Tactical MANET

Team Members

| Name | Email |
|-------------------------------------|---|
| Mahmoud Adas Yosry Mohammad | mahmoud.ibrahim97@eng-st.cu.edu.eg yosry.mohammad99@eng-st.cu.edu.eg |
| Ahmed Mahmoud Abdulrahman Khalid | Ahmed.Afifi98@eng-st.cu.edu.eg abdulrahman.elshafie98@eng-st.cu.edu.eg |

1. Problem Statement

A mobile ad-hoc network communication system for military, for operations in areas with no internet infrastructure. Deployed units can stream audio, video and sensors readings to command centres. Command centres can stream audio and message codes to some/all unit(s).

2. Motivation

We are interested in decentralized/distributed algorithms and designing/building complex systems.

3. System Architecture

TODO

4. List of Deliverables

| Modul Name | | Input | Expected Output | % of used Libraries |
|-------------------------------|--|--|--|---------------------------|
| Unit Client | Stream and receive streams to/from command centres | Device audio, video, sensors and message codes. Streams and messages from command centre | Send streams and show play audio/messa | TODO |
| Cmd. Cen- tre Client | Stream and receive streams to/from deployed units. Shows a map of all units with their statistics | Audio and message codes. Streams and messages from deplyed units | Send streams and show play | TODO |
| Router | Determine how a certain ip-packet should be forwarded. Implements some MANET ad-hoc protocol | IP packet (with final destination) to forward | audio/messa Path from this node to final destination | TODO |
| Testbe | dBuild, configure and monitor the simulation/emulation of the MANEt. Define the topology and mobility model | User commands and arguments or configuration file | Commands to emulation/s HW | TODO |