

Tactical MANET

Team Members

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

Module		Input	Expected Output	% of used Libraries
Name	Function			
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/messages	TODO
Cmd. Centre 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 audio/messages	TODO
Router	Determine how a certain ip-packet should be forwarded. Implements some MANET ad-hoc protocol	IP packet to forward	IP address of node to forward to	TODO
Testbed	Build, 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/simulation/actual-HW	TODO