

SAPTHAGIRI COLLEGE OF ENGINEERING

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Department of Computer Science and Engineering



Certificate

Certified that the Project Work entitled "**Access Control on Time Sensitive Data based on Time and Attribute Factors in Public Cloud**" carried out by Syed Ahmad Taqi (1SG14CS117), Vaibhav Gupta (1SG14CS118), Chandrabhushan Prakash (1SG14CS127), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2017-2018. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Project Work (10CS85) prescribed for the said degree.

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ABSTRACT

The concept of outsourcing data to the cloud has both advantages and disadvantages. On one side, it frees data owners from the technical management, and is easier for data owners to share their data with intended users. On the other side, it poses new challenges on privacy and security protection. To protect data confidentiality against cloud service providers, numerous works have been proposed to support data access control and from the perspective of cryptography, the function of timed access privilege releasing can be achieved by Timed-Release Encryption (TRE). However, till now, no schemes can support both fine-grained access control and time-sensitive data publishing. In this work, by embedding timed-release encryption into CP-ABE (Ciphertext-Policy Attribute-based Encryption), a new time and attribute factors combined access control on time-sensitive data for public cloud storage is proposed. Based on the proposed scheme, an efficient approach to design access policies faced with diverse access requirements for time-sensitive data is proposed, which with security and performance analysis shows that the proposed scheme is highly efficient and satisfies the security requirements for time sensitive data storage in public cloud.