

Karoshi Inc.

Map-MET User Manual

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1 General Information

1.1 System Overview

Map-MET is a map application with context aware user interface. This service is designed for military units who suffer from light and movement conditions. It provides an adaptable interface to user which changes under different conditions accordingly. Our final product satisfies main expectations, but it can be developed further for better uses.

1.2 Scope of the User Manual

This document describes the requirements in order to use Map-MET service. In this manual, explanations about server and client parts and correlation between them can be found. It also explains system requirements, installation procedure and setup process of the system. Troubleshooting ways are also included.

1.3 Contact Us

For detailed information you can reach us by e-mail or through our website.

- E-mail: karoshisoft@gmail.com
- Website: <http://senior.ceng.metu.edu.tr/2011/karoshi>

2 How to Use Map-MET

2.1 System Requirements

2.1.1 Hardware Requirements

- A mobile device with touch screen
- Two access points, one for server and one for client

2.1.2 Software Requirements

- On server, OpenCV headers must be available under “C:\OCV\include\opencv\” path.
- On server, compiled OpenCV libraries must be available under “C:\OpenCV\lib\” path
- Server must use Windows operating system
- Client device must use Android v2.2 or later

2.2 Before Installation

- Retrieve software packages from our website, under documents section.
- Connect both server and client devices to the internet.

2.3 Setup and How to Use

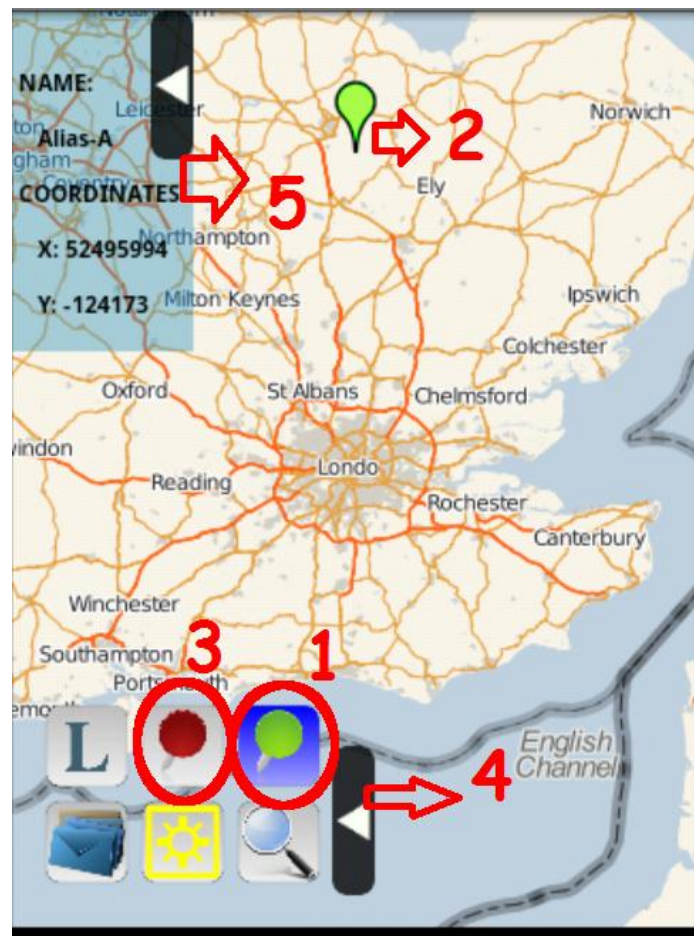
2.3.1 Setup

Since client application is .apk package, it can be directly used by an android mobile device. Server application is supplied with a setup wizard; therefore it can be easily installed by following explanations. Since this is not a market application, the user should change the settings and let the unknown application install itself to the device.

2.3.2 How to Use

To use this product, server should be started first. When the server started, client application can be started. There are two screenshots from the client application running on Android.

2.3.2.1 Client Side Application



Screenshot 2.3.2.1

As it can be seen, there is a map in the background. This map shows the current location of the user. There are 6 buttons at bottom-left corner of the map and there is a location bar in top-left corner of the screen.

Number 1 - Show-hide ally button: This button, when clicked, shows the ally troops on the map. This is a filtering button. When clicked again, this button hides the ally troops on the map. Background color changes from white to blue between two toggles. As you can see on the map, when the button is in showing mode, it shows an ally troop (number 2).

Number 3- Show-hide enemy button: This button functions similar to the mentioned above. This is also a filtering button. The button shows enemies and hides enemies on the map when toggled.

Number 4: The arrow hides all the buttons at bottom left. The buttons can be shown again if the user clicks that arrow again.

Number 5: That is the information bar. This bar contains some information about the location (enemy or ally troop which are represented by yellow and red bubbles respectively) of the troop on which user clicks. This bar can be closed by clicking the arrow attached to it.



Screenshot 2.3.2.2

Number 1: When a message comes, it is shown on the screen immediately. This bar containing the message disappears after a while.

Number 2: This button is for showing the last message that has come. When the button is clicked, the last message is shown on the map with a transparent background as shown in number 1.

Number 3: This button is for adjusting the brightness of the screen.

Number 4: When this button is clicked, there appears a minus and a plus sign on the screen. Minus sign is for zooming out and the latter is for zooming in.

Changes in light value change:

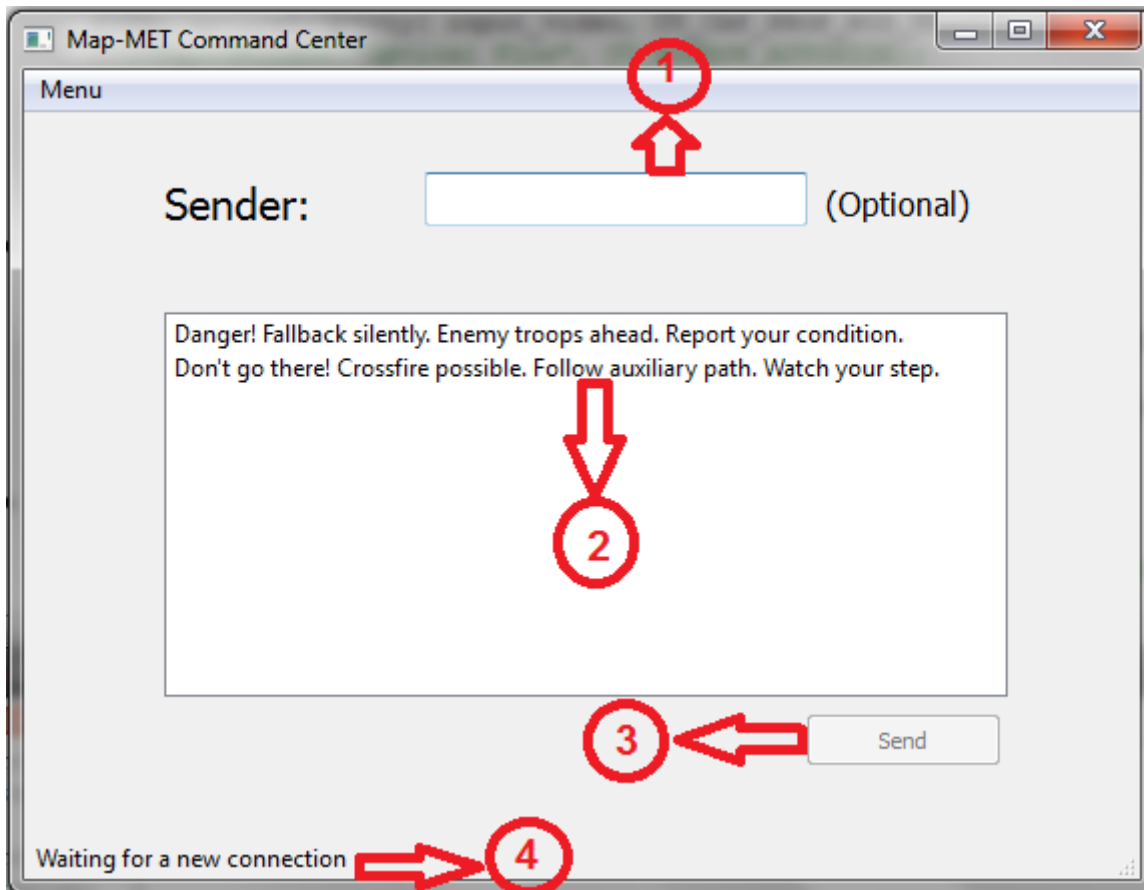
The colors of the map change according to the light conditions of the environment that user is in. In dark environments the ways are in light color and map background is dark. In light environments on the contrary, ways are in dark color and map background is in light colors. Background color of the information and message bar and colors of the texts in them also changes according to the light conditions so that user can easily read the texts.

Changes in motion value change:

Size of buttons change with an animation (gets bigger and smaller according to the motion of the user). Text fonts change from small sizes to big sizes. Zoom level of the map changes so that user can focus on more important things on the map when the motion value is big. Information (detailed or less detailed) shown on the map also changes.

2.3.2.2 Server Side Application

Server side application is for sending messages to user. This application has a user interface shown in the screenshot below.



Screenshot 2.3.2.2.1

This server side application should be always working. The connection between the server and client establishes when the application on the client side is started.

Number 1: This input field is for determining the sender of the message. It is not required for a message to have a sender. Default sender is Command Center.

Number 2: Message sender selects a message from this list and that becomes the content of the message.

Number 3: Sender uses this button to send a prepared message to the client-side application user. This button becomes active only when a client is connected to the server.

Number 4: This field shows connection information. If a client connects to the server, send button becomes active and information field (number 4) informs server-side user with message "Connection is established. You can send messages."

3 Troubleshooting

If you have any questions, please do not hesitate to reach us via e-mail.