

SAPTHAGIRI COLLEGE OF ENGINEERING

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Department of Computer Science and Engineering

Certificate



Certified that the project work entitled "Message Service Security and Control by Message Sender" carried out by Ashwin Bharadwaj B.N (1SG12CS128), Manohar G (1SG12CS055), Naveen N Prabhu (1SG12CS061), Shriram Subray Bhat (1SG12CS127), 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, Belgaum during the academic year 2015-16. 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

Publish/subscribe pattern is an efficient way of message service. It is more flexible and scalable for asynchronous message delivery when compared to other message services like Store and Forward and Web Service request/response mode. On receiving a request from subscriber, the message is sent by the publisher. The publisher sends the message to the message server which delivers the message to all the subscribers who have subscribed to the server. Access control is managed by message server in the traditional message service models, the publisher is the entity who creates and sends the message and decides whether to send the message to the particular subscriber or not. Here, the publisher is unaware of the subscribers. The server is responsible for distributing the messages among all the subscribers, therefore it is not suitable for complex SWIM (System Wide Information Management). To improve the acceptability of information security transmission, sender control model based on JMS publish/subscribe is proposed. In the proposed model, access control to the publisher is given by the encryption and decryption process. The publisher sends the encrypted message to the JMS server which distributes the encrypted message to all the subscribers. The subscribers request the key from the publisher in order to decrypt and view the message.