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Allocating Marine Expeditionary Unit Equipment and Personnel to Minimize Shortfalls

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By Walter L. Perry, Roald Euler, Jennifer Kavanagh, Nicholas Salcedo

The MESA application is designed so that most of the major components—input screens, missions, mission tasks, equipment inventories, and equipment rankings—can be reconfigured by making changes to the Excel spreadsheet, “configure.xls,” on this CD. In this sense, it is largely data-driven. However, there are some aspects of the functionality that cannot be modified without making changes to the underlying Microsoft Visual Basic® code. These are noted in the text where they occur.

Installation

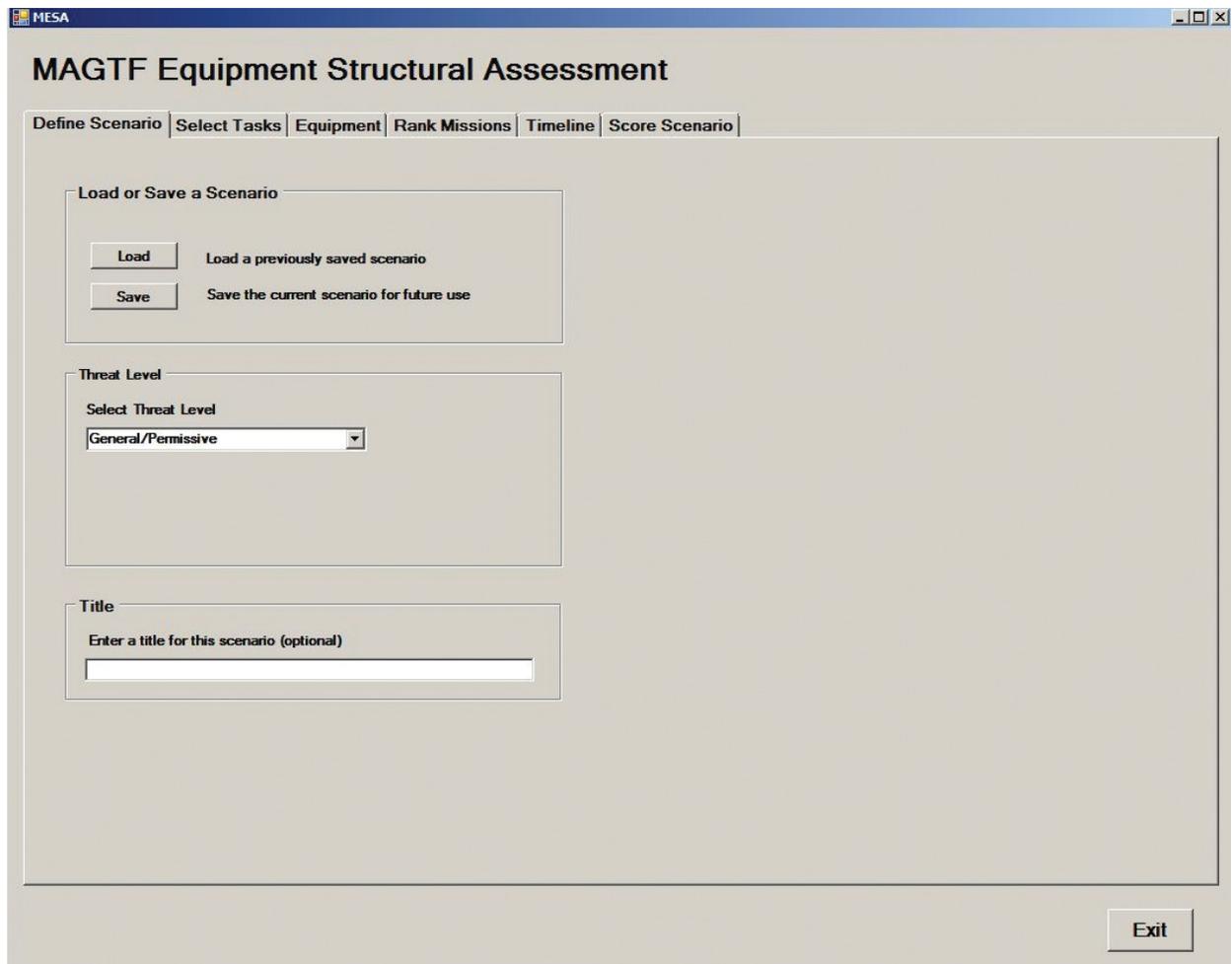
The steps to install and run the MESA software are as follows:

- 1) Drag and unzip “MESA.zip” onto the computer’s desktop.
- 2) Open the resulting folder and double-click on “mclift” application. The MESA application should start up with the main screen (“Define Scenario”), as shown as in the Figure below.
- 3) From this point, the user can define a scenario, allocate equipment, and save the results as described in the User's Manual.

For Developers

The MESA application is a standard Visual Basic application developed with Microsoft Visual Studio® 10.0. To modify the Visual Basic code underlying the application, drag the “MESADevelopment” folder from the installation CD to the desktop (or any other desired location). Open the folder and double-click on “mclift.vbproj.” This will open the application in the Visual Studio development interface. It is necessary to have Visual Studio 10.0 installed on the local machine.

Main Screen of the MESA Application



The screenshot shows the main interface of the MESA application. The window title is "MESA" and the main heading is "MAGTF Equipment Structural Assessment". A tabbed menu at the top includes "Define Scenario", "Select Tasks", "Equipment", "Rank Missions", "Timeline", and "Score Scenario". The "Define Scenario" tab is active and contains three main sections: "Load or Save a Scenario" with "Load" and "Save" buttons, "Threat Level" with a dropdown menu set to "General/Permissive", and "Title" with a text input field. An "Exit" button is located in the bottom right corner.

MESA

MAGTF Equipment Structural Assessment

Define Scenario | Select Tasks | Equipment | Rank Missions | Timeline | Score Scenario

Load or Save a Scenario

Load a previously saved scenario

Save the current scenario for future use

Threat Level

Select Threat Level

General/Permissive

Title

Enter a title for this scenario (optional)