



Gary Grigsby's World At War™ (V1.033)

Thank you for playing Gary Grigsby's World At War™! We are always looking for ways to improve your gaming experience. For the latest information on the game, please go to the Matrix Games web site at www.matrixgames.com.

Troubleshooting:

Ensure that your system meets the minimum system requirements:

OS: Windows 2000, XP

Processor: 800 Mhz (2 GHz Recommended)

RAM: 512 MB (1 GB Recommended)

Video card: 32 MB or greater (128 MB Recommended)

Sound Card: 16 bit DirectX 9 compatible

To obtain optimum game performance, close all other applications before beginning a game. For systems that only meet the minimum requirements, ensure that you are running in low quality graphics mode in the game options. The high quality graphics mode can be extremely slow on lower end systems.

Also, ensure that you have the latest video and sound drivers available for your system and that you have upgraded to the latest version of DirectX from Microsoft. The vast majority of reported problems are resolved by upgrading all drivers and DirectX to the latest versions.

If you are experiencing problems with the game, please contact support@matrixgames.com or post in the Gary Grigsby's World At War Support Forum at www.matrixgames.com. Please provide as much detail on your issue as soon as possible.

Change History:

V1.033 – May 17th, 2005

(Second Update Changes and Additions)

Please Note: Old save files (v1.005 and v1.016) should be able to be loaded with the updated version. However, if playing PBEM, once one player has loaded the game using the patch, all the next players to follow must also play the game using the patch. **Not all fixes will work in games that continue from old saves.**

1. Rule Change - The evasion modifier for being previously fired upon during the current turn does not apply during Opportunity Fire.
2. Rule Change - In the last part of section 8.5.7 in the section dealing with adjusting the net die roll modifier, the 2nd item dealing with units with a defense value of 12 only impacts the Attack Help Level modifier (caps it at + or - 1). It will not cap other modifiers.

3. Rule Change - The fort value of Western Germany is now cancelled if the player defending in Western Germany does not also control Eastern Germany.
4. Rule Change – Italy will now only surrender whenever Germany does not control at least 2 of the following 4 regions: Northern Italy, Southern Italy, Sicily, Tripoli.
5. Rule Change – Germany is now charged 5 supply points whenever it attacks a neutral country.
6. Rule Change – The Liberation rule in section 11.5.3 has been modified. Now, when a World Power successfully attacks another friendly World Powers region, the player will be asked “Occupy Area Yes/No”. If they answer no, then the effects listed in 11.5.3 will take place. If they answer yes, then they attacking player will take control of the area as they would any other region and their units will remain in the area. The area and its infrastructure will now function as if they belong to the occupying World Power. Any population and factories in these occupied areas may be used by the occupying World Power using the factories normal factory multiplier. Example: Germany has taken Leningrad. The Western Allies successfully attack it and answer Yes to the Occupy Area question. They now control Leningrad and if they repair the factory there it will provide the standard Soviet multiplier (x2 or x3, not x1) under a Production for Soviet Union section in the Western Allies production screen (using population in Western Allied controlled Russian nationality areas).
7. Rule Change – Units that have already fired at an enemy unit during their turn may not enter an enemy controlled land region, even if there are no enemy units in the area.
8. Rule Change – Units that are damaged or destroyed do proceed to the next combat phase, but fire with the combat modifier disadvantages listed in the manual. The exception to this is air units. Air units that are hit either in the Air vs. Air phase or the Land vs. Air phase will not proceed once hit.
9. Addition - Added a new Game Option titled Fuel Cost. If this option is activated, all ground units are fueled and expend one 1 extra supply when they move over a 2MP land border.
10. Addition - There is a new Preference Item called Language that lists the players Language setting. Currently it only allows English, but eventually we will have other choices which the player will choose from at the start of their first game and they will be able to alter this choice in the Preference screen.
11. Addition - The game uses far less CPU power when minimized (in windowed mode and full screen mode via Alt-Tab).
12. Addition - The four arrow keys will now scroll the map.
13. Addition - Added a button in the Production screen that when clicked will use all remaining production points to build supply. This button is just to the left of the normal build buttons.
14. Addition - Added a way to spend maximum on the research screen pop-up (shift key when clicking on plus should spend max). Shift-click on minus button removes all research for this turn.
15. Addition – The text pop up over the Isolated Resource Centers number on the Production Summary screen now shows what regions are isolated. Also changed the pop up text for the isolated numbers on this screen to: Isolated resource centers and Isolated resources.

16. Interface Change- The "Exit the game and go to the Main menu?" text is now red to minimize confusion with the "Exit this phase?" text.
17. Interface Change - Removed "unit is already here" text in move mode.
18. AI Improvements – Many changes were made to improve the AI play involving both movement/combat strategy and production/research strategy.
19. Data Change - Allied Bomber Evasion was changed to 5 and Durability changed to 3 in the Campaign I Scenario; all other scenarios were adjusted accordingly.
20. Data Change - Japanese Heavy Bomber Evasion was changed to 5 in all scenarios.
21. Data Change - Heavy Fleet Aircraft Attack was changed to 3 in the Campaign I Scenario; all other scenarios were adjusted accordingly.
22. Data Change – Two World Standards were changed. Armor Evasion and Tactical Bomber Land Attack World Standards were both changed to 7.
23. OOB Change – Several Soviet units have been repositioned in the Campaign I and II scenarios. The repositioning involved units in Moscow and 3 Eastern (Siberian) areas.
24. OOB Change – Germany has been given 15 additional supply points in Campaign I to help offset the new supply cost for attacking neutral countries.
25. Bug Fix – Several bugs in the combat analyzer have been fixed. It now yields a more accurate estimate of losses for each side. Among other things it now accounts for air units not bombing when damaged and militia generated before a combat. It also provides a better estimate of battles involving surface ship combat, although this still can vary greatly based on how many surface ships actually participate.
26. Bug Fix - Fixed a bug that could allow you to move and undo a move indefinitely, gaining 1 supply each time.
27. Bug Fix - Several corrections to correct Op-fire bugs were made, including that now Op-fire directed at units moving over transports will fire at the transport instead of the moving unit as per the manual. The transport fired at will be within one region of the region where the Op-fire was triggered (i.e. might be further along on the chain of transports). Also CV Airgroups were not op-firing in all cases. Also, with Fog of War on, it was sometimes possible to avoid being Op-fired at by units that were visible if moving into an area that was not visible. Several other Op-fire corrections were made as well.
28. Bug Fix – Fixed a bug that kept some air units from participating in combat.
29. Bug Fix – Fixed a bug where areas that were both rough and cold regions required only 2 to 1 to retreat the enemy instead of 3 to 1 (per Rules Clarification that rough areas require 3 to 1 to retreat the enemy).
30. Bug Fix - When loading a PBEM game with Fog of War on, the opponent's map will no longer be (briefly) seen.
31. Bug Fix - Heavy Bombers will no longer incorrectly attack ships with their land attack value.
32. Bug Fix - Damaged Factories can no longer be strategically moved.

33. Bug Fix - Air-only attacks on China (or any area that generates Militia) will not produce Militia units.
34. Bug Fix - Units will no longer retreat into a frozen area except as a last resort.
35. Bug Fix – Some combats (often involving subs) were not being shown in the when using the Game Playback (section 7.3). All combats should now be shown during the replay.
36. Bug Fix - Sicily is now treated correctly as an island for interdiction and Op-fire purposes.
37. Bug Fix - Carrier planes can no longer counterattack further away than their speed allows.
38. Bug Fix - Fixed a bug where Chinese production was reset to occur only every third turn after having been set to produce every turn. Once Chinese production increases to occur every turn, it should remain this way for the duration of the game.
39. Bug Fix – Air units are now retreating properly, flying to nearby land areas that are within range when necessary.
40. Bug Fix – Carrier Air units that participated in a battle should now retreat along with their Carrier Fleet when the Carrier Fleet is forced to retreat.
41. Bug Fix – Fixed a bug caused by undoing the move of a Heavy Bomber that was carrying an Airborne unit.
42. Bug Fix – Fixed a bug that sometimes caused units that were damaged in combat in an area containing a Factory to be eliminated instead of being placed on the production track. This bug could have also happened to a damaged unit that was part of a force retreated after combat to an area containing a Factory (damaged units retreat first if they lose a battle before being removed from the map and placed on the production track). These units should now be correctly placed in the production track
43. Bug Fix – Units attacking with 0 dice due to attack dice reductions (due to armor on the defender or the rule regarding amphibious units losing attack dice if attacking after a long movement) were not being displayed as having attacked. They now are correctly shown attacking with 0 dice. This is important as they can reduce the evasion of the unit that they attack, even though their net attacker dice is equal to 0.
44. Bug Fix/Rules Clarification – Political Garrisons required of a player are now checked only at the end of that player's movement phase (i.e. the required Russian garrison of Karelia is checked only at the end of the Russian player's movement phase).
45. Rules Clarification - Rough Terrain increases the odds needed for the attacker to take an area to 3:1. This stacks with the Fortification odds, so a Rough + Fortified area needs an Attacker : Defender ratio of 4:1 for the attacker to force the defender to retreat.
46. Rules Clarification - Area Supply: When the Area Supply game option is activated, at the beginning of a player's movement phase the computer will attempt to move:
 - one Supply Point into each land region containing a friendly unit.
 - one Supply Point into each land region containing an enemy partisan unit and at least one friendly Infantry, Militia, Airborne, or Armor unit.This is an aide to help the player maintain one Supply Point in every region for defensive purposes and help the player supply his anti-partisan garrison.

If both enemy partisan units and friendly Infantry, Militia, Airborne, or Armor units are present this means two Supply Points will be moved to region. The supply moves that occur due to Area Supply only happen if there aren't already the required supplies in an area.

47. Rules Clarification - Auto Supply: When the Auto Supply game option is activated, at the end of a player's movement phase the computer will attempt to move one Supply Point into each land region containing enemy partisans and at least one friendly Infantry, Militia, Airborne, or Armor unit (if no supply is already present in the area). The supply must follow normal movement rules, and since this is at the end of the movement phase, it may be impossible for a supply unit to reach the desired area. This is an aide to help the player supply his anti-partisan garrison.
48. Rules Clarification - Combat Phases: The combat phases are listed below in the order that they occur:
 - Air vs. Air
 - Land vs. Air
 - Air vs. Land (including airfield, port and infrastructure attacks)
 - Ship vs. Ship
 - Sub vs. Ship
 - Ship vs. Sub
 - Ship vs. Land
 - Land vs. Land (range 2 then range 1)Air units hit in Air vs. Air or Land vs. Air will not participate in additional combat phases. All other units hit should continue to fight in later phases, but at a disadvantage per the combat modifiers section of the manual.
Examples:
Ship->ship happens before sub->ship, ships hit by gunfire are easier for subs to hit and defend against.
Sub->ship happens before ship->sub, ships hit by torpedoes will shoot back at a disadvantage.
49. Rules Clarification - A unit fired at by the same artillery unit at both range 2 and range 1 in the same battle (and no other unit prior to the range 1 combat), will not suffer an evasion reduction during the artillery attack at range 1 (i.e. a unit that fires more than once at an enemy unit in the same battle does not count its previous attack when determining if the target was previously fired upon this turn).
50. Rules Clarification - The exception in the 4th paragraph of section 8.5.3 regarding Op-fire also does not apply to aircraft Op-firing from other areas (only enemy units in the initial area will are not allowed to fire at a unit that moves out of the region it begins its turn in).
51. Spelling Corrections – Text on the map for Chungking was corrected. Pop up text for Bering Sea regions were corrected.
52. Bug Fix – Fixed a bug that was causing some damaged land units that had a valid path to a factory to be eliminated instead of being placed in the production track. These units were not having a "unit destroyed" message displayed, but were simply disappearing from the game. This was happening when damaged units were not adjacent to a factory (any factory) and did not have a working rail link to a factory. These units will now return to the production track as they should.

v1.016 – April 5th, 2005
(First Update Changes and Additions)

Please Note: Old save files (v1.005) should be able to be loaded with the updated version. However, if playing PBEM, once one player has loaded the game using the patch, all the next players to follow must also play the game using the patch. **Not all fixes will work in games that continue from old saves.**

1. **Important New Feature** - Users using systems with less than 640 MB of RAM or less than 100 MB of texture space will be set to Low Graphic Quality (16 bit) mode the first time the game loads with this version. It will mark the new graphics setting on the preferences screen. At this point if the user selects High Graphic Quality (32 bit) it will use that setting on future loads. Old preference files (v1.005 game release) will be ignored on the first run of this newer version. These settings are designed to reduce troubleshooting by setting the systems that should be using Low Graphic Quality for performance and compatibility to that setting for the first load, while allowing a change back to High Quality if the user desires. In most cases, the difference in visual Quality will be slight, but with a significant performance gain on slower systems.
2. Bug Fix – The sound handling on the production screen was improved, which may help some systems that were experiencing issues with overlapping sounds.
3. New Feature – Added the ability to interrupt the game during an AI turn. Press ctrl-p to pause the AI and gain control over the top toolbar. Press ctrl-r to resume the AI's turn.
4. Bug fix – When Combat Animations are turned on, the game may crash during a battle involving 64 or more units (combined total of both sides' units). This has been fixed so that it will work with up to 256 units (when more than 256 units are in a battle, some will be left out of the combat animation but the game should no longer crash).
5. Bug fix – A crash reported during AI movement was determined to be caused by bad unit data. A fix was made to self correct this kind of data problem and more safeguards were inserted to protect the system from initially generating bad data. This crash was reported by one user in the German AI movement phase of the Winter 1945 turn.
6. Bug Fix – Combat modifiers for attacks on frozen zones are not taking effect. Now the surprise rule modifiers will function properly and no die roll modifiers are allowed in combat in frozen zones as per the manual.
7. Bug Fix - When Germans invade Russia in winter, the first winter rules are in affect on the turn of invasion. They will no longer take affect until the following winter turn.
8. Bug Fix - There were some instances where units that should have been able to retreat were destroyed as if they had no legal area to retreat to. One example was Soviet Units in Vladivostock being destroyed as being unable to retreat after a battle even though they had a retreat route. Units will now retreat properly.
9. Bug fix – In some cases Carrier Air units on a Carrier Fleet in a battle were being destroyed as unable to retreat even though the Carrier Fleet successfully retreated. Now, the Carrier Air unit will retreat with the Carrier Fleet.
10. Bug Fix – Units on factories that are scrapped upon capture were providing extra resources to the capturing player. Now, when units are scrapped when the factory they are on is captured, no resources will be generated for either player.
11. Bug Fix – A few instances of crashes while using the turn replay were reported. Changes were made to better prevent these crashes from occurring.

12. Bug fix – Sometimes the last line of the message listing what has been produced at the end of the production phase is truncated. This display bug has been fixed.
13. Bug fix – There have been several reports of AI ground units remaining in sea regions without transports at the end of their turn. Changes were made to the AI to eliminate possible illegal moves that might explain these reports.
14. AI improvement – Improved the AI's ability to team up on Germany late in games when Germany is reduced to just a few areas and Western Germany is controlled by an especially large German army.
15. AI improvement – Improved the Western Allied AI's ability to resist a German invasion of England. The Allies should be more aggressive with their fleets in trying to disrupt a German invasion.
16. AI improvement – Improved naval AI so that fleets will do a better job avoiding making poor odds attacks.
17. AI improvement – Improved naval AI so that the Russian fleet in the Black Sea will be more aggressive at attacking German transports in the Black Sea.
18. AI improvement – Improved Japanese AI to avoid weak attacks against areas where militia will be generated.

1. (Addition) After a game is completed, both major alliances (Axis and Allies) will receive a victory point score. This is in addition to the basic victory level (Total, Decisive, Marginal, Draw). This score takes into account the victory level, difficulty level, number of turns played, the build cost of units damaged and destroyed (both friendly and enemy), and the factories, resource centers and regions owned at the end of the game. The higher the number, the better the score.
2. (Change) In reference to section 3.2.6, political garrison requirements are not only checked at the end of friendly player turns. All political garrison requirements (for all players) are checked after each battle is resolved and also at the end of each player's turn.
3. (Addition) Just below the save date on the Load Game screen, during PBEM games you will find the text message Console: 0. This indicates the number of times that the data in the game has been altered by the players. This should always be 0, as players should never attempt to alter game data. If you see a value greater than 0, your opponent has tampered with the game data.
4. (Addition) The game now keeps track of how many times each player has loaded a saved game during the current turn when playing in a PBEM game. Some PBEM players prefer that player's not be able to replay all or part of their turns. We've added this loaded count feature for those players. The loaded count appears just after the Console message on the Load Game screen. The game will track the number of times the game has been loaded during a player's turn.

Each time a saved game is loaded, the save, and all other saves by this player this turn will have that player's load count increased by one. Whenever a new save is made, the load count only for this save will be decreased by one. Whenever a PBEM game is saved, the game will automatically exit to the main menu. As long as a player always loads the most recent save (and only loads each save once), the final load count for the player's save that they pass to the next player will be 0. So when you load a saved game, if the value is ever greater than 0 for any of your opponents, you know that that opponent has loaded a save more than once (allowing them to retry a portion of their turn). The loads are listed for each of the 5 World Powers: Ge, Ja, So, Ch, We (although nothing is listed for a player if their load count is 0). Whenever the German or Soviet player loads a saved game, the load counts of the previous players are zeroed out.

Example: Soviet Union is played by player #3 and China and the Western Allies is played by player #4. The Soviet player loads the save received from the Japanese player and starts playing. They then save the game, exiting to the main menu after the save. The Soviet player then loads his save, finishes the turn, saves the game and emails the save to player #4. When player #4 loads the save, he will see no load count as the Soviet player did not make any extra loads. Player #4 moves for the Chinese and then during the Western Allies turn they save the game. Player #4 loads this new save, continues the turn, but exits to the main menu. They then reload their save. Since this is an extra load, the Western Allies load count will be increased. If player #4 completes the turn, saves the game and sends it to the German player, the German player will see We: 1 on the Load Game screen for this save, and will know that during the Western Allies turn an extra load was made.

5. (Clarification) In section 8.5.7, the combat modifier that begins with "+1 Firing Unit is German..." should be changed to read: +1 Unit in Defending Force and the Firing Unit is German in a cold weather Soviet Nationality region during the first winter turn following a German declaration of war with the Soviet Union.
6. (Addition) Section 8.5.8 Combat Animation - When a unit is fired at, two small boxes will appear near the target unit. The first number that is displayed in one of these boxes is the modified defense factor of the target unit. The next number displayed is displayed in red, and is the modified Attack Factor of the firing unit.