

Diffusion robuste de la vidéo en temps réel sur réseau sans fil

Mots clés :

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- **Co-encadrant(s)** :
- **Unité de recherche** : Laboratoire Traitement et Communication de l'Information
- **Ecole doctorale** : École Doctorale Informatique, Télécommunications, Électronique de Paris
- **Domaine scientifique principal**: Divers

Résumé du projet de recherche (Langue 1)

In this project we aim to define a framework for real-time video streaming over mobile ad-hoc networks, in the case of lossy and unreliable environment. In a first phase, a complete survey of the state of the art will be performed, in order to identify the existing solutions to this problem. Building on this analysis, new algorithms will be proposed in order to address the problem of providing a reliable communication application on top of an unreliable channel. A key step at this end is the design of a routing algorithm, which is intended to construct and manage an efficient overlay network with a minimal use of resources. In the following, we aim to optimize this system with respect to the trade-off between congestion and distortion. The design of the algorithm must be validated by an extensive set of experiments, to be performed in a suitable simulation environment.

Résumé du projet de recherche (Langue 2)

- * Design of a routing protocol able to provide an efficient overlay network over a MANET, by using a minimal amount of resources
- * Gathering topology and node status information as needed by the routing protocol with the minimum exchange of messages in presence of nodes' churn and mobility
- * Optimizing the trade-off between the distortion of the received video sequence and the congestion generated on the MANET