Abstract

Secure and reliable group communication is an active area of research. The main issue in secure group communication is group dynamics and key management. Group key management brings challenges on scalability for multicast security. Member joining and member leaving from the group is the main challenge in designing secure and scalable group communication for dynamic update of keys. Most of the proposed solutions are not considering this parameter and so suffer from the one-affects-n scalability problem. In this paper, we present a new group key management protocol and express that it has better scalability when compared with other important protocols.


**Index Terms**

Computer Science

Security

**Keywords**

Group communications  group key management  key  multicast security and scalability