AliSoft MapViewer for Android

Program Features:

MapViewer supports three interconnected modes of operation:

• UAV flight (DJI products that support SDK4).

• Offline digital maps.

• Encrypted offline communications (DATA-SIM or WIFI).

UAV Flight:

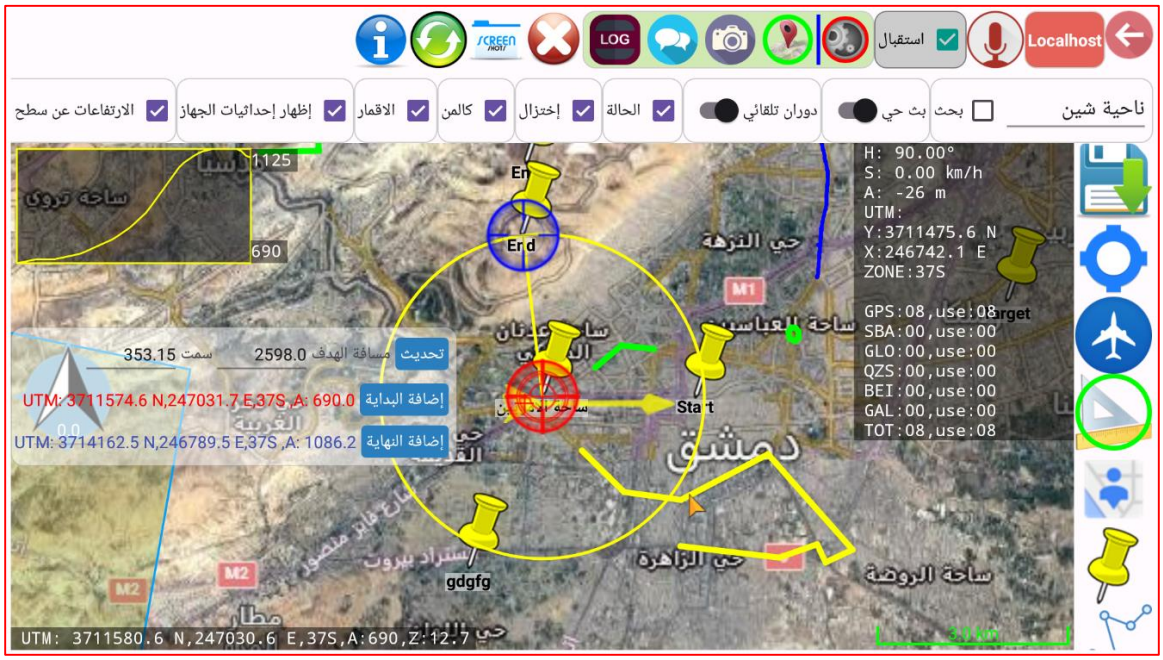
This part of the program enables drone control.

The program comprehensively supports all DJI drones that are compatible with SDK4.

It allows uploading drone coordinates in multiple formats to enhance aerial tracking beyond visual matching.

Live streaming of drone camera view with coordinates to other MapViewer users.

Digital Map:



Popular web-based mapping applications are generally designed for navigation and do not offer user privacy; any activity on the map is synchronized with the operator's servers.

MapViewer provides a secure mapping environment, especially for military use where privacy and confidentiality are critical.

The program has no connections to any servers, so all map data remains secure.

It is equipped with maps from various sources.

Displays the device's current GPS location for navigation purposes.

Several types of markers have been created for different uses (general, private, weapon).

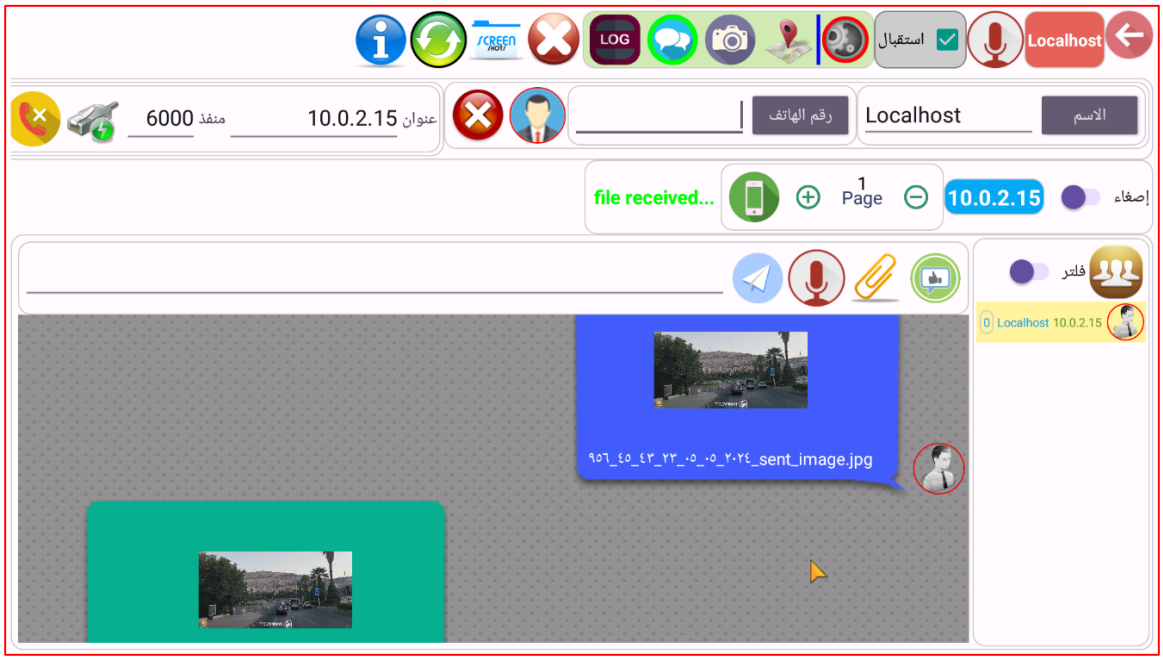
Ability to show/hide the geographic coordinate grid and print the map directly to get a paper copy containing the required map data.

Synchronizes map coordinates with their associated data.

Ability to measure distance and bearing and display an elevation profile along the measured path.

Supports multiple coordinate systems (UTM, STM, SK42, Geography).

Encrypted Communications:



In recent years, exchanging military information via common messaging apps that support file sharing has become widespread; however, this type of communication is insecure, making the data vulnerable to unauthorized access. This led us to create an alternative application that offers greater security and privacy in messaging and data transfer.

The program is designed to transfer the aforementioned data over a national network (DATA-SIM), effectively creating a local network without internet access. The mobile device acts as the server instead of external servers, and encryption is applied to protect data during exchange over the internal network.

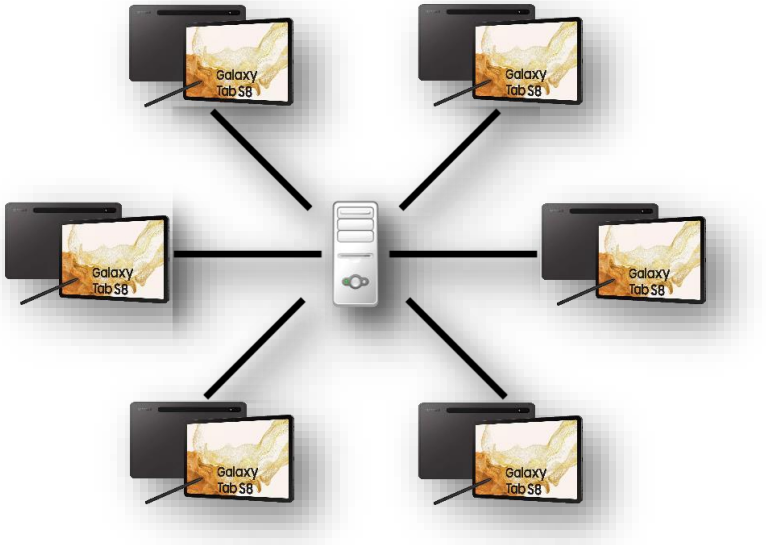
The interface resembles popular messaging apps (WhatsApp, Telegram, etc.) to make it easy to learn, allowing users to:

- Send text messages.
- Send live audio/video recordings.
- Send location coordinates.
- Send photo and video files.
- Send various types of data.

Messaging App Architecture:

Popular messaging apps (WhatsApp, Telegram, etc.) are developed using the Client/Server architecture, which relies on a central server connecting all devices over the internet. Advantages include easy device status monitoring (online/offline) and use of server

resources rather than device resources. Drawbacks include complete service disruption if the server fails, which is unsuitable for military operations.



MapViewer Architecture:

MapViewer was developed using a Peer-to-Peer architecture that doesn't rely on a central server or internet connection. Advantages include independence from a central server, allowing connected devices to communicate even if some devices fail. Drawbacks include difficulty quickly knowing device status (online/offline) and reliance on the resources of connected devices.