Plenary Panel Session

Security and Privacy in Collaborative Distributed Systems

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With the rapid development of various types of open infrastructures, including Internet, Grid, and wireless networks, much attention has been focused on the development of distributed systems for collaborative applications in many areas, including collaborative research and development, healthcare, e-commerce, disaster management and homeland security. Besides reliability and timeliness, the great advantages of collaborative distributed systems for improved group awareness and collaboration opportunities are, however, often overshadowed by accompanying security and privacy concerns. In practice, it is desirable that security and privacy for collaborative distributed systems are flexible, scalable and adaptable to the changing and heterogeneous environments. Ensuring efficient collaboration with such security and privacy requirements is a great challenge due to the difficulties of:

1) Ensuring flexible and verifiable security in collaboration.

2) Negotiating and reconciling policies of multiple organizations when the collaboration occurs across organizational boundaries.

3) Collaboratively drawing a conclusion based on data collected from various members while maintaining the privacy of each member.

This panel will address various challenging issues of security and privacy in developing collaborative distributed systems and discuss recent advances as well as future trends in dealing with them.