay-per-use. From the economic point of view, the main attractiveness of cloud computing is that users only use what they need, and only pay for what they actually use. Resources are available for access from the cloud at any time, and from any location through networks. Cloud computing is gradually replacing the traditional Information Technology Infrastructure. Securing data is one of the leading concerns and biggest issue for cloud computing. Privacy of information is always a crucial point especially when an individual's personal information or sensitive information is being stored in the organization. It is indeed true that today; cloud authorization systems are not robust enough. This paper presents a unified approach for analyzing the various security issues and techniques to overcome the challenges in the cloud environment.

42. Secured Communication for Business Process Outsourcing Using Optimized Arithmetic Cryptography Protocol Based on Virtual Parties

NASA Astrophysics Data System (ADS)

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Within a span of over a decade, India has become one of the most favored destinations across the world for Business Process Outsourcing (BPO) operations. India has rapidly achieved the status of being the most preferred destination for BPO for companies located in the US and Europe. Security and privacy are the two major issues needed to be addressed by the Indian software industry to have an increased and long-term outsourcing contract from the US. Another important issue is about sharing employee's information to ensure that data and vital information of an outsourcing company is secured and protected. To ensure that the confidentiality of a client's information is maintained, BPOs need to implement some data security measures. In this paper, we propose a new protocol for specifically for BPO Secure Multi-Party Computation (SMC). As there are many computations and surveys which involve confidential data from many parties or organizations and the concerned data is property of the organization, preservation and security of this data is of prime importance for such type of computations. Although the computation requires data from all the parties, but none of the associated parties would want to reveal their data to the other parties. We have proposed a new efficient and scalable protocol to perform computation on encrypted information. The information is encrypted in a manner that it does not affect the result of the computation. It uses modifier tokens which are distributed among virtual parties, and finally used in the computation. The computation function uses the acquired data and modifier tokens to compute right result from the encrypted data. Thus without revealing the data, right result can be computed and privacy of the parties is maintained. We have given a probabilistic security analysis of hacking the protocol and shown how zero hacking security can be achieved. Also we have analyzed the specific case of Indian BPO.

43. Energy and technology review

DOE Office of Scientific and Technical Information (OSTI.GOV)

Quirk, W.J.; Canada, J.; de Vore, L.

1994-04-01

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44. Information Security Awareness On-Line Materials Design with Knowledge Maps

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