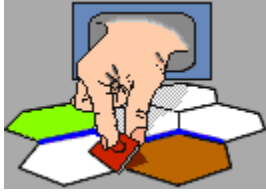# WarGame Processor Index

The WarGame Processor

Version 1.08 for Windows

The whole WarGame Processor System is designed to make it as easy as possible to play popular board wargames by mail or e-mail.   It's not necessary for your opponent to have a copy of the WarGame Processor, as the program will still make life easier on your end.   The WarGame Processor concept is a dynamic one.   The program provides the means for users to design their own modules, so the usefulness and utility of the system will always be growing. WGP owners (and non-owners) can stay up to date on revisions, modules, and be able to contact opponents on the WGP WWW page.

System Requirements and Set up

The WarGame Processor requires W95.   No other hardware restrictions are known.   Older versions of W95 may have an out of date version of Oleaut32.dll.   If your programs returns an error about this file, you need to acquire a newer version of the ActiveX libraries.   You can download a copy of this from the WarGame Processor Homepage.

To set up WGP, unzip the archive into a directory called "WGP".   The directory structure should look like this:

(Dir)WGP
    (Dir)Modules
        chess.gpf
        chess.gpg
        France44.gpf
        France44.gpg
    (Dir)Savedgames
        chess_setup.gps
        f44setup.gps

    F44_Read.txt
    F44_Rules.txt
    Release History.txt
    Webdlt.exe*
    WGP.exe
    WGPEdit.exe
    WGP.hlp

When you receive additional game modules, they will consist of a *.gpf (module data) file and a *.gpg (module graphics) file.   Place these new files in your Modules directory.   Many modules are distributed with one or more "set-up" files, which are saved games with all the pieces sorted.   You may want to make a separate subdirectory under your "savedgames" directory for these.

*Webdlt.exe is freeware from Solution Soft to allow Windows help files to link to the Internet.   They also sell amore advanced shareware version of their product.   If you are interested in learning more about it, they can be reached at: (408) 736-4013)

Shareware Registration

The WarGame Processor is shareware.   The Demo version of this program found on the Internet is crippled.   I hate doing this, but I know how bad I am about procrastinating on shareware fees with the best of intentions if I don't have anything to motivate me.

There are no crippling restrictions on the WGP editor.

In the crippled version the playback options are limited in the number of actions per playback, and players may not save a game in progress more than twenty   times. By the time you encounter this limit, I hope you will agree that this is well worth the $25 registration fee.   To get a registered version you can register by secure credit card on the WarGame Processor Homepage.

The registered version which will be sent to you may be an earlier version of the one you downloaded, so don't erase any of your existing files!   To uncripple your software, simply copy the file named "keyfile.sys" from your registered disks to the same directory your WGP programs reside in.   Please don't distribute this keyfile, but feel free to distribute the rest of the program as far and wide as you like.

The WarGame Processor

The main WarGame Processor program is the player.   This is where you will actually play your games. It's been designed to be as friendly as possible to the players.   The main map window shows an area of your mapboard, which may be scrolled around.   Units are arranged in stacks. The contents of stacks may be displayed on the column of buttons to the left of the map. There is a miniature map showing where the current viewing area is, and an area for off-map forcepools.   Menus, buttons and information fields   are arranged around the play area help coordinate the game interface.
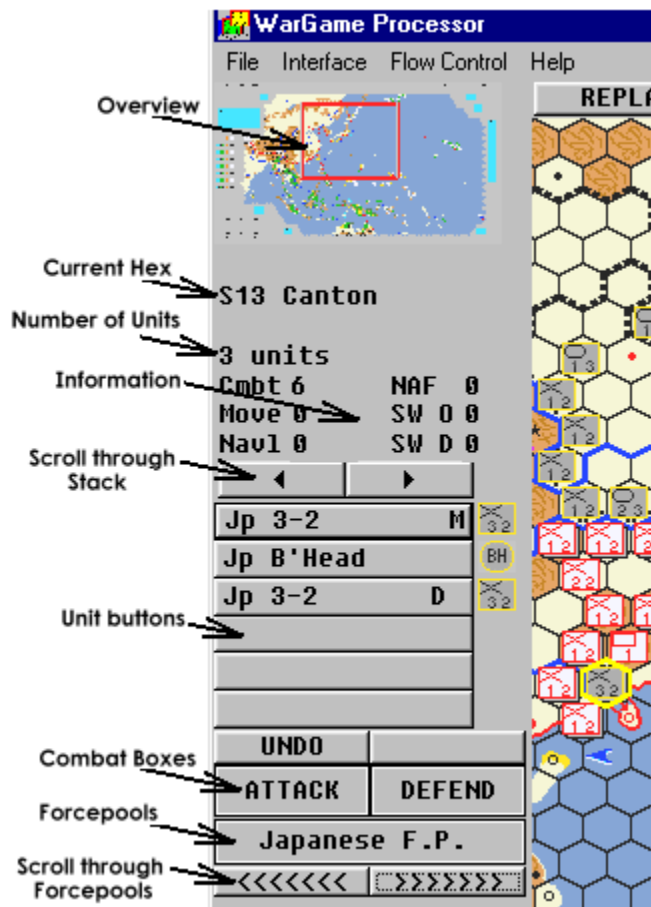
To move around the map, you can use the arrow keys.   These will move the visible map area by one or two hexes in the direction you press. You may also click on the miniature map in the upper left corner. The red box indicates where the visible area is.   Place the box where you want to view and click again. Feel free to resize the mapboard to fill your screen.

Starting the WarGame Processor

Upon starting the WarGame Processor, you will be presented with a requester pointing to your "Modules" directory.   The WarGame Processor is a shell from which you'll play your game.   To give this shell a form, you must load a game module.   Game Processor Files are located in your "Modules" directory, with a ".GPF" extension.   Each WGP module file has an accompanying graphics file containing the image libraries, with a ".GPG" extension.

The game module will define the map and the units.   Each game modeled with WGP will require a different module.   It's not possible to run more than one module at a time.   To load a different module, you must exit WGP and restart it.

Menu Functions
There are three main menu categories in the WarGame Processor.   Click on

the items below to see a detailed description of each function:

The Project menu:
    Load
    Save
    Encode Save
    Save as ASCII
    Replay Turn

The Interface Menu:
    Show Terrain/Units
    Define Dice
    Value Computation
     Preferences

The Flow Control Menu:
    Show Held Units
    Clear Movement Flags
    Clear Combat Flags
    Turn All Units Face-Up/Down
    Turn Carried Units Face-Up/Down
    Reset Playback

Load Saved Game

When a module is first loaded up by the WarGame Processor, all the units are in a stack on the hex on the upper left corner of the mapboard. By loading a saved game file, you can recall any previously saved positions. Saved game files may also have any number of replays attached to them, which will also be loaded available for <u>replay</u>.

Selecting "Load" from the Project menu allows you to load a saved game from disk. The default directory is the "SavedGames" directory. Using a Windows Explorer, you may wish to create sub-directories in this if you usually use more than one module at a time.

If you receive a <u>text encoded file</u> through the Internet as e-mail, simply save the mail as a separate file to your savedgames directory.   Then select the file from the "Load Game" requester.   You don't have to edit any preceding text that might accompany the file.   WGP will parse the file looking for the header to tell it where to start loading.   If you receive a file as two or more separate pieces, use any text editor to join them together before you load it into WGP (Be sure you join them in order).

Save Game

Selecting "Save" from the project menu allows you to save the current game position and the playback for the turn to a saved game file. This file may then be sent to your opponent, if he's also a WGP user.   If your opponent is not a WGP owner, you may still send your move using the save as ASCII   functions.

The save game event will be recorded in the playback history.   When the file is replayed, the viewer will be notified at the point where the game was saved during play.   This is to discourage the practice of saving a game right before a critical die roll,   then reloading and re-throwing the die until a desirable result is attained.

I've found it's helpful to agree on a naming system with your opponent that will help keep saved game files in order.   For instance, you may wish to name the first move of the first turn of a Third Reich game as "390301", which would translate as 1939, third season (fall), first file exchange. This will result in all your turns being kept in order in your directory listings. You may also wish to keep your games separate in your directory listings by making subdirectories for each game in your savedgames directory.

Encode Save

This function is identical to the "<u>Save Game</u>"   selection, except that the   file will be encoded in standard ASCII characters suitable to be sent as   attached e-mail over the Internet.

Many Internet servers such as Juno or Genie will not support a binary transfer as e-mail.   Others, such as Compuserve, will allow you to attach a file to e-mail, but only if that file is strictly ASCII characters. This Feature of WGP allows you to save the game in a format compatible with any e-mail handler.   To use it, save the file using the "Encode Save" menu option.   Once the file is saved, you may load it into any text or e-mail editor.

This sort of saved game file is normally twice as large as a standard saved game file. It consists of a WGP file header identifier, the savedgame body, and the WGP file trailer.   You should be careful not to add or change any text in any part of this file if you add it as E-mail.   The saved game body consists of a block of encoded characters, 60 spaces wide.   You will notice that the characters are alternating numbers and letters.   WGP will be able to decode these during the load back into a normal saved game file format.

You may add text before or after the WGP file in your e-mail.   The load function will ignore any text before the WGP file header.   It will also ignore whatever line feed sequence your particular program uses, so if you use a PC or Mac to transfer your files, WGP should still be able to decode them.

Some e-mail servers impose a size limit on email text.   You may have to break up your saved game files into two or more parts.   Be sure to label them so that the other player can reassemble the parts into one file.

Save as ASCII functions

Selecting any of the "Save as ASCII" options will generate an ASCII text file with details about your move.   You may record the entire move since the last <u>reset</u>, with all the details about the exact movements of each unit and all your <u>comments</u>, or you may record only the current positions of each unit. You may also record only the comments made since the last reset, for the purposes of quoting them in other correspondence. These files may be saved and later printed to be sent to an opponent who isn't privileged enough to have a copy of the WarGame Processor.   Each line recorded will have a leading space, so that E-mail editors won't reformat the lines.

Note that the save as ASCII function will ignore encrypted comments.

Replay Turn

Pressing the replay button or selecting "Replay Turn" menu will reset the units to their positions when the playback recorder was last <u>reset</u>, and allow the player to watch as play unfolds.   Pressing the spacebar or clicking on the button labeled "?" will allow you to step through the playback move by move.   This function is crippled to the first 30 movement actions for unregistered copies of the program, and can be uncrippled by <u>registering</u>. The replay can be terminated any time by pressing the Escape key followed by the spacebar.

During playback, units are moved in the same order that they were moved during play.   Every hex they touched will be shown.   While a stack of units are moving, the left side of the screen will show the contents of the stack.   When combat occurs, all units not involved in a specific combat will be removed from the board, after which a comment box detailing the combat declaration and any results will appear.

If the moving player encrypted a <u>comment</u>, the program will prompt you for the correct password when the encrypted comment is to be read.   If you do not know the password, press enter and the file will deny you access to read the comment and press on.   Passwords are case-sensitive.

Show Terrain

The "Show Terrain/Units" option of the interface menu allows you to turn the units on and off on the map, allowing you to examine the terrain underneath them. Select this option again to turn the units back on. This may also be accomplished by pressing "T" on your keyboard.

Define Dice

The "Define Dice" function of the interface menu allows you to dictate how many dice are to be thrown, and how many sides the dice should have. The default is 2 6-sided dice. These parameters will be used in all subsequent <u>dice throw</u> and <u>combat</u> actions. This definition may be saved from the <u>preferences</u> requester.

Unit Value Computation

The six items at the bottom of the interface menu list the unit variable names for the 6 <u>defined variables</u> for each unit.   Beside each name will be either "Total" or "Lowest." This will control how the program displays these values from a stack of units. "Total" will tally all the values in the stack in question and display the result. "Lowest" will display the lowest value in the stack for that value. The method of computation may be changed during play by selecting the desired menu option.

Preferences

This function allows you to customize your replay speed and pause delays.   You can turn the user prompts on and off from here, and set the replay mode from interactive to automatic.   Saving the preferences from this requester will also save the currently selected die roll definition as the default.

Show Held Units

The "Show Held Units" menu option will allow you to examine the contents of the stack you're currently carrying, as if it was a stack sitting on the board. This may also be done by pressing the "H" key.

Clear Movement Flags

Whenever a unit is moved, the program will mark it with an "M" beside the unit name in the <u>information</u> display.   This allows players to   keep track of what units may have moved in a particular phase.   The "Clear Movement Flags" menu function will clear this symbol from all units, and may be invoked at any time.   This is simply a player aid, for you to use as you see best.

Clear Combat Flags

Whenever a unit participates in <u>combat</u>, the program will mark it with an "C" beside the unit name in the <u>information</u> display. This allows players to keep track of what units have been in combat.   The "Clear Combat Flags" menu function will clear this symbol from all units, and may be invoked at any time. This is simply a player aid, for you to use as you see best.

Flip all units face up/face down

Each unit has a front image and a back image, and the WarGame Processor treats it just like a real cardboard counter.   You can turn units face up or face down.   The "Flip All units Face-up" and "Flip All units Face-down" functions will turn over all units in the game.   This may not be desirable in every game situation, as there might be units off-map that you don't want to turn over, so should used with discretion.

Flip carried units face up/face down

Each unit has a front image and a back image, and the WarGame Processor treats it just like a real cardboard counter.   You can turn units face up or face down.   The "Flip Carried units Face-up" and "Flip Carried units Face-down" functions will turn over all units currently being carried, if they aren't already. This may also be done from the keyboard, using the "F" (front) and "B" (back) keys.

Reset Playback

As the player <u>moves</u>, writes <u>comments</u> or performs <u>combat</u>, the details of his action are stored in a temporary file in the WGP root directory called "pb.tmp".   This file will be appended to a saved game file during a <u>save</u>. The "Reset Playback" Menu function will erase all previous moves from the playback record.   If the turn is <u>replayed</u>, only moves made after the reset will be shown. It is very important to reset this at the point you wish to begin recording. This function will also reset the unit start positions, which is used when the <u>Undo</u> button is selected from movement mode.

It might be suggested that the reset playback function would also reset the <u>movement</u> and <u>combat</u> flags, instead of having to do that as a separate step. This would, however, limit the versatility of WGP, since it might not always be desirable to clear a movement flag with a reset, especially in a game with multiple phases which may require several game save and playback resets per turn.

Button Functions

Along the top and to the left of the play area are a number of buttons and text fields to allow the player to interact with different functions provided by the WarGame Processor.

BUTTONS
   Replay Turn
   Comment
   Throw Dice
   Movement
   Information

Comment

Pressing the "Comment" button will allow you to enter a comment at any point in the game.   Comments will also be required whenever combat is declared or resolved, or a die is thrown.   Pressing "Save" at the bottom of the comment box will save the comment as part of the underlined replay function.

Pressing "Encrypt" will do the same as saving your comment, except you will be asked for a password. Passwords may be up to 8 letters long, and are case-sensitive.   You should be careful to record what a password for a comment was, and what the comment pertained to.   If you decide you don't want to encode the comment after you press this button, simply don't enter a password.   Once you enter your password, this comment will not be able to be read during playback unless the correct password is entered. The text will be encrypted in the saved game file to prevent prying eyes armed with sector editors from finding out your comment.   Pressing the "Cancel" button will return to play without recording the comment.

The encryption option is useful for exchanging secret option selections. For instance, a game might allow you to secretly deploy a number of submarines to sea without your opponent knowing how many there are until they attack. You would make that choice, record it as a comment and then encrypt it and send it to your opponent.   When the time comes to reveal your secret, you can give him your password, and he can verify that you aren't cheating, since he would have been in possession of your choice all along, even though he couldn't read it.   Because someone might go back to review a turn and read a comment that he just acquired the password for, it might be considered a good practice to preface an encrypted comment with an unencrypted explanation of what you're hiding -- "The following comment is my submarine deployment."

The encryption logic uses a random tearoff pad method, which encodes differently every time you save something.   It's reasonably secure and should withstand a casual effort to break it.   Of course it could not withstand a dedicated effort to break it, but the effort to do so would hardly be worthwhile.

Throw Dice Button

Pressing the "Throw Dice" button will open a comment box and record the result of the die roll. The number and sides of the dice are dependent on what was set from the Define Dice menu. This button is for any die rolls not specifically related to combat.   It's generally considered good manners to use a comment to declare what the die roll represents before doing it. After the result is displayed, the user has the option to enter a comment before closing the dialog box.   To prevent selective cheating, the lines containing the die results cannot be edited . Likewise, the die roll comment itself cannot be canceled, and will be part of the replay.

Movement

There are two modes of action in the WarGame Processor: Movement and Combat. Movement is the main mode used for 90% of what goes on in WGP. Combat is a special mode designed to make it as easy as possible for a player to designate units participating in combat and still let the program do as much of the work as possible.   Because of the way WGP tracks unit positions, the Combat mode is very restrictive.

The two different modes are selected by pressing the rotating option button labeled "Movement".   This button will change to "Combat", to show the new mode, and the button beside it will be enabled to allow the user to select one of three different modes available in Combat.

Moving Units
Undoing moves
Combat

Moving Units

Any time a hex containing units is clicked on, a wealth of <u>information</u> about those units will appear in the text fields to the left of the play area. To pick up a unit for movement, click on the button containing that unit to the left of the map.   This unit will be added to the bottom of the stack you are currently carrying. You may pick up more than one unit in this fashion, but you may not pick up units from more than one hex.   If you click on any other hex or flip over any units you might be carrying, you will not be able to pick up additional units until the stack you are carrying is put down.   If you wish to pick up a whole stack at once, simply double-click on that stack.

There may be more units in a hex than the individual buttons can display.   Use the left and right arrows above the unit buttons to scroll up and down the stack.

After you have picked up units, you may wish to see what you are "carrying." You may do this using the pull-down menu option <u>show held</u>   units.   This will show you the units you are carrying, as well as the values summary in the information fields.

To move units normally the "Movement/Combat" button at the top of the screen must say "Movement." If it says "Combat", **units may only be moved to combat boxes, or returned to their last position by pressing the <u>release</u> button.**

When the "Movement/Combat" button says "Movement", the replay recorder will record every hex a unit "touches" on its way to its final destination. To "touch" a hex, the user would single click in the hex. For example, a unit is picked up, then each hex along its path of movement may be clicked on once, indicating the unit passed through that hex, then the unit is placed in it's destination by double-clicking. During the <u>replay</u>, the entire path of movement will be indicated. Note that the "touched" hexes don't necessarily have to be contiguous.

Undo

If you wish to return a unit to it's starting position in the <u>Movement</u> mode, you may do so by picking it up if you're not already carrying it, and pressing the "Undo" button above the attack combat box.   The unit will be returned to the position it was in when the last <u>reset replay</u> option was executed from the menu. Note that if a unit is moved more than once, it will **NOT** return to the last hex it was in!   It will always return to the position it was in when the last reset was accomplished.

The undo may not replace a unit in the same position within a stack that it started.   Units which are "undone" will be placed on the top of the stack which occupies their starting position.   This is because the program has no way of knowing what units might have been moved in or out of a hex, and thus cannot accurately track the position in a stack.   For this reason, if you are playing a game where the position within a stack is important, you should be careful to check units which are undone to make sure they are in the proper place in the stack to which they're returned.

Combat

There are three modes of combat operation, <u>1 by 1</u>, <u>Declare</u> and <u>Resolve</u>. These are selected by the button to the right of the "Movement/Combat" button.

While in any Combat mode, units may only be moved from the map into either the attack or defend boxes.   Units may not be moved from hex to hex, or even put down normally in their original hex.   To return a unit to the map, or to put it down after picking it up, it must be picked up and the <u>release</u> button pressed.   This will return the unit to the hex it started this combat sequence in.

Between individual combat actions, the player may move freely back to <u>movement</u> mode, and then re-enter the combat mode.   For instance, a combat may be declared and resolved, and the player may need to move some combatants to the dead pile or advance after combat.   Since **units cannot be moved around on the board in Combat mode**, the player would return to movement mode, make his movement, and then go back to combat mode if more combat was necessary.   The program will remember if any combats are pending, and the order in which they're to be accomplished.

There are two ways of declaring combat, depending on what the requirements of a particular game are. When the "Movement/Combat" button is in the "Combat" mode, the button beside it will indicate which of the three combat modes is active.

To declare a combat, the combat mode button should be either in <u>1 by 1</u>   or <u>Declare</u>.   Attacking units are moved into the attack box, and the defending units are moved into the defend box. This is a way of designating who is involved in the combat and what their role is. It's up to the user to determine the odds and terrain effects to be applied.

Resolving combat:
  <u>1 by 1</u>
  <u>Resolve</u>

Individual Combat Actions

The "1 by 1" Combat mode means that each combat is declared and resolved before moving on.   Units are placed in the attack and defend boxes according to their roll in combat.   If a mistake is made and the player picked up a unit he doesn't wish to use in Combat, he must press the Release button above the Attack box.   This will place all the units currently being held back on the hexes they were on at the start of the combat mode.   Units may be picked up from either combat box, or anywhere else, but may only be put down in a combat box or by using the release button.

When all the units have been designated by placing them in the combat box, the player may resolve the combat by pressing the "Resolve" button above the Defend box.   This will generate a comment requester with the details of the combat and the subsequent die roll.   Players may not alter the die roll text, nor may they cancel out of the comment.   The combat result may be encrypted.

Declaring Combat Actions

The declare combat mode allows each combat to be declared first, before any resolution takes place. This allows you, for instance, to declare all combats before any resolution die rolls.

If the combat is in Declare mode, once all the units involved in a particular combat have been designated, press the "next" button. Units in the combat boxes will be returned to their hexes, and a comment box will appear detailing the combat and clarifying that this is a combat declaration to be <u>resolved</u> later. Each unit assigned to a declared combat will receive a "D" flag after its name to indicate that it's part of a declared combat. A text field right below the hex names on the left of the screen will remind the player how many combats have been declared and are pending resolution. A maximum of 120 combats may be declared this way. After 120 (what kind of game are you playing anyway?), you MUST resolve some before you can declare more.

A unit may only be assigned to one declared combat at a time, although it may be used in <u>1 by 1</u> combats while part of a pending declared combat.

One limitation to this method of declaring combat is that additional units may NOT be added in to the list of combatants after the declaration is made. If, for instance, a defender chooses to add air support later to a combat, it would be noted in the comments manually, since those air units wouldn't be reflected in the unit list shown by the program.

Resolving Declared Combat Actions

The resolve combat mode allows the player to resolve combats which were declared in the Declare mode. While in this mode,   no units may be moved.

Attacks declared in Declare mode will be resolved in the order in which they were declared. To initiate resolution, press the "Resolve" button. The map will be redrawn with only the units actually involved in the combat shown. To continue, the user must press a key or click the "Resolve" button again, and a comment window will be opened.   This will contain the details of the combat, who took part, and what the dice roll was. The user may enter any additional comments, such as units which joined the combat after it was declared, odds and results, before saving the comment. Canceling a comment box or editing the die roll text after a combat is not possible.

The user may switch back and forth between the Combat and Movement modes between combat resolutions to make post-combat movements.   The user may also perform 1 by 1   combats in between declared combat resolutions, without affecting the declarations.

Release

In <u>combat mode</u>,   units may no be put down except in the combat boxes.   This is to avoid confusing the position of the units, since a different method of tracking position is used in combat mode.   To put a unit down anywhere but in the combat box the user must press the "release" button.   This will ensure that the unit to the place it was in when the combat mode was entered.   Unlike the <u>undo</u> function, the program will restructure the stacking order after every combat so that the stacks are preserved. Stacking may become confused if units are "released", but this will resolve itself when the combat boxes are cleared.

Information Text fields

To the left of the play area are several text fields to provide information about specific parts of the game in play.
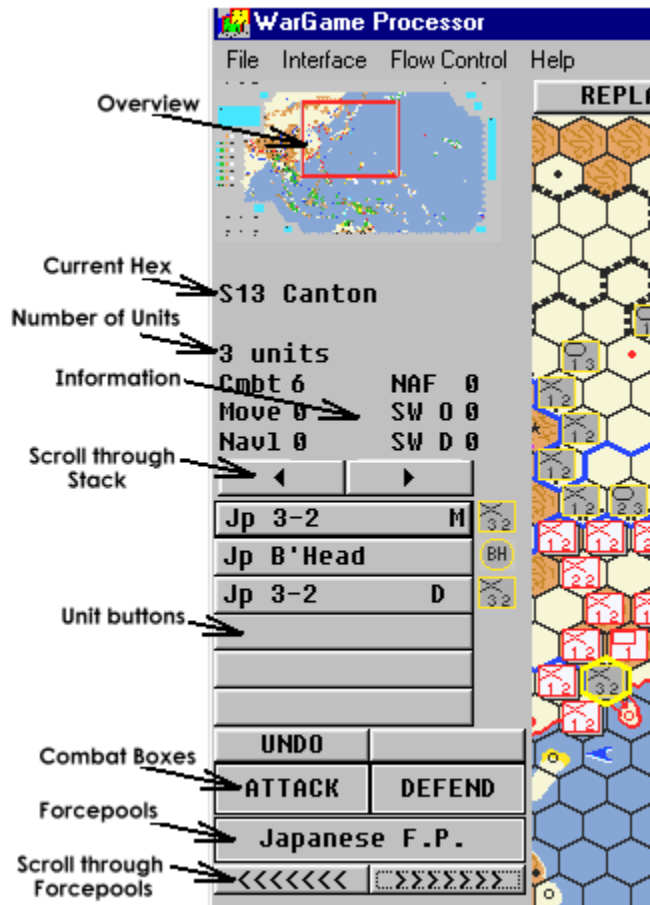
Just below the overview map, the name or coordinate of the current hex under the mouse cursor is shown. This is updated as the mouse is moved.

Underneath the hex name field will be a status line showing how many declared combats are pending resolution, if any.

When you click on a hex containing units, you will see the yellow hex marker over that hex.   A list of units in that hex will be displayed in the buttons to the left of the map.   If there are more than six units in the hex, additional units in the stack may be shown by using the left and right arrow buttons above the unit buttons. Pressing these buttons will allow you to scroll through the list.   If a unit has moved already, it will be marked with a "M" flag beside its name. If a unit has participated in combat, it will be marked with a "C" flag beside its name. If a unit is part of a combat that has been declared, but not resolved, the "C" flag will be replaced with a "D" flag.   The movement and combat flags may be cleared from the "Flow Control" menu.   The "declared" flag can only be cleared by resolving the combat.

Units may be picked up from a stack by clicking the button containing that unit.   This capability is sometimes restricted by the current mode of play, or units being held from another hex.

Just above the buttons will be a summary of the 6 module-specific values for the units in that hex. Module values may either be the sum of a specific value or show the lowest value in the stack.   The method of how they are tallied may be set through the menu.

Just above the unit values fields is a field showing the number of unit counters in a hex.

The WarGame Processor Editor

The WarGame Processor Editor provides an intuitive interface with which you can design your own modules, based on your favorite games.   In it you can design your <u>map</u>, define your <u>order of battle</u>, <u>name hexes</u> and <u>design your unit images</u> .

Please report all bugs to me, E-mail <u>semerson@transport.com</u>. If you report a bug, I'll ship you a fixed update as soon as possible with your bug fixed.

Planning your module

After doing a couple of modules myself, and offering advice to others who are doing modules, I've found some ways of doing things seem to work better than others.   I'll try to pass some of these on here.

The quality of your module will depend on how well you orchestrate the different steps and functions of <u>planning</u>, <u>map design</u>,   <u>force pools</u>   and <u>Order of Battle</u>   layout.   While the map design and implementation will provide the greatest visual impact, the planning of the Order of Battle will be the most significant contribution to how easy the module is to play.   The artwork and how the unit values are displayed can make the difference between a good module and one that is unplayable.   Once you have the map and the order of battle together, you will have to tie it all together by <u>preparing set-ups and documentation</u>.

<u>The Map Editor</u>
<u>Hex Editor</u>
<u>Palette</u>
<u>Hex Copying</u>
<u>Renaming Hexes</u>
<u>Overview</u>
<u>Cards</u>
<u>Force Pools</u>
<u>Coordinates</u>
<u>Menus</u>
<u>The Order of Battle Editor</u>
<u>The Unit Image Editor</u>
<u>Tips: Preparation</u>
<u>Tips: Map Design</u>
<u>Tips:Force Pools</u>
<u>Tips: Order of Battle</u>
**<u>Tips: Unit Values</u>**
<u>Packaging Your Module</u>

The Map Editor

The map editor is the core of the WarGame Processor editor. This is where you will actually design the playing field. The map editor is the only area from which the user can access the pull down menus (including the save function) , or exit the program.

To scroll the map up down or sideways, use the arrow keys on the keyboard.   The visible area relative to the map will be represented by the red box in the overview map   in upper left corner of the screen. Clicking in this area will also allow you to move around the map. Just click the left mouse button in the area you want to view.

There are three modes that the map editor operates in: 1. Terrain Draw,   indicated by "TERRAIN" in the Mode button.   2. Hex Copying,   indicated by "PAINT" in the Mode button and 3. Hex renaming, indicated by "RENAME" in the Mode button.   You may cycle from mode to mode by pressing the Mode button.
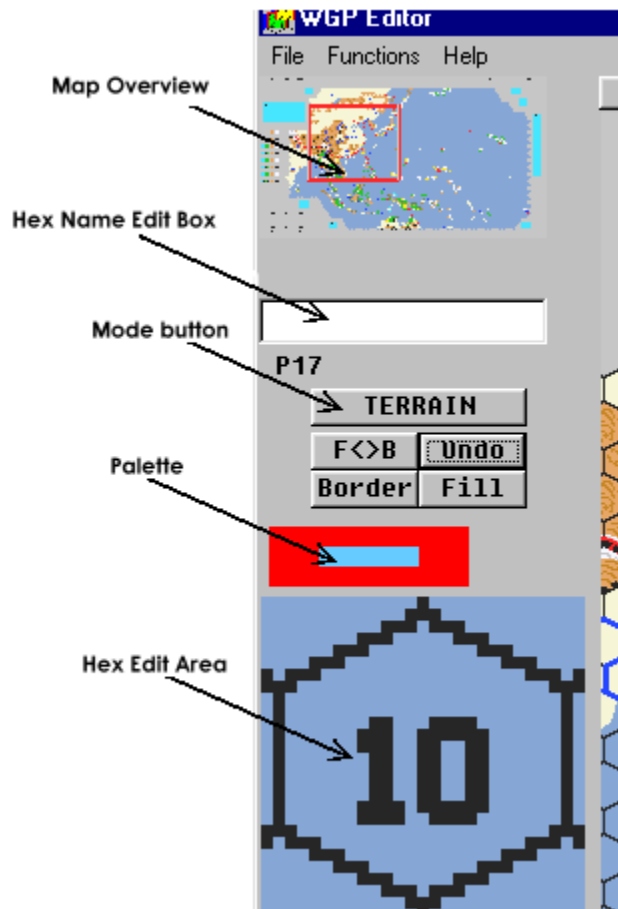
The left side of the screen provides the following editing tools:
Overview Map
Hex editor
Palette field
drawing macro buttons

<u>Hex name editor</u>

Across the top of the screen is a row of buttons which access major editing functions:

<u>OVERVIEW</u> – Generates the overview map in the upper left corner opf the screen based on the latest map artwork.

<u>CARDS</u> – Allows generation and editing of game card decks.

<u>UNITS</u> – opens the Order of Battle Editor

<u>FORCEPOOLS</u> – Allows editing of the Forcepool Names.

<u>COORDINATES</u> – Provides the ability to automatically generate hex coordinates from a variety of avaliable coordinate systems.

The <u>Menus </u>allow you to Save your module, Save the graphics as a bitmap, and Clear Hex Names.

<u>Tips on Map design.</u>

Hex Editor

In the Terrain Draw mode, you may select a hex to edit by clicking on that hex in the map area.   An enlarged blowup of that hex will appear in the lower left corner of the screen (See the illustration in the Map Editor Topic).   You may draw in this field by using the left (foreground) or right (background) mouse buttons. Colors are indicated by the Palette field.

The buttons below the Mode button provide some useful macros to work with the hex editor.   The Border button will draw a border around the hex in the current foreground color.   The Fill button will provide a paint bucket to fill areas in the Hex Edit area (NOTE: the area fill will affect as much of the map area as the color being filled reaches.   This could cause unintended fills that may not be undo-able.   This is scheduled for correction at a Later date,)   The "F < > B" button reverses any pixel in the edit area which has the foreground color to the Background and vice-versa.   The Undo button allows the user to undo the last edit action performed.

Palette

Above the Hex Editor area and on the Unit Edit window is the Palette field (See the illustration in the Map Editor Topic) .   This indicates the colors currently assigned to your mouse buttons.   The inside color is the left, or foreground, color, and the outside color is the right, or background color.   You may "pick" a color from anywhere on the screen by clicking in the Palette field with the right mouse button, then clicking the desired color with the desired mouse button. You may also select different colors from the WGP palette by clicking the left mouse button on the Palette field, which will provide the following requester:
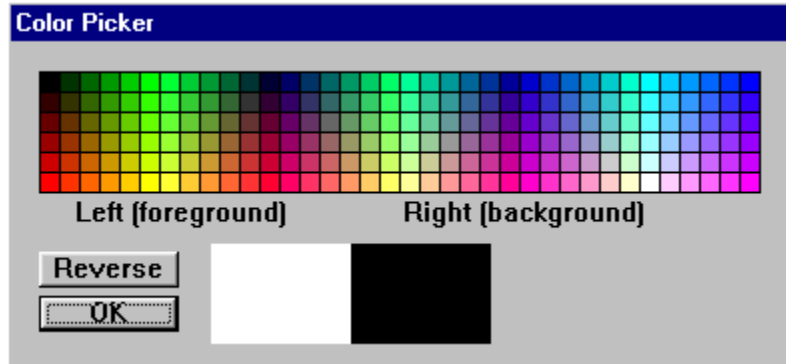
You may select the color to be assigned the left mouse button by clicking with the left button on any desired color.   You may select the color to be assigned the right mouse button by clicking with the right button on any desired color.   You may reverse the left and right selections by pressing the "reverse" button.

Note that imported bitmaps may not support all the colors available from the WGP palette requester.

Hex Copying

You may copy a hex to any other part of the map by first selecting the desired hex to be copied in "TERRAIN" mode. The select "PAINT" mode by pressing the Mode button. The selected hex will be copied to every hex clicked from that point. If you hold either shift key down along with the left mouse button, the selected terrain feature will be pasted over every hex the mouse touches as you move the mouse. This allows you to "paint" broad areas of your map with a particular type of terrain without having to click on each individual hex.

The Undo button will restore the last hex painted in this mode. No hex editing functions are available in this mode.

Renaming Hexes

The "RENAME" mode will allow the user to rename a hex from the default coordinate name. The default coordinate name is located just below the Hex Name Edit Box(see the illustration in the Map Editor Topic) , and updates as you move the mouse cursor around the screen. A hex may be marked by clicking on it, and the new name typed in. No other functions will be possible while text entry is active.   Note that the Menu item "Clear Hex Names" will delete all hex name data, and customized hex names may be overwritten by the "Coordinates" function.   Normal Cut and paste windows functions are supported.

Overview

In the upper left corner of the screen is the map overview, which allows the user a quick way to navigate around the map and an easy way to see the currently displayed portion of the map with respect to the rest of the map.

The "Overview" button will draw a new overview map in the upper right-hand corner which will reflect any changes made in the map. This may take a long time if the map is very detailed.   During the operation, the current row being worked on will be displayed under the hex name edit box.

Cards

Pressing the Cards button allows you to define the card decks for the module.   This function is not supported in Version 1.

Force Pools

The "Force Pools" button allows the user to assign his own names to any of the 18 Force pools. Force pools are off-map holding areas for units and can be designated whatever name the user desires. You may notice that there is no capability to place units on the map. This can only be done from the WarGame Processor player.   All units will be placed on the map in the upper left corner as an initial default. Designers should include a saved game file which distributes the units in some fashion to expedite setup.

Tips on Force pool development.

Coordinates

The Coordinates button allows you to automatically rename all your hexes with one of a number of popular coordinate systems.   Some experimentation may be necessary to get the results you want.   Use the arrow buttons to select the different coordinate systems, and follow the directions.   This will overwrite all hex names in the affected area.   You can prepare your map for new coordinates by selecting "Clear Hex Names" from the pull-down menu.   Once you've established your coordinate names, you may wish to add to them in the Rename Mode,   for example, to add city names.

Menus

The Project menu: Save allows the user to save his module to disk. The game will be saved using the name you select. All images will be saved with the module files in the "Modules" directory, located under the directory that the editor was launched from. Two files are saved with each module, one *.GPD file which contains all the graphic images unique to your module, and one   *.GPG, which contains the graphics data.

Save Graphics BMP allows you to save your .gpg file as a windows bitmap.   This will allow you to edit the graphics using more powerful paint programs than the basic tools provided in the WGP editor.   To import your edited graphics, change the file name from *.bmp to *.gpg and place it in the same directory as the *.gpf file is.

"About" contains the copyright notice for the Game Processor.

The Order of Battle Editor

The order of battle editor allows the user to define the individual units which will be used in the game. The maximum number of units which may be defined is 10,000. A scrolling list of units is shown in the main part of the screen. To see additional units, the scroll up and scroll down buttons allow you to view the entire list of units. Page up and page down allow faster scrolling. Units may be selected to be edited by double-clicking anywhere on that unit's line. This unit will then be shown in the edit fields and changes can be entered.
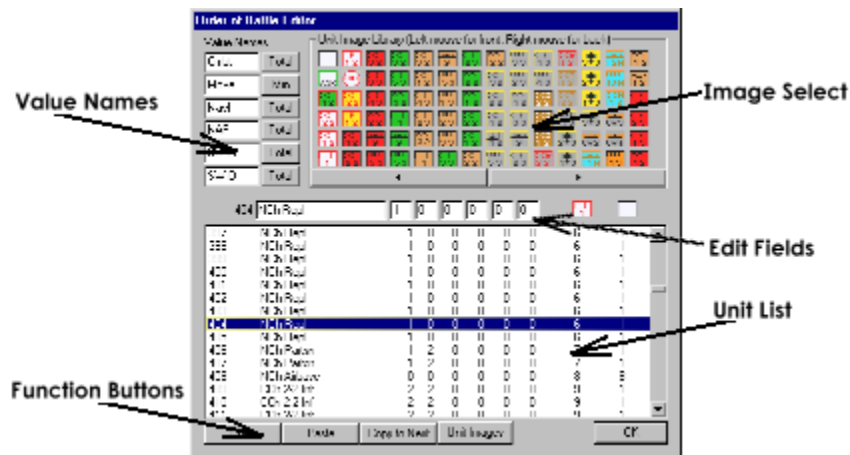
Each unit has a unique ID number in the far left column, which cannot be changed. The name column provides a space to enter a name for the unit. This can be whatever the user wants, but is limited to 9 characters. To enter a new name, simply click in the name field edit box to activate the entry mode, then type in the name or make changes to an existing name.

Each unit may have up to 6 user definable values attached to it. The names of each of these values may be edited by the user in the box in the upper left of the screen. Click on the desired name to change, and enter your changes. Value names are limited to four characters, and will be displayed in the information fields of the WarGame Processor when units are examined. To the right of each value is an indicator button of how this value is to be treated in a stack. If the indication is "Total", all the values are added together and the total displayed. If the indicator is "Min", only the lowest value will be displayed from a stack. This may be changed by clicking on the appropriate indicator. These values will be used to generate the information fields during [play.

The values to be assigned to each unit are entered in much the same way as the name, but are limited to numeric values from 1 to 99.

Each unit may have two images assigned to it (a front and back). These images are shown as such on the editor line, and the numbers which reference these images on the main unit list. At the top of the window is a graphic table of all the available unit images to choose from. Click the left mouse button on the desired image to select the "front" of the counter, and the right mouse button to select the image for the "back" of the counter. The new images will be displayed in line with the edit fields. Additional images may be viewed by the left and right arrows at the bottom of the image display.

The copy button at the top of the screen will memorize the unit currently selected for edit. The details of this unit can then be pasted onto any other unit by selecting that unit to be edited and pressing the paste button.

If you press the "Copy to Next" button, the currently selected image will be copied to the next unit on the list.

Once units are defined, they will appear in the upper left hex of the map when the player is run. The WarGame Processor player must be used to move the units from there and place them prior to play of the game.

Tips on the Order of Battle.

The Unit Image Editor

The unit image editor allows you to define the art work which you will see on your units when playing the game.
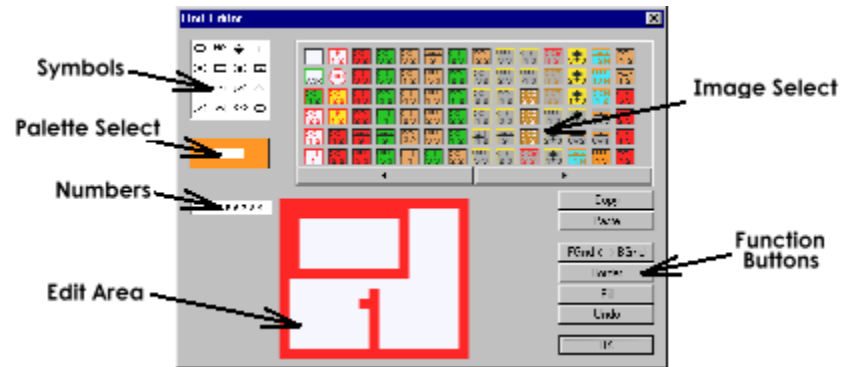
At the left of the screen is the color palette. This works exactly like the Palette in the Map editor window. Left mouse button click will get the Palette requester, Right mouse button will allow you to pick a color.

The "Fill color" button will paint over the image completely in the foreground color.

The "Border" button will draw a border around the edge of the unit in the foreground color.

The "FGnd<>BGnd" button will replace the foreground color with the background color and vice-versa in the image. This is an easy way to do a quick nationality change.

The "Copy" button copies the current image to the buffer.

The "Paste" button copies the contents of the copy buffer over the current image.

At the top of the window is a graphic table of all the available unit images to choose from. Additional images may be viewed by the left and right arrows at the bottom of the image display.   Click on the desired image to edit it.

In the upper left of the window are a series of common military symbols. Clicking on these will paste that symbol in the upper left corner of the current image.   Note that color matching may cause this to look strange.   You are recommended to do this on a white background, then reverse in the desired color with white.

Below the Palette is a sequence of numbers. Clicking on a number will allow you paste that number in the actual size image. The blowup will reflect the change once the number is pasted.   Note that color matching may cause this to look strange.   You are recommended to do this on a white background, then reverse in the desired color with white.

Preparation

When you start designing a module, do a little preparation work first. How many hexes high and wide will your module have to be?

It's unwise to set the map limits to that exact number when you initialize the module.   I've found that a two hex pad on the edges all the way around may give you some room to make mistakes in. This can be visually negated by filling the padded area with a gray hex image with no borders.   You may want to make this buffer bigger to accommodate turn record charts or other similar game functions

You should also decide how many units you need in the module, and how you're going to portray them. Which unit data fields will hold what data? Will the data be summed together within a stack, or will the program only show the lowest value of that field in a stack?   Some games have step reductions for losses, and one "unit" might have two or more sets of game values, depending on what step you're looking at.   Will these be portrayed by one unit with two sides, or by two different units within the module? The latter will allow for the values to be computed correctly, even with reduce-stepped units.

Map Design

When you get to the map editor, do a quick layout of your game map, but avoid doing detail work at first. If you need to put a coordinate system on the map, you should do so early on, as redoing coordinates will erase existing hex names.   The default coordinate system names the hexes after their X and Y coordinates. If you are playing with an opponent who doesn't have the Game processor, or you want 100% accuracy, you may want to rename the coordinates based on whatever system the game actually uses. The "Coordinates" button will allow you to select a coordinate system for your game. If you don't see the system you need, E-mail me with details.

When initially laying out your map, you may find it necessary to blank out the leftmost hex on all the odd rows so that your map edge will match the game you are modeling. One of the games I used to proof much of this code by installing was World in Flames, which uses off-map area movement out of the hexagonal play area, and so the actual hexagon play area started two or three hexes from the game processor edge to give room to draw these areas.

Force Pools

You have eighteen force pools which you should name.   Try not to give different pools the same name, even if they're not used, because the user will only have the name to tell him where he is as he's flipping through the pools.   Even if you label them "unused" you should attach a number or some other unique identifier to each name.

You should also try to avoid names like "German" in your force pool. Qualify the name to show that this is a forcepool, like "German FP."   That this is the "German" forcepool is obvious when you're using WGP, but less so if your module is used to play against a player who doesn't have WGP. The player will be saving his moves in ASCII, and it doesn't make much sense for "unit xyz moves from hex B38 to German."

Order of Battle
The Order of Battle editor can be a lot of work if it's not approached in an orderly fashion. It's easiest to make one unit of a particular type and copy it over and over as many times as necessary, then go back and change the details.   It's a good idea to indicate the nationality of the unit in the name, to make references clear in combat text.

The counters provided in the game don't necessarily have to be reproduced exactly in the module.   Text on the counter can often be done as part of the unit name, for one thing.   You should decide which factors are necessary to be shown on the counters, and which would do the job just as effectively as computable values to be shown to the right of the map. You should avoid putting too much information on the counters, or cluttering them so that they're unreadable.   Often different classes or nationalities may be designated by different colored borders.

Unit Values

Before you start working on your units, you should determine what values should be computed from the unit as it sits in a stack, and in what order these values should be displayed. The WarGame Processor player will display the values like this above the hex roster (See Information Fields):

Val1	Val4
Val2	Val5
Val3	Val6

Decide on a 4-letter name for each value. You may want to delete value names that are not used. As a general rule, games that need more than six values for each unit make poor PBM candidates. Be sure your values are the way you want them, because it's a painful process to go back rearranging the data for every unit.

Packaging Your Module
Once you've made your map, detailed the order of battle, named your force pools, and are satisfied with the whole thing, you are ready to move to the WarGame Processor play program.   When you first load a module into the play program, all the units appear in the upper left corner in one huge stack. You should provide a setup saved game file, with the units broken down into smaller stacks, maybe by type, and possibly placed in the correct area of the board.   Some games which have a fixed setup should have the units placed in their startup positions.   Perhaps you might want to put some units in the correct force pools at the setup.

You should keep notes on the game module and provide them with the module as a README file. Identify where you made a compromise between the board game and the module, what the different values mean, and how you arranged the force pools.   You should also state who the original publisher of the game is, provide their address and phone number, and tell how someone can acquire a copy of the game, if it's not one of the more popular games.

When you are ready to distribute your module, you should provide the two data files (.GPF and .GPG) from the modules directory, the suggested setup file(s) from the savedgames directory, and the readme file detailing your notes on the module.   If possible the files should be archived in place in their proper directory.   If you upload to a network, you should have the word "WGP" as one of your keywords, and clearly identify it as a WarGame Processor module, and that ownership of the WarGame Processor and the original game are required for play.

WarGame Processor Product Support

If you have any comments, suggestions or questions, please feel free to contact me. Please report any bugs you find so I can get them fixed for the next release.

To report a bug, please be as specific as possible: what you were doing, what the program did, any error numbers. Please take the time to reproduce the failure several times. I can't fix it if I can't reproduce your failure consistently. Send all comments, suggestions and bug reports to semerson@transport.com.

Keep an eye on WGP Home page for WGP updates, information about module availability and opponent listings. Log in every so often to make sure nothing has moved. . . If I change ISP's for some reason, I'll post a link for several months to the new one.

http://www.transport.com/~semerson/wgp.html

Legal stuff
 COPYRIGHTS

 The WarGame Processor Version 1.x for Windows
 Copyright - 1999, Sean Emerson, All rights reserved

All versions of the WarGame processor executable, documentation and support files are protected by United States Copyright Law and related international treaty provisions.   You are entitled to use the program in original form only.   You may not reverse engineer, decompile, disassemble or derive a work based on this work in whole or in part.

 FAIR USE

The Nature of the WarGame Processor is such that it may be abused to violate Copyright laws when dealing with   modules based on existing board wargames.   The user is obligated to avoid developing modules unless he or she legally owns a copy of the board wargame in question.   The user is additionally obligated to avoid distributing modules for use to third parties who do not own a legal copy of the board wargame in question. Under the concept of fair use, it is not a violation of Copyright law to distribute modules for third party games, as long as the recipient and the sender both legally possess a copy of the original board wargame.   You may not charge a fee for such distribution beyond a reasonable amount for materials, shipping, and handling.

 SHAREWARE

This program is made available through the concept of "Shareware" which is a form of distribution that gives you the opportunity to try a piece of software before you buy it.   It is a copyrighted work that is not now, nor will it ever be regarded as in the Public Domain or otherwise "free" software.

 LICENSE

You are granted a limited license to evaluate this software on a private, non-commercial basis only. Registration is not only required for your continued use, it is needed to keep the development of future enhancements to WarGame Processor active.   Without your support the product cannot continue to evolve.

 DISCLAIMER

No warranties are implied or expressed with regard to the fitness or merchantability of the WarGame Processor for any particular purpose.   All risks and damages, incidental or otherwise, arising through the use or misuse of the WarGame Processor are entirely at the responsibility of the user.

While considerable effort has been made to provide you with a reliable product, there is no guarantee that this program is 100% "bug-free". Additionally, this disclaimer does not guarantee future versions of this product, but maintenance releases may be made available if and when feasible.

ACKNOWLEDGEMENTS

Third Reich, Advanced Third Reich, D-Day, Empire of the Rising Sun, Victory in the Pacific and War and Peace are all Trademark names for board wargames by the Avalon Hill Game Company:

The WarGame Processor was originally developed for the Amiga entirely with SAS/C 6.55.   PC version developed with Microsoft Visual C++ 5.0

To pick up a unit, click on that unit's hex, then click on the button on the left showing that unit.   You may also double-click on a hex to pick up a whole stack.

Once a unit has been picked up, double-click on the destination hex.   To indicate a path of hexes, single-click on all hexes the unit will "touch".

To put a unit down, double-click on the destination hex, or desired forcepool.

Pick up the units you wish to turn over, and press the "B" key to turn them face-down, or the "F" key to turn them face-up.

1. Press the "Movement" button so it says "Combat"
2. Move attackers and defenders to the appropriate boxes on the left (Note: you may not place units on the board exept by pressing the "release" button)
3. Press the "resolve" button.

Select the menu option "Reset Playback" at the desired point to begin recording.
All movements are automatically recorded at all times and saved with your game.

Save your positions when you finish your move.   Send the file you saved to your opponent.   All moves and playback information will be contained in that file.