

# Gary Grigsby's War in the East 2

## Read me File – 9<sup>th</sup> September 2024

### Version 01.04.01

#### Welcome.

Thank you for playing Gary Grigsby's War in the East 2™! 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](#).

Below you will find the latest and greatest information on Gary Grigsby's War in the East 2™. Information in this document supersedes that in the official game manual.

#### Troubleshooting:

Ensure that your system meets the minimum system requirements. These are found in the game manual. Also, ensure that you have the latest video and sound drivers available for your system. The vast majority of reported problems are resolved by upgrading all drivers to the latest versions.

If you are still experiencing problems with the game, please use our [Ticket System](#) or post in the Gary Grigsby's War in the East 2 [Support Forum](#). Please provide as much detail on your issue as you can.

**To obtain optimum game performance, close all other applications before beginning a game.**

**Information Regarding Crashes, 4k Displays and DPI Scaling** – Please see [this thread](#) for information on how to troubleshoot crashes and correctly set your DPI scaling for high resolutions.

**Suggested Difficulty Levels** – We players new to the Gary Grigsby's War in the East series begin by using the Easy Difficulty level and then move to the Normal level. Those with prior War in the... experience may want to start out with the Normal level. After that the next suggested bump up would be to give the AI side 110 morale help or set all of the AI side's help levels to 110. After that, the Challenging level should be just that, Challenging, against all but very experienced players. In games against the AI, you can change the difficulty levels mid-game. So, if are finding your game to be too hard or too easy, it's easy to make an adjustment to suit your level of play.

#### Change History

##### **V1.04.01 – 9<sup>th</sup> September 2024**

##### **New Features and Rule Changes**

- 1.04.00 public beta version made official
- Updated the Living Manual.pdf file in the \Manuals folder. This is up to date with changes through game version 1.04.00.

##### **V1.04.00 – 14<sup>th</sup> June 2024**

##### **New Features and Rule Changes**

**IMPORTANT NOTE:** All save game and scenario files created with this or later versions may only be loaded with this or a later version. Versions prior to 1.04.00 may not load these newer save game or scenario files. Old saves and scenarios may be loaded with this and newer versions.

- The game options screen now has three tabs, with options categorized as gameplay, difficulty, or balance. Note that clicking on Reset to Default will reset all game options to their default values, not just those visible on screen.
- New Game Option – Combat Delay Effects, with 3 settings:
  - STANDARD (default) - no change in combat delay (CD) movement point (MP) costs.
  - REDUCED - Extra MP cost for each CD point is divided by 2 (and truncated). Examples: For non-motorized 1 CD adds 0 MP cost, 2 CD adds 1 MP cost. For motorized 1 CD adds 1 MP cost ( $1 \times 3/2$ ), 2 CD is 3 MP cost ( $2 \times 3/2$ )
  - MINIMAL - 0 MP cost for CD points (it still impacts not being able to attack a hex that has 9 combat delay)

This allows players to create a game with more maneuver and chance for encirclements.

Combined with turning on Reduced Retreat Attrition, setting to Reduced should open up the game while reducing the value of grinding attacks. The minimal setting is only recommended for novice players.

- New Game Option – Campaign End Conditions, with 3 settings:
  - STANDARD (default) – no change to campaign end conditions
  - EXTENDED PLAY - If the game ends due to Sudden Victory/Sudden Loss/31 December

1944 High Water Mark check, the game will pause. The victory screen will appear with the victory level displayed, and the player will be able to enter extended play and continue the game. Each player will see the victory screen at the start of their turn one time, and be able to continue the game. When the campaign ends due to Berlin falling or time expiring, the game will display the same victory level displayed at the start of extended play.

- NO EARLY END – The game ignores the Sudden Victory/Sudden Loss/31 December 1944 HWM check conditions completely.

IMPORTANT: The No Early End versions of the 1941 and Stalingrad to Berlin Campaigns are considered to be superseded by the new Campaign End Conditions game option. We strongly recommend using this game option along with the regular scenarios instead of using the "No Early End" scenarios, but they remain available for players who prefer them. Also, note that the turn summary screen graphic that show the sudden victory and sudden loss levels still shows these values when using the No Early End game option. Players should view the victory screen to see if there are any active sudden victory and sudden loss victory checks.

- New Game Option – Vehicle Repair Rate – This allows players to adjust the vehicle repair rates (percentages) for Axis and Soviet vehicles (to any value from 5 to 50). There is a repair rate for each side for 1941-42, and another for each side for 1943-45. Default values for Axis are 5% in 41-42 and 10% for 43-45. Default values for Soviet are 25% in 41-42 and 25% in 43-45. A small change could have a large impact over time on the number of vehicles in repair at any given time. Players looking to weaken Soviet logistics in 1943-45 could try adjusting to 20%.
- New Game Option – Miscellaneous Leader Deaths, with 3 settings:
  - STANDARD (default) – no change in leader deaths not caused by HQ displacement or air attack
  - REDUCED – ½ the chance of leader deaths not caused by HQ displacement or air attack
  - NONE – No chance of leader deaths not caused by HQ displacement or air attack

Note: All leaders that become unavailable, due to HQ displacement, air attack, or miscellaneous deaths, are listed as KIA in the game. However, those that become unavailable due to the miscellaneous leader deaths represent unavailability due to accidents, natural death, other enemy action (artillery while visiting the front, etc.), retirement, and prolonged illness. The last paragraph of section 15.8 of the manual inaccurately described these losses as "killed due to other enemy action", but in fact they are meant to reflect additional reasons for leaders becoming unavailable. It is these losses that we are now defining as miscellaneous leader deaths (although as stated above they don't all involve death).

- New Game Option – Amphibious Invasions, with 3 settings:
  - STANDARD (default) – no change in amphibious invasion rules
  - LIMITED – Only hexes in the regions of Crimea, Georgia, and Krasnodar may be targets of an amphibious invasion (Ctrl-m shows all regions)
  - NONE – No amphibious invasions are allowed
- New Game Option – No Temporary Motorization (default off). When checked, players may not temporarily motorize any units.
- New Game Option – No Airborne Operations (default off). When checked, players may not drop airborne units (airborne tab will not appear in F9 window).
- The country specific Morale Mod game option has been expanded so it now includes entries for 1941-42 and for 1943-45. The values entered alter each country's ground national morale for the indicated years.
- Added a new toggle item to the main editor menu: Allow Axis Unit Build Yes/No (default value is No). When Yes:
  - the build unit button is visible to Axis players so they can access the build unit menu
  - any Axis units that are built will go to the Axis reserve
  - fortress and fortified zone units are never buildable on the build menu (like Soviet fort and fortified regions are not buildable on the build menu)

It is also now possible, in the Ob chain portion of the editor, to assign each OB chain an Axis special flag (Axis- Elite, SS-Elite, SS-Non-Elite, LW, LW-Elite). When a new unit is built, it will be given the special flag set in the OB chain.

Note: This new feature is for modders who will need to create their own data for what is buildable for the Axis player. This can be done by changing the OB chain data in a scenario file and then locking the generic data in that scenario.

- Made changes to cargo and troop ship monthly replacements, and to some cargo ship minimums:
  - Changed cargo ship (monthly) replacements in 3 areas:
    - for Axis in Baltic Sea from 1 to 3
    - for Soviet in Caspian Sea from 2 to 3
    - for Soviet in Black Sea from 4 to 3
  - Increased the 5 cargo ship minimum to 10 in 4 areas
    - for Soviet in Baltic Sea
    - for Soviet in Black Sea
    - for Soviet in Caspian Sea
    - for Axis in Baltic
  - Added 1 troop ship (monthly) reinforcement in 3 areas:
    - for Soviet in Caspian Sea
    - for Soviet in Lake Ladoga
    - for Soviet in Sea of Azov
- Made several changes to the way pilots are treated:
  - Adjusted the way pilots are handled when air group is sent from map to TB: Wounded and other inactive pilots are detached from air group. Wounded should become available once healed (as always). This prevents wounded pilots from being lost when air groups are sent to a TB. Excess pilots with higher experience are detached from the group first (average group experience in the TB can go down due to this)
  - Increased the pilot experience spread when an air group is sent from TB to map (chance for more higher and lower experienced pilots)
  - When wounded, the pilot will immediately detach from the group
  - When air groups in TBs shrink in size, excess pilots are sent to the “free” pool and given experience equal to the air group experience (they used to be lost)
- Reduced the likelihood of some ground element substitutions, and eliminated multiple substitutions in the same turn, within a unit, in any specific ground element slot.
- The baseline chance a non-isolated displaced/relocated HQ will lose a leader was changed in July 1941 from 10% to 7.5%, and for all later dates from 15% to 10%.
- Errata – Freight in depots may be destroyed by air attacks targeting a port or a railyard. Destroyed freight can cause the loss of equipment and/or supplies/ammo/fuel.
- Errata – Soviet Mountain divisions may attach one support unit.

### **Bug Fixes and AI Improvements**

- Fixed Air Directive labels on the map so they do not cover up waypoints. It is now possible to adjust the waypoints even in a hex containing the air directive label.
- Fixed several display errors in the CR/Equipment/Ground element compare display.
- Switching air battle reports from the battle report window, by clicking on the quick link in the center of the battle report, can cause an interface glitch. Fixed.
- Entrained units that rename from on map combat units to a support unit keep their Loaded status for the rest of the game. Fixed.

### **Data and Scenario Changes**

- Device.dat
  - 160mm Stielgranate 41 (0562) – Blast Radius increased from 0 to 1 and Anti-Soft increased from 0 to 21.
- Gtype.dat
  - Light Tank (0012) – Foreign Light Tank substitution removed.
  - Medium Tank (0013) – Foreign Medium Tank substitution removed.
- Ground.dat
  - 37mm PaK36 AT Gun (0067) – Upgrade to 160mm Stielgranate AT Gun removed and Scrap date changed from 1942 to 1943.
  - 160mm Stielgranate AT Gun (0150) – Scrap date changed from 1943 to 1944.

- BAB C Armored Car (0176) – Name changed to BAF C Armored Car; icon changed to BAF C and Type changed from Foreign Armored Car to Armored Car.
- 120mm GrW 42 Mortar (0295) – First Year changed from 1944 to 1943 and Build Limit changed from 1 to 2.
- 160mm Stielgranate AT Gun (0435) – Scrap date changed from 1943 to 1944.
- Panzer T-34B 747(r) (0457) – Type changed from Foreign Medium Tank to Medium Tank.
- Panzer T-34D 747(r) (0458) – Type changed from Foreign Medium Tank to Medium Tank.
- 76mm IG 290r Infantry Gun (0547) – Captured Soviet 76.2mm M27 Infantry Gun added with Maximum Imports of 900 beginning 1/42 to 8/45 and “built” at a rate of 5 per week.
- M3A1 Stuart (0742) – 37mm M6 gun ACC decreased from 625 to 125.
- M3 Lee (0749) – 37mm M6 gun ROF decreased from -4 to -6 and ACC decreased from 625 to 125; 75mm M3 gun ROF decreased from -4 to -6 and ACC decreased from 600 to 100.
- Cityowner.dat
  - Corrected six city capture dates that listed 1941 instead of proper 1942.
- 1941 Campaign(s)
  - Axis pool changes:
    - SdKfz 6/2 SP Flak pool raised from 12 to 30
    - SdKfz 7/1 SP Flak pool erased
    - SdKfz 10/4 SP Flak pool raised from 65 to 250
  - Soviet Unit changes:
    - 10 Mech Corps (reinforcing mech unit in FE), add TB-lock, remove rebuild restriction
    - 142 Rifle Div locked in NF TB, map release delayed to 11/44
    - deleted duplicates of 51,60,129,184,277 Engineer-Sapper Bns
  - Axis unit changes:
    - 101-103 RHG Cmd rename RHG Command North/Center/South in 7/41
    - Nord SS mot Div TB-locked, tagged
    - Rhodos Sturm Div available mid 3/43, Brandenburg PzG Div rename -> mid 10/44
    - downgrade to Bde, Map transfer removed, TB locked
    - 2 Mountain Div delay WE transfer to late 1/45, TB-locked, tagged
    - 6 Mountain Div TB-locked, tagged
    - 52 Security Div arrival moved forward to early 12/43, arrives to Soviet Garrison, TB-locked, disbands at the end of 1944
    - 163,169 Inf Div TB-locked, tagged
    - 207 Security Div disbands at the end of 1944
    - 213 Security Div disbands at the end of 1944
    - 221 Security Div disbands at the end of 1944
    - 285 Security Div disbands at the end of 1944
    - 325 Security Div built to higher infantry strength (created from existing units), TB-locked, disbands at the end of 1944
    - 390 Security Div arrival moved forward to 9/42 and directly to Soviet Union Garrison TB, TB-locked
    - 391 Security Div arrival moved forward to 9/42 and directly to Soviet Union Garrison TB, TB-locked
    - 403 Security Div disbands at the end of 1944
    - 444 Security Div disbands at the end of 1944
    - 454 Security Div disbands at the end of 1944
    - Hermann Goering Bde renamed General Goering, remove arriving flak guns (supplied by disbanding Flak bns), add renames to follow historical name changes
    - Rhodos Sturm Bde disabled, modelled by downgrade from Rhodos Sturm Div
    - 16 SS Sturm Bde OB change from 1209 to 1206 to restore conversion to 16 SS PzG Div
    - 108 Panzer Bde disband delayed to 1st turn of 1945, add 11/44 rename to 150 Panzer Bde
    - 201 Security Bde arrives directly to Soviet Union Garrison TB, TB-locked, disbands at the end of 1944

203 Security Bde arrives directly to Soviet Union Garrison TB, TB-locked  
 HG Falls Flak Rgt delayed to 3/1944  
 139 Mount Reg TB-locked, tagged  
 Flanders SS Inf Bn OB changed in Sturm Bde rename from 1206 to 1209 to prevent improper PzG Div conversion  
 Norway Inf Bn disbands 3/43 (became part of 11 SS PzG Div)  
 1 Rum. Security Div arrives directly to Soviet Union Garrison TB, TB-locked  
 3 Rum. Security Div arrives directly to Soviet Union Garrison TB, TB-locked  
 2 Hun. Armored Div arrives directly to Western Europe TB, TB-locked, to Map late 3/44  
 201 Hun. Security Div arrives directly to Soviet Union Garrison TB, TB-locked, disbands at the end of 1944  
 1 Hun. Cavalry Bde restore reformation into Hussar Div  
 3 Gennaio CCNN Bde disbands at end of 6/43, rebuilt as Axis-Elite  
 23 Marzo CCNN Bde rebuilt as Axis-Elite  
 Hun. Constr Bns unfrozen, arrive directly to map, those for 2nd Army arrive in mid 42  
 63 CCNN Legion disbands mid 6/42  
 79 CCNN Legion delayed, arrives to map with Expeditionary Corps, disbands mid 6/42  
 Croat CCNN Legion moves to Balkans instead of Italy

- New Axis Units:
  - Brandenburg Mot. Div Elite Division (former special forces) arriving 4/44 to Balkans, to map 1/45
  - 1,2,4 Ital. Bersaglieri Regiments, locked in Balkans
- Increased Soviet manpower gain from Soviet Partisan War Ends event 136 from 100,000 to 250,000
- Germany Fully Mobilizes event now reduces German ground national morale by 2 instead of 5
- Road to Minsk, DSWF
  - Adjusted starting Axis air directives to better mirror C41 starting air directives
  - Selected drop tank load outs for German fighters
- Road to Leningrad
  - Adjusted starting Axis air directives to better mirror C41 starting air directives
  - Selected drop tank load outs for German fighters
  - Added German 96<sup>th</sup> Infantry Division which arrives on turn 4
- Red Army Resurgent
  - Added two additional Soviet National Supply Source depots, Elton (North) and Surakhami (South)
- Red God of War
  - Renamed XLIII Corps to XXXXIII Corps
- Stalingrad to Berlin Campaign(s)
  - Most German Infantry Corps have a TOE around 80
  - Most German Panzer Corps have a TOE around 90
  - Almost all Soviet Armies and Fronts have a TOE near 100
  - 16<sup>th</sup> SS Mot. Sturm Bde renames to 16<sup>th</sup> SS PzGr Division
  - 133<sup>rd</sup> Littorio Ital. Armored Division removed from AF TB
  - X Ital. Corps removed from AF TB
  - All three RHG Commands moved to OB #8 with 500 support squads not 1,000
  - Rumanian 9<sup>th</sup> Fighter Group added
  - The following German Corps HQs are Axis Elite:
    - III Panzer Corps
    - LVII Panzer Korps
    - XXXXVIII Panzer Corps
    - XXXIX Panzer Corps
    - XXXXVII Panzer Corps
  - Made sure the name changes for the SS Motorized Werfer Bns and Heavy Panzer Bns from the 100s to the 500s were consistent
  - Made change to 16<sup>th</sup> SS Sturm Bde

- Made changes to 2<sup>nd</sup> RFSS Mot Bde which changes to 2<sup>nd</sup> SS Latvian Mot Bde and finally the 19<sup>th</sup> SS Latvian Grenadier Division across all Campaigns
- Made changes to the 1<sup>st</sup> RFSS Mot Bde which changes to the 18<sup>th</sup> SS PzGr Division across all Campaigns
- Made changes to Flandern SS Infantry Battalion which becomes the 6<sup>th</sup> SS Flan. Mot Sturm Bde and finally the 27<sup>th</sup> SS Flan. Grenadier Division across all Campaigns
- Renamed XLIII Corps to XXXXIII Corps
- Added Soviet manpower gain of 250,000 to Soviet Partisan War Ends event 136
- Germany Fully Mobilizes event now reduces German ground national morale by 2 instead of 5
- Minor changes to Escorts Over Germany, Battle of Berlin, and Final Effort events
- Fixed 287<sup>th</sup> Arab PzGrd battalion.
- Made all Bulgarian Fighter units Bf-109G-2s
- Vistula to Berlin Campaign
  - III and XXIV Panzer Corps are Axis Elite.
  - Made TO&E changes to the SS Motorized Werfer Bns
  - Made changes to 2<sup>nd</sup> RFSS Mot Bde which changes to 2<sup>nd</sup> SS Latvian Mot Bde and finally the 19<sup>th</sup> SS Latvian Grenadier Division across all Campaigns
  - Synchronized the Disbandment of the 11th SS Panzer Army which becomes the arriving German 11th Army in AR and then WE
  - Added as a Reinforcement SS Detachment Steiner Army on April 21, 1945
  - Corrected many inappropriate starting Detection Levels
  - Moved many German Support Units into entrenched hexes
  - Removed the small number of Fw-190A-9s in the Game and replaced them with Fw-190A-9 1944s which also left 450 aircraft as Pool replacements
  - Added Fw-190G's and Fw-190Fs to the Pool which can be used to replace Ju-87D-5 Night Bombers.
  - Combined the previously Broken-Down 7th Panzer Division with the 507th Heavy Panzer Battalion
  - Added NSGr. 30 as a reinforcement
  - Germany Fully Mobilizes event now reduces German ground national morale by 2 instead of 5
- Steel Inferno – Road to Karelia
  - Adjusted starting Axis air directives to better mirror C41 starting air directives
  - Selected drop tank load outs for German fighters
  - Added German 96<sup>th</sup> Infantry Division which arrives on turn 4
- Steel Inferno – Case Blue Phase II scenarios
  - Corrected leader in V Rum. Corps HQ
- Steel Inferno - Drama on the Danube scenarios
  - Germany Fully Mobilizes event now reduces German ground national morale by 2 instead of 5
- Steel Inferno - 1943 Campaign
  - 16<sup>th</sup> SS Sturm Bde renames to 16<sup>th</sup> SS PzGr Division
  - All three RHG Commands moved to OB #8 with 500 support squads not 1,000
  - The following German Corps HQs are Axis Elite:
    - III Panzer Corps
    - XXXXVIII Panzer Corps
    - XXXXVII Panzer Corps
  - Many Soviet Fronts that were previously at 100% strength have been weakened as follows:
 

|                 |     |
|-----------------|-----|
| Volkhov Front   | 80% |
| Northwest Front | 85% |
| Kalinin Front   | 85% |
| Western Front   | 90% |
| Bryansk Front   | 90% |
| Southwest Front | 90% |

- Southern Front 90%
  - Made sure the name changes for the SS Motorized Werfer Bns and Heavy Panzer Bns from the 100s to the 500s were consistent
  - Made change to 16<sup>th</sup> SS Sturm Bde to
  - Made changes to 2<sup>nd</sup> RFSS Mot Bde which changes to 2<sup>nd</sup> SS Latvian Mot Bde and finally the 19<sup>th</sup> SS Latvian Grenadier Division across all Campaigns
  - Made changes to the 1<sup>st</sup> RFSS Mot Bde which changes to the 18<sup>th</sup> SS PzGr Division across all Campaigns
  - Made changes to Flandern SS Infantry Battalion which becomes the 6<sup>th</sup> SS Flan. Mot Sturm Bde and finally the 27<sup>th</sup> SS Flan. Grenadier Division across all Campaigns
  - Renamed XLIII Corps to XXXXIII Corps
  - Added Soviet manpower gain of 250,000 to Soviet Partisan War Ends event 136
  - Germany Fully Mobilizes event now reduces German ground national morale by 2 instead of 5
  - Minor changes to Escorts Over Germany, Battle of Berlin, and Final Effort events
  - Made all Bulgarian Fighter units Bf-109G-2s
- Steel Inferno - Campaign 1944 (May Start)
  - 102<sup>nd</sup> RHG Command moved to OB #8 with 500 support squads not 1,000
  - The following German Corps HQs are Axis Elite
    - III Panzer Corps
    - XXXXVIII Panzer Corps
    - XXXXVII Panzer Corps
    - XXIV Panzer Corps
  - II/32<sup>nd</sup> LW Flak was Depleted. Fixed.
  - 662<sup>nd</sup> Pion Bn was 41 Pion TOE. Changed to 43b TOE.
  - I/34<sup>th</sup> LW Flak was Depleted. Fixed.
  - 253<sup>rd</sup> Infantry Division from Reserve to Refit.
  - I Cavalry Corps HQ had No Movement Points. Fixed.
  - Removed 502<sup>nd</sup> SS Motorized Werfer Bn as the 102<sup>nd</sup> SS Motorized will change its name to the 502<sup>nd</sup> SS
  - 6<sup>th</sup> SS Flandern PzGr had a TOE Upgrade.
  - 101<sup>st</sup> Jaeger Division from Reserve to Refit
  - 741<sup>st</sup> Pioneer Bn from 41 Pion TOE to 43b TOE.
  - Added Depots and Freight at Campulung, Roman, and Bacau in Romania.
  - Made sure the name changes for the SS Motorized Werfer Bns and Heavy Panzer Bns from the 100s to the 500s were consistent
  - Made changes to 2<sup>nd</sup> RFSS Mot Bde which changes to 2<sup>nd</sup> SS Latvian Mot Bde and finally the 19<sup>th</sup> SS Latvian Grenadier Division across all Campaigns
  - Made changes to the 1<sup>st</sup> RFSS Mot Bde which changes to the 18<sup>th</sup> SS PzGr Division across all Campaigns
  - Made changes to Flandern SS Infantry Battalion which becomes the 6<sup>th</sup> SS Flan. Mot Sturm Bde and finally the 27<sup>th</sup> SS Flan. Grenadier Division across all Campaigns
  - Changed XI Motorized Sturm Brigade Rifle Squad 43 to Motorized Rifle Squad 44
  - Added Soviet manpower gain of 250,000 to Soviet Partisan War Ends event 136
  - Germany Fully Mobilizes event now reduces German ground national morale by 2 instead of 5
  - Changed 92<sup>nd</sup> Motorized Sturm Brigade to 92<sup>nd</sup> PzGr Division and made it Axis Generic
  - Minor changes to Final Effort event.
- New/revised artwork:
  - Ground Element Photo GP0547
  - Ground Icon G0176
  - Unit symbols for General Goering Mot. Brigade/Division

#### **V1.03.11 – 25<sup>th</sup> March 2024**

- 1.03.10 public beta version made official

#### **V1.03.10 – 6<sup>th</sup> February 2024**

#### **New Features and Rule Changes**

- Changes/improvements to the Multiplayer Server system:
  - Any error from the server will display a message window that requires the player to press a key to close. Please note the error message if you are going to report an issue to technical support.
  - Game now logs server requests/responses/errors in a server.log file that is stored in the main game directory (Gary Grigsby's War in the East 2). Whenever the game is restarted and the first server request is made, it will create a new file. It will store the previous server file as server-prev.log. If you report a tech support issue with your server game, please attach your server.log and/or server-prev.log file to your report.
  - Other changes were made to reduce the number of automatic retries, reduce the amount of logins, and avoid token expiration issues.
- Rule Change – The number of requested bomber aircraft for Ground Attack Air Directives must now be set to at least 10 (or set to 0 for Automatic).

### **Bug Fixes and AI Improvements**

- Halftracks with mortars are not using their mortars in combat. Fixed.

### **Data and Scenario Changes**

- Ob.dat changes:
  - Some spelling updates
  - 42 A.S. Ital. Semi-Mot Infantry Division now uses the Italian version of the 88mm Flak
  - 43 LW Flak Regiment used the single barrel version of the 128mm Flak
  - 42c Tier 1 Motorized Division has the proper 50mm GrW used
  - 43 Guards Airborne Division and OB Chains have been synched to prevent unlimited building
- Device.dat file changes:
  - 75mm vz.15 L/15 Gun (0348) – Rate of Fire decreased from 20 to 10.
  - 75mm M34 L/46 Gun (0375) – Rate of Fire increased from 10 to 20.
  - 37mm da 37/45 L/45 Gun (0672) – Rate of Fire increased from 10 to 15.
  - 76.2mm KT-28 L/25 Gun (0351) – Renamed 76.2mm KT-28 L/16.5 Gun.
  - 76.2mm L-10 L/30.5 Gun (0378) – Renamed 76.2mm L-10 L/26 Gun.
- Gtype.dat file change - SP Rocket Launcher (0056) – Combat Value increased from 1 to 3.
- Ground.dat file changes:
  - Panzer IIIe (0006) – Ammo Use increased from 20 to 24.
  - Panzer IVf2 (0019) – Ammo Use decreased from 182 to 165.
  - Panzer IVg (0020) – Ammo Use decreased from 182 to 165.
  - Panzer IVh (0021) – Ammo Use decreased from 182 to 165.
  - Panther D (0022) – Ammo Use decreased from 182 to 165.
  - Panther A (0023) – Ammo Use decreased from 182 to 165.
  - Panther G (0024) – Ammo Use decreased from 182 to 165.
  - Sturmpanzer IV (0027) – Ammo Use decrease from 184 to 168.
  - Stug IIIf (0030) – Ammo Use decreased from 132 to 120.
  - Stug IIIg (0031) – Ammo Use decreased from 132 to 120.
  - Jagdpanzer IV (0032) – Ammo Use decreased from 132 to 120.
  - Panzerjaeger II (0034) – Ammo Use decreased from 193 to 187.
  - Marder II (0035) – Ammo Use decreased from 215 to 210.
  - Marder III (0036) – Ammo Use decreased from 215 to 210.
  - Panzerjaeger 38t (0037) – Ammo Use decreased from 193 to 187.
  - Jagdpanzer 38 Hetzer (0039) – Ammo Use decreased from 132 to 120.
  - Jagdpanzer IV/70(V) (0041) – Ammo Use decreased from 132 to 120.
  - Hummel (0046) – Ammo Use decreased from 424 to 384.
  - Lorraine (SdKfz-135/1) (0047) – Ammo Use decreased from 424 to 288.
  - sIG33 (0052) – Ammo Use decreased from 278 to 252.
  - sIG33 Grille K (0053) – Ammo Use decreased from 278 to 252.
  - SdKfz-234/3 Armored Car (0059) – Ammo Use increased from 174 to 203.
  - SdKfz-234/4 Armored Car (0060) – Ammo Use decreased from 215 to 210.



- SdKfz-233 Armored Car (0066) – Ammo Use increased from 160 to 203.
- 75mm PaK40 AT Gun (0069) – Ammo Use decreased from 231 to 225.
- 76.2mm PaK36(r) AT Gun (0070) – Ammo Use decreased from 210 to 204.
- 88mm Pak43 AT Gun (0071) – Ammo Use increased from 240 to 264.
- 75mm IeIG18 Infantry Gun (0074) – Ammo Use decreased from 218 to 210.
- 150mm sIG33 Infantry Gun (0075) – Ammo Use decreased from 276 to 252.
- SdKfz-251/22 Halftrack (0107) – Ammo Use decreased from 215 to 210.
- 150mm K39 Field Gun (0108) – Ammo Use decreased from 210 to 190.
- 75mm IeFK18 Field Gun (0109) – Ammo Use decreased from 149 to 126.
- 150mm sFH Howitzer (0112) – Ammo Use decreased from 412 to 384.
- Panzer IVj (0125) – Ammo Use decreased from 182 to 165.
- Stug IIIg (0140) – Ammo Use decreased from 132 to 120.
- 75mm K/40 AT Gun (0145) – Ammo Use decreased from 231 to 225.
- 150mm H/15 Howitzer (0164) – Ammo Use increased from 309 to 376.
- Panzer IVj (0166) – Ammo Use decreased from 182 to 165.
- Stug IV (0170) – Ammo Use decreased from 132 to 120.
- StuIG33B (0175) – Ammo Use increased from 185 to 168.
- M-11/39 (0179) – Ammo Use increased from 17 to 20.
- M-13/40 (0180) – Ammo Use decreased from 50 to 33.
- M-15/42 (0181) – Ammo Use decreased from 41 to 27.
- Semovente L40 da 47 (0183) – Ammo Use decreased from 69 to 39.
- 47mm M35 AT Gun (0192) – Ammo Use decreased from 68 to 45.
- 75mm M34 AA Gun (0213) – Ammo Use increased from 140 to 280.
- Panzerjaeger 38(t)H (0216) – Ammo Use decreased from 215 to 210.
- sIG33 Grille H (0218) – Ammo Use decreased from 278 to 252.
- T-4(g) (0233) – Ammo Use decreased from 182 to 165.
- T-4(h) (0234) – Ammo Use decreased from 182 to 165.
- TA(g) (0236) – Ammo Use decreased from 132 to 120.
- TACAM T-60 (0237) – Ammo Use decreased from 228 to 182.
- TACAM R-2 (0238) – Ammo Use decreased from 228 to 182.
- 20mm Oerlikon AA Gun (0242) – Ammo Use increased from 21 to 60.
- 37mm Bofors AT Gun (0243) – Ammo Use increased from 20 to 24.
- 47mm Breda AT Gun (0244) – Ammo Use decreased from 68 to 45.
- 25mm Mle 1939 AA Gun (0259) – Ammo Use decreased from 162 to 90.
- 75mm Mle 1897 Field Gun (0262) – Ammo Use increased from 192 to 196.
- Panzer IVh (0284) – Ammo Use decreased from 182 to 165.
- Stug IIIg (0286) – Ammo Use decreased from 132 to 120.
- 75mm PaK40 AT Gun (0291) – Ammo Use decreased from 231 to 225.
- 75mm 15M Mountain Gun (0313) – Ammo Use decreased from 280 to 140.
- 37mm vz.37 AT Gun (0320) – Ammo Use increased from 25 to 30.
- LT-40 (0335) – Ammo Use decreased from 15 to 12.
- Marder III (0336) – Ammo Use decreased from 215 to 210.
- Panzer IVj (0337) – Ammo Use decreased from 182 to 165.
- Panzer IVh (0348) – Ammo Use decreased from 182 to 165.
- Stug IIIg (0351) – Ammo Use decreased from 132 to 120.
- 47mm PaK181(f) AT Gun (0357) – Ammo Use decreased from 60 to 45.
- 40mm 40M AT Gun (0359) – Ammo Use decreased from 100 to 40.
- 75mm IeIG18 Infantry Gun (0364) – Ammo Use decreased from 218 to 210.
- 150mm sIG33 Infantry Gun (0365) – Ammo Use decreased from 276 to 252.
- 75mm Pak40 AT Gun (0366) – Ammo Use decreased from 231 to 225.
- 75mm GebG36 Mountain Gun (0373) – Ammo Use increased from 91 to 98.
- Panzer II f (0379) – Fuel Use increased from 22 to 23.

- Marder I (0401) – Ammo Use decreased from 215 to 210.
- GW 39H(f) (0402) – Ammo Use decreased from 215 to 210.
- GW FCM(f) (0404) – Ammo Use decreased from 215 to 210.
- sIG33/2 Hetzer (0410) – Ammo Use decreased from 278 to 252.
- Panzer Ia (0415) – Ammo Use increased from 3 to 5.
- Tauchpanzer IIIf (0417) – Ammo Use increased from 20 to 24.
- sIG33 II (0420) – Ammo Use decreased from 278 to 252.
- SdKfz-8 Flak18 (0422) – Ammo Use increased from 240 to 480.
- SdKfz-9 Flak18 (0423) – Ammo Use increased from 240 to 480.
- 47mm M35 Infantry Gun (0444) – Ammo Use increased from 68 to 75.
- 47mm M1937 AT Gun (0448) – Ammo Use decreased from 60 to 45.
- Stug IIIf/8 (0451) – Ammo Use decreased from 132 to 120.
- 47mm M1935 Infantry Gun (0460) – Ammo Use increased from 30 to 75.
- SdKfz-251/9D Halftrack (0461) – Ammo Use increased from 154 to 203.
- 75mm leIG37 Infantry Gun (0467) – Ammo Use decreased from 174 to 168.
- 75mm K/17 Field Gun (0485) – Ammo Use increased from 132 to 196.
- 75mm PaK40 AT Gun (0495) – Ammo Use decreased from 231 to 225.
- Recon Squad (0496) – Hand Grenade (0176) facing changed from Fwd to Side.
- Panzer IVg (0506) – Last Year changed from 1943 to 1945; Last Month changed from 4 to 8 and Ammo Use decreased from 182 to 165.
- Stug IIIg (0507) – Ammo Use decreased from 132 to 120.
- 37mm vz.37 AT Gun (0511) – Ammo Use increased from 25 to 30 and Build Limit decreased from 1 to -1 (production deactivated).
- 75mm PaK97/38 AT Gun (513) – Build Cost increased from 5 to 22.
- 75mm PaK40 AT Gun (0514) – Ammo Use decreased from 231 to 225.
- 75mm leFK18 Field Gun (0519) – Ammo Use decreased from 149 to 126.
- 75mm M15 Mountain Gun (0520) – Ammo Use decreased from 280 to 140.
- 105mm Skoda Field Gun (0521) – Build Cost increased from 2 to 57.
- 150mm sFH18 Howitzer (0524) – Ammo Use decreased from 412 to 384.
- Lorraine (SdKfz-135/2) (0544) – Ammo Use decreased from 424 to 252.
- OT-34/85 M1944 (0728) – ROF increased from -4 to -3 and Ammo Use increased from 158 to 182.
- T-34/85 M1944 (0747) – ROF increased from -4 to -3 and Ammo Use increased from 140 to 160.
- M4A2 Sherman (0751) – Ammo Use decreased from 195 to 165.
- M4A2(76)W Sherman (0752) – Ammo Use decreased from 202 to 124.
- KV-85(0757) – ROF increased from -4 to -3 and Ammo Use increased from 140 to 160.
- IS-2 M1944 (0759) – Ammo Use increased from 110 to 165.
- IS-1 M1943 (0763) – ROF increased from -4 to -3 and Ammo Use increased from 100 to 160.
- ZiS-30 (0764) – Ammo Use increased from 108 to 126.
- SU-85 (0766) – ROF decreased from -3 to -4 and Ammo Use increased from 120 to 140.
- ISU-122(0769) – Ammo Use decreased from 165 to 110.
- 57mm ZiS-2 AT Gun (0782) – Ammo Use decreased from 160 to 140.
- SU-85M (0830) – ROF decreased from -3 to -4 and Ammo Use increased from 120 to 140.
- 75mm PaK40 AT Gun (1003) – Ammo Use decreased from 231 to 225.
- 76.2mm PaK36(r) AT Gun (1004) – Ammo Use decreased from 210 to 204.
- 75mm leIG18 Infantry Gun (1005) – Ammo Use decreased from 218 to 210.
- 150mm sIG33 Infantry Gun (1006) – Ammo Use decreased from 276 to 252.
- 75mm leFK18 Field Gun (1028) – Ammo Use decreased from 149 to 126.
- 150mm sFH Howitzer (1031) – Ammo Use decreased from 412 to 384.

- SdKfz-250/11 (0441) – Scrap date changed from 1943 to 1944.
- OT-130/133 (0743) – Scrap date changed from 1940 to 1941.
- T-34 M1941 (0745) – Scrap date changed from 1943 to 1945.
- T-34 M1942 (0746) – Scrap date changed from 1944 to 1945.
- KV-1s M1942 (0750) – Scrap date changed from 1943 to 1945.
- KV-85 (0757) – Scrap date changed from 1944 to 1945.
- M-30-4 Rocket Launcher (0816) – 7.62mm M1938 Carbine (0157) facing changed from Fwd to Side.
- KV-1 M1941 (0839) – Scrap date changed from 1943 to 1945.
- Map changes (hex.dat, hexart.dat and maptext.dat):
  - Location changes:
    - 0558 Messina (ITA) moved from Calabria to Sicily region
    - 0782 Braila (RUM) moved from Dobrogea to Muntenia region
  - Region changes:
    - Transylvania region (Rumania) slightly reduced in size
    - 0088 Muntenia (RUM) slightly extended in Nothwest
    - 0086 Oltenia (RUM) slightly extended in North
    - 0087 Banat (RUM) slightly extended in North and East
    - 0089 Crisana (RUM) slightly extended in East, slightly shrunk in South
    - 0244 Languedoc (FRA) slightly extended to West and Northwest
  - minor hex art changes:
    - Hex 175,217 transferred from RUM to HUN
    - Hex 177,220 transferred from YUG to RUM
  - Omul (2505m) -> Omu (2505m)
- 1941 Campaign(s):
  - RHG Command HQs changed to a different OB, restoring the 500 support squad max size
  - fixed some on-map support units without combat preparation points
- Road to Leningrad, Destruction of Southwester Front, Road to Minsk, Red Army Resurgent scenarios:
  - RHG Command HQs changed to a different OB, restoring the 500 support squad max size

### **V1.03.09 – 9<sup>th</sup> January 2024**

#### **New Features and Rule Changes**

- New Game Option – Reduced Retreat Attrition – When enabled, routing units suffer less retreat attrition than normal. The default is for this to be off. This value may not be changed once a scenario has begun in PBEM and MP games.
- New Game Option – Morale Mod (by country) – This allows a value between 0 and 20 to be set for each active country. The value set is added to the ground national morale value of the country. The default is for all of these to be set to 0. This value may not be changed once a scenario has begun in PBEM and MP games.
- Leaders in charge of air command HQs will no longer gain victories and defeats.
- In order to reduce failures when attempting to save MP games, the amount of time has been increased before a save will timeout with a failure.
- Manual correction (section 23.7) - Reserve units committed to support a cross river attack are not subject to additional disruption.
- Manual correction (section 28.6.2) - Damage is calculated by factory as follows:  $((100 - \text{damage}) / 100) \times \text{factory points}$  and rounding up. So a 12 factory with 40 damage would produce 8  $((100 - 40) / 100) \times 12 = 7.2$  rounded up to 8.
- Updated the Living Manual.pdf file in the \Manuals folder. This is up to date with changes through game version 1.03.09.

#### **Bug Fixes and AI Improvements**

- Units that are class Mech-Infantry (ground elements of type Mech-Infantry, Cavalry, and several others) are firing in combat with 20% of their correct effectiveness. Fixed.

- Routed units in theater boxes will automatically unrout in the logistics phase.

### Data and Scenario Changes

- Device.dat changes:
  - 50mm Type 89 Grenade Launcher (0174 & 0183) – Duplicated Japanese devices both removed as no use in WitE2.
  - 7.5mm FM Mle 24/29 AAMG (0223 & 0231) – Duplicated device both removed as no use in WitE2.
  - 6.5mm Breda BMG (0258) & (0280) – Duplicated device both removed as no use in WitE2.
  - 7.5mm MAC 31 BMG (0290) – Duplicated device removed.
  - 7.62mm DT TMG (0296) – Duplicated device removed.
  - 12.7mm DShK TMG (0297) – Duplicate device removed.
  - 20mm Flak30 L/65 Gun (0651) – Duplicate device removed.
  - 8mm 35M Rifle (0652) – Duplicate device removed.
  - 7.92mm ZB M1924 Rifle (0659) – Duplicate device removed.
  - 7.92mm vz.26 BMG (0662) – Duplicate device removed.
  - 165 USG Drop Tank (0722) – Duplicate device removed.
  - 5in/38 Mk 12 Gun (1055) – Duplicate device removed.
- Ground.dat changes:
  - Panzer IIlf (0003) – Scrap date changed from 1944 to 1945.
  - Flammpanzer II (0005) – Upgrade to Flammpanzer III (0012) removed.
  - Panzer IIIe (0006) – Upgrade path changed from Panzer IIIg (0007) to Panzer IIIlf (0438).
  - Panzer IIIg (0007) – Upgrade path changed from Panzer IIIm (0010) to Panzer IIIh (0008) and Scrap date changed from 1943 to 1942.
  - Panzer IIIh (0008) – Maximum Imports increased from 0 to 150; Import From ID changed from 0 to 0007 (Panzer IIIg); Last Year changed from 1941 to 1942; Scrap date changed from 1944 to 1943; Last Month changed from 3 to 6 and Build Limit increased from -1 to 3.
  - Panther D (0022) – Upgrade path to Panther G (0024) removed.
  - Stug IIIlf (0030) – Upgrade path changed from Stug IIIlf/8 (0451) to Stug IIIg (0031).
  - Labor Squad (0133) – Ammo Use increased from 2 to 3.
  - 65mm M13 Infantry Gun (0195) – Build Limit decreased from 1 to -1 (production deactivated).
  - T-35 (0227) – Gun changed from 37mm KwK34(t) L/40 (0310) to 37mm vz.34 L/40 (0309); ACC increased from 425 to 475; CMG changed from 7.92mm MG37(t) (0267) to 7.92mm vz.37 (0266) and BMG changed from 7.92mm vz.26 (0662) to 7.92mm vz.26 (0268).
  - T-38 (0231) – BMG changed from 7.92mm vz.26 (0662) to 7.92mm vz.26 (0268).
  - TACAM T-60 (0237) – BMG changed from 7.92mm vz.26 (0662) to 7.92mm vz.26 (0268).
  - TACAM R-2 (0238) – BMG changed from 7.92mm vz.26 (0662) to 7.92mm vz.26 (0268).
  - 20mm Oerlikon AA Gun (0242) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
  - 37mm Bofors AT Gun (0243) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
  - 47mm Breda AT Gun (0244) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
  - 60mm Mle 1935 Mortar (0247) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
  - 81mm Mle 27/31 Mortar (0248) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
  - 120mm Resita Mortar (0249) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).

- 37mm M1939 AA Gun (0258) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 25mm Mle 1939 AA Gun (0259) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 25mm Puteaux AT Gun (0261) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 75mm Mle 1897 Field Gun (0262) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 100mm vz.30 Howitzer (0263) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 122mm M-10 Howitzer (0264) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 13.2mm Mle 1930 AAMG (0265) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 105mm leFH18 Howitzer (0268) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 149mm vz.37 Howitzer (0269) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 45mm M37 AT Gun (0271) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- Labor Squad (0272) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 75mm Vickers AA Gun (0273) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- T-38E (0281) – BMG changed from 7.92mm vz.26 (0662) to 7.92mm vz.26 (0268).
- OA vz.30 Armored Car (0331) – BMG changed from 7.92mm vz.26 (0662) to 7.92mm vz.26 (0268).
- 128mm Flak40 AA Gun (0340) – Fuel Use increased from 0 to 22.
- 76.2mm FK295(r) (0443) added – Captured Soviet 76.2mm M1902 Field Gun added; 500 imported at 10 per month from 1/42.
- 47mm M35 Infantry Gun (0444) added – Identical to 47mm M35 AT Gun but classified as Infantry Gun Type (62) with Build Limit of 2 per turn thru 9/43.
- 47mm M1937 AT Gun (0448) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 47mm M1935 Infantry Gun (0460) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 105mm Mle 1913 Field Gun (0468) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- 105mm Mle 1936 Field Gun (0470) – Rifle changed from 7.92mm ZB M1924 (0659) to 7.92mm ZB M1924 (0132).
- SU-57 (0726) – Upgrade path to SU-76M (0731) added.
- Engineer-Sapper Squad (0733) – Ammo Use increased from 2 to 3.
- T-40 M1941 (0739) – Upgrade path to T-60 M1941 removed.
- OT-34 (0748) – Upgrade path to OT-34/85 (0728) removed.
- M4A2 Sherman (0751) – Upgrade path to M4A2(76)W (0752) removed.
- Churchill IV (0762) – Scrap date changed from 1945 to 1944.
- IS-1 M1943 (0763) – Upgrade path changed from IS-2 M1943 (0829) to IS-2 M1944 (0759) and Scrap date changed from 1943 to 1944.
- ZiS-30 (0764) – Upgrade path to SU-76 (0765) added and Scrap date changed from 1941 to 1942.
- SU-76 (0765) – Upgrade path to SU-76M (0731) removed and Scrap date changed from 1943 to 1945.
- SU-85 (0766) – Upgrade path changed from SU-85M (0830) to SU-100 (0767).

- SU-122 (0768) – Upgrade path changed from ISU-152 (0771) to ISU-122 (0769).
- 76.2mm 3-K AA Gun (0811) – Fuel Use increased from 6 to 22.
- Motorcycle Squad (0813) – Fuel Use increased from 10 to 12.
- T-50 M1941 (0826) – Upgrade path changed from T-34 M1942 (0746) to T-70 M1942 (0741).
- 152mm D-1 Howitzer (0827) – Size increased from 1 to 2 and Fuel Use increased from 6 to 22.
- KV-8 (0842) – Scrap date changed from 1944 to 1945.
- 2 new photos for ground elements 043 and 0444.
- 1941 Campaign(s) changes:
  - Assigned non-PVO Soviet fighter AOGs, and non-Long Range Air Command bomber AOGs, directly to ground support Air Directives.
  - Fixed experience of support elements in German 3<sup>rd</sup> and 6<sup>th</sup> Panzer Divisions.
  - Added 25,000 vehicles to the German vehicle pool.
- Stalingrad to Berlin Campaign(s), Vistula to Berlin Campaign, Steel Inferno 1943 and 1944 Campaigns changes:
  - Changed all airbases in Slovakian to German nationality
  - 6<sup>th</sup> SS Mountain Division now leaves Norway for WE rather than the Map.
  - The 7<sup>th</sup> Mountain Division was left out of each Campaign. It begins in Finland and will move to Norway.
  - Added Air Directives for the different PVO Air Commands.

#### **V1.03.07 – 7<sup>th</sup> November 2023**

##### **Data and Scenario Changes**

- Ob.dat changes:
  - Corrected spelling of Division in OB 0989
  - Changed OBs 270,302,1190-1194,1196-1197 to Multi-role (RFSS, 900<sup>th</sup> Lehr, GD Motorized Brigades)
- 1941 Campaign(s):
  - Adjusted Axis turn 1 air ADs, removing day 7 recon missions and setting loadouts for German Me109 fighters to use drop tanks
  - 102nd Trento mot. Division made TB-locked
  - 132nd Ariete Armored division set to disband instead of unintended transfer to WE TB
  - 133rd Littorio Armored Division made TB-locked
- Stalingrad to Berlin Campaign(s), Vistula to Berlin, Steel Inferno 1943 and 1944 Campaigns:
  - Corrected the 91<sup>st</sup> Airlanding Division to arrive in mid-January 1944 and to use the most recent TOE available
  - Several corrections for the Herman Goering Divisions' names and increased Experience levels befitting Motorized LW Elite units

#### **V1.03.06 – 31<sup>st</sup> October 2023**

##### **New Features and Rule Changes**

- Adjusted aircraft with cannons with anti-armor >39 to greatly increase their likelihood of targeting AFVs.
- Added Effective Ceiling to the CR/Device/Weapon screen.
- Added Reliability and Durability to the CR/Equipment/Aircraft screen.
- Editor – Made visible the Linked With value for each OB. This allows linking of one set of OBs to the OB chain used by another set of OBs.

##### **Bug Fixes and AI Improvements**

- Air units can be incorrectly brought onto the map to airfields not yet size 1. Fixed.
- Column header on Maneuver column in CR/Equipment/Aircraft screen lists Reliability. Fixed.

##### **Data and Scenario Changes**

- Ob.dat changes:
  - Fixed Ob chains for several OBs, including Soviet Corps Artillery and Axis Fortified Zones, and reset correct build cost and max limits for both Soviet and Axis Fortified Zones/Regions
  - Fixed upgrade paths of 43 FF Cavalry Squadron

- Cleared erroneous upgrade paths of the 41 Ital. Mot AA Gun Battalion and Soviet HQ Military District
- Fixed spelling of "Kampfgruppe" in OB 0091
- Fixed overlap of start and end dates on HQ Panzer Group and HQ Panzer Army
- Delayed upgrade of 42 A.S. Ital Armored Division to 43 Ital. Division to May 43
- Changed upgrade of 43 Afrika Panzer Division to 43b Tier 2 Panzer Division
- Added the "Mot." designation to 41a AA Gun Regiment, 41a Ital. Heavy AA Battalion, 41b Ital. Heavy AA Battalion and 41b Rum. Artillery Battalion
- Device.dat changes:
  - 105mm M12 L/28.4 Gun (0394) – Renamed 105mm M13 L/28 Gun; Range decreased from 13100 to 12500 and Rate of Fire increased from 5 to 6.
  - 105mm Mle 1913 L/28.5 Gun (0551) – Renamed 105mm Mle 1913 L/28 Gun; Range decreased from 13100 to 12500 and Rate of Fire decreased from 8 to 6.
  - 75mm M37 L/34.3 Gun (0685) – Rate of Fire increased from 8 to 13.
- Ground.dat changes:
  - M-11/39 (0179) – Ammo Use increased from 8 to 17.
  - M-13/40 (0180) – 47mm M35 (0323) AMMO decreased from 104 to 87 and Ammo Use decreased from 58 to 50.
  - M-15/42 (0181) – Ammo Use decreased from 48 to 41.
  - P-26/40 (0182) – 75mm M37 (0685) ROF increased from -6 to -4 and Ammo Use increased from 99 to 149.
  - Semovente M40 da 75 (0184) – 75mm M34 (0357) ROF increased from -7 to -4 and Ammo Use increased from 44 to 88.
  - Semovente M42 da 75 (0188) – 75mm M37 (0685) ROF increased from -9 to -5 and Ammo Use increased from 50 to 132.
  - 105mm M12 Field Gun (0222) – Renamed 105mm M13 Field Gun; 6.5mm M1891 Rifle (0142) decreased from 8 to 7; Men decreased from 8 to 7; Load Cost decreased from 16 to 15; Ammo Use increased from 165 to 198 and Build Cost decreased from 57 to 56.
  - 122mm M1910 Howitzer (0264) – Maximum Imports increased from 50 to 160; First Year changed from 1944 to 1942; First Month changed from 1 to 6 and Build Limit increased from 1 to 2.
  - 47mm M37 AT Gun (0271) – Maximum Imports increased from 100 to 230 and Build Limit increased from 1 to 2.
  - 76.2mm FK288(r) Field Gun (0368) – Upgrade to 75mm leFK18 Field Gun (0109) removed.
  - Panzer M13/40 735(i) (0396) – 47mm M35 (0323) AMMO decreased from 104 to 87 and Ammo Use decreased from 58 to 50.
  - Panzer M15/42 738(i) (0397) – Ammo Use decreased from 48 to 41.
  - Panzer P40 737(i) (0398) – 75mm M37 (0685) ROF increased from -6 to -4 and Ammo Use increased from 99 to 149.
  - Stug M42 850(i) (0406) – 75mm M34 (0357) ROF increased from -7 to -4 and Ammo Use increased from 44 to 88.
  - Stug M42 851(i) (0407) – 75mm M37 (0685) ROF increased from -9 to -5 and Ammo Use increased from 50 to 132.
  - Stug M43 852(i) (0408) – 75mm M34 (0375) changed to 75mm M34 (0354); ROF increased from -7 to -5 and Ammo Use decreased from 132 to 108.
  - Stug M43 853(i) (0409) – 105mm da 105 (0391) ROF increased from -5 to -3.
  - SdKfz-251/16 Halftrack (0440) – Maximum Imports increased from 347 to 417; First Year changed from 1944 to 1943 and Build Limit decreased from 7 to 3.
  - 105mm Mle 1913 Field Gun (0468) – Scrap Date changed from 1942 to 1945; Load Cost increased from 12 to 15; Ammo Use decreased from 277 to 198 and Build Cost increased from 41 to 56.

- 88mm Flak18 AA Gun (0489) – Maximum Imports increased from 0 to 200 and Build Limit increased from -1 to 2 (imports activated).
  - 152mm KH 433(r) Howitzer (0537) – Captured Soviet 152mm ML-20 Gun-Howitzer added; 300 guns from 1/42 with a Build Limit of 6.
- Gtype.dat change – Ground types Mech-Inf Squad, Mech-Engr Squad, Mech MG Section, and Mech Recon have had their base CV values doubled to offset the halving received for being in an open top vehicle.
- 1941 Campaign(s) changes:
  - Bornholm Island moved from Map to Norway TB
  - double the amount of French B-2 tanks in German pool
  - event 0011 - add command to force-move select German ground units to Norway
  - Finnish Artillery/Anti-Tank Gun review, spreading out gun use to available gun models
  - Zangen Detach Army rename type downgraded from Army Group to Army
  - Army Group Afrika removed, will be renamed from Panzer Group/Army Afrika
  - Panzer Army Afrika rebuild as Panzer Group, replace odd rename to 1st Ital. Army with rename to Army Group Afrika (Ad-Hoc OB)
  - IV LW Field Corps rename changed to non-LW LXXXX Corps
  - 7 Panzer Div merged 4 slots (96) Panhard armored cars into 2 slots (64), add two slots of 221/223 armored cars
  - 10 Panzer Div changes to an Afrika type OB prior to its Afrika transfer
  - 20 Panzer Div merged 4 slots (96) Panhard armored cars into 2 slots (52), add two slots of 221/223 armored cars
  - 155 Infantry Div arrival moved forward to early November 1944, remove HHQ
  - 204 Panzer Rgt rebuilt to full strength
  - 4 Tank Div fixed missing Tank Bde OB in first rename
  - 8 Tank Div repaired strange fortress rename
  - 239 Mech Div repaired strange fortress rename
  - Ariete Armored Div disbands at the end of 1942 (destroyed EI Alamein)
  - Bologna Mot Div rebuilt as Semi-Mot Infantry Div, made Elite
  - Brescia Mot Div rebuilt as Semi-Mot Infantry Div, made Elite
  - 131 Centauro Arm Div added TB-lock + no rebuild, disbands mid 6/43 (if it survives NA)
  - Fascisti Mot. Div downgraded to Regiment, will become reduced-size Division in mid 5/42
  - Littorio Armored Div disbands at the end of 1942 (destroyed EI Alamein)
  - Pasubio Div fixed arrival hex
  - Pavia Mot Div rebuilt as Semi-Mot Infantry Div, made Elite
  - Sabratha Mot Div rebuilt as Semi-Mot Infantry Div, made Elite, disbands 8/42 (lost in combat)
  - Savona Mot Div rebuilt as Semi-Mot Infantry Div, made Elite, disbands mid 1/42 (lost in combat)
  - Superga Mountain Div rebuilds as elite Semi-Mot Infantry Div in mid 3/42
  - Trento Mot. Div disbands at the end of 1942 (destroyed EI Alamein)
  - Panzer Brigade 101-113 added historical disbands
  - Corps Machine Gun Bns renamed, OB updated (to avoid double Corps in name)
  - 12 zbv Panzer Bn available from start in WE, transfers to BA in mid 9/41
  - 102 Flammpanzer Bn removed disband, added rename to 213 Flammpanzer
  - 193 Gren Inf Bde renamed, OB upgraded (to avoid double Grenadier in name)
  - 202 Panzer Bn available from start in WE as I./202, moves to BA in 9/41, renames 202 in 1/43
  - 203 Panzer Rgt split into two Bns, add force-upgrade to German tanks
  - 211 Panzer Bn TB transfer removed, made rebuild-restricted
  - 213 Flammpanzer Bn disabled, will be renamed from 102 Flammpanzer Bn
  - 272 Army mot Flak Bn disband delayed to late 9/43
  - 273 Army mot Flak Bn disband delayed to late 8/42
  - 275 Army mot Flak Bn added disband in late 5/44
  - 279 Army mot Flak Bn disband delayed to late 4/43
  - 503 Gren Inf Bde renamed, available earlier in 1/43, starts in Norway, transfers to Finland



in 6/44, TB-Lock

- 523 Coastal How Bn rename changed to 150mm sFH Bn
- 529 Coastal How Bn rename changed to 105mm K18 Bn
- 532 Coastal How Bn renamed 533
- 609 Army Light Flak Bn reforms to 305 Army mot Flak Bn in 10/42
- 613 Army Light Flak Bn remove disband, reforms to 291 Army mot Flak Bn instead
- 113x Gren Inf Bdes renamed, OB upgraded (to avoid double Grenadier in name)
- 5 Fort Fin. Art Bn reduced to 100% TOE
- III,XXIII Ital How Bn changed to Medium Field gun Bns with 105/28 gun
- LI-LIII Ital How Bn changed to Medium Field gun Bns with 105/32 gun
- LX-LXII Ital How Bn changed to Medium Field gun Bns with 105/32 gun
- 65th CCNN Legion renamed 63rd
- Rum. Art/How Bns corrections to gun types/OBs
- New units:
  - 1st Italian Army arrives to North Afrika in late 2/43
  - 136 Centauro Ital. Arm Div arrives 7/43 to Italy
  - 135 Ariete Ital. Arm Div arrives 4/43 to Italy
  - 183 Ciclone Ital. Para Div arrives 7/43 to Italy
  - 288 Army mot Flak Bn arrives 2/42 and disbands mid 6/43
  - 289 Army mot Flak Bn arrives mid 4/43
  - 294 Army mot Flak Bn arrives mid 12/43 to WE
  - 300 Army mot Flak Bn arrives 5/43
  - 301 Army mot Flak Bn arrives 5/43 to WE
  - 302 Army mot Flak Bn arrives 7/43 to ITA
  - 304 Army mot Flak Bn arrives 1/43 to ITA, disbands 10/43, equipped with SP 88mm Flak
  - 306 Army mot Flak Bn arrives 8/43
  - 307 Army mot Flak Bn arrives 10/43 to ITA
  - 308-310 Army mot Flak Bn arrive 12/43 to BA
  - 316 Army mot Flak Bn arrives 1/44 to WE
  - 317-318 Army mot Flak Bn arrive 8/44 to WE
  - 2 Fin Super Hvy Art Bn with 203mm guns
  - 5-8 Fin Hvy Flak Bn available from start
  - 1-5 Slov Construction Bn arrive 11/43 to ITA
  - 6-10 Slov Construction Bn arrive 6/44 to AR
- Stalingrad to Berlin Campaign(s), Vistula to Berlin Campaign, Steel Inferno 1943 and 1944 Campaigns changes:
  - Removed the duplicate 202<sup>nd</sup> StuG Bn (Bde)
  - Updated all German Corps MG Bns to the (44 MG Bn) TO&E and also removed the Corps in the name
  - Updated Grenadier brigades to remove double Grenadier in the name and updated TOE where appropriate.
  - Made several minor changes in StoB campaign including the I/15<sup>th</sup> Panzer Regiment now disbands on Turn 26.
- Road to Leningrad - 702 SP Infantry Gun Company added to 1st Panzer Division
- Operation Typhoon
  - 30 Panhard armored cars added to pool
  - 7/20 Panzer Div - two slots of German armored cars replaced with two slots of 15 Panhards each
  - 701-706 SP Infantry Gun companies added to 9/1/2/5/7/10 Panzer division
- Road to Minsk
  - 7 Panzer Div - merge 4 slots (96) Panhard armored cars into 2 slots (64), add two slots of 221/223 armored cars
  - 20 Panzer Div - merge 4 slots (96) Panhard armored cars into 2 slots (52), add two slots of 221/223 armored cars
  - 705 SP Infantry Gun Company added to 7th Panzer Division
  - 706 SP Infantry Gun Company added to 10th Panzer Division

- Red Army Resurgent
  - II Ital Corps - 2x 149mm Howitzer Bns changed to 105/28 Medium Field guns
  - XXXV/Alpini Ital Corps - 3x each 105mm Howitzer Bns changed to 105/32 Medium Field guns
- Destruction of Southwest Front
  - IV+XIX Anti-Air Bn - fix motorization status
  - LX-LXII Ital How Bn - changed to Medium Field gun Bns with 105/32 gun
  - 65th CCNN Legion - renamed 63<sup>rd</sup>
  - 701 SP Infantry Gun Company added to 9th Panzer Division
- Steel Inferno – Road to Karelia
  - Added 702<sup>nd</sup> SP Inf Gun Company and attached to 1<sup>st</sup> Panzer Division
- Two German and 7 Italian renamed unit symbols
- New ground element photo 0537

### **V1.03.05 – 13<sup>th</sup> October 2023**

#### **Bug Fixes and AI Improvements**

- Fixed a bug in the hit chances for Air to Ground attacks on armored targets. Made additional adjustments to greatly increase the chance of side armor hits, greatly decrease front armor hits, and somewhat decreasing top armor hits (the ratio now is 33% top, 50% side, 17% front). Also downgraded the hit chances of larger bombs (they retain a higher chance to hit and hurt an AFV, but they will do relatively less than before compared to other weapons).
- Removed code that halved the transport cost of units when being airlifted or paratropped.

#### **Data and Scenario Changes**

- OB.dat file changes:
  - Reviewed Multi-Role designations to be more consistent.
  - Forced all Company and Battery sized units to use the company symbol
- Device.dat file changes:
  - 37mm Cannon BK3.7 (0048) – Accuracy increased from 5 to 20.
  - 37mm M4 Cannon (0050) – Accuracy increased from 5 to 20.
  - 37mm Cannon Ho-203 (0051) – Accuracy increased from 5 to 20.
  - 37mm Cannon NS-37 (0574) – Accuracy increased from 4 to 20.
  - 40mm Cannon Vickers S (0624) – Accuracy increased from 6 to 20.
  - 50mm Cannon BK5 (0638) – Accuracy increased from 6 to 20.
  - 75mm Cannon BK7.5 (0639) – Accuracy increased from 10 to 20.
- Ground.dat file changes:
  - 20mm Flak38 AA Gun (0072) – Build Limit increased from 100 to 110.
  - 88mm Flak18 AA Gun (0073) – Build Limit increased from 40 to 55.
  - 75mm IeIG18 Infantry Gun (0074) – Build Limit increased from 25 to 32.
  - 120mm GrW 42 Mortar (0078) – First Year changed from 1942 to 1943; First Month changed from 4 to 1 and Build Limit increased from 50 to 72.
  - 28mm sPzB41 AT Gun (0093) – Build Limit increased from 3 to 18.
  - 20mm Quad Flak38 AA Gun (0106) – Build Limit increased from 10 to 12.
  - 105mm IeFH18 Howitzer (0110) – Upgrade to 105mm IeFH18M Howitzer (0477) added and Build Limit decreased from 55 to 22.
  - 150mm sFH18 Howitzer (0112) – Build Limit increased from 15 to 22.
  - 150mm Nebelwerfer (0113) – Build Limit increased from 20 to 26.
  - 105mm Flak39 AA Gun (0132) – Build Limit increased from 12 to 17.
  - 120mm Krh/40 Mortar (0148) – Build Limit increased from 1 to 2.
  - 150mm H/15 Howitzer (0164) – Type changed from Artillery (9) to Heavy Artillery (32).
  - 76.2mm K/02 Field Gun (0169) – Build Limit increased from -1 to 1 (production activated).
  - 210mm Nebelwerfer (0171) – Build Limit increased from 8 to 9.
  - 128mm Flak40 AA Gun (0340) – Build Limit increased from 5 to 7.
  - 75mm GebG36 Mountain Gun (0373) – Build Limit increased from 4 to 5.
  - 75mm IeIG37 Infantry Gun (0467) – Build Limit increased from 27 to 59.

- 105mm NbW 35 Mortar (0475) – Scrap date changed from 1942 to 1944 and Build Limit increased from -1 to 2 (production activated).
- 105mm NbW 40 Mortar (0476) – Load Cost increased from 5 to 6; Build Cost increased from 8 to 10 and Build Limit decreased from 10 to 5.
- 105mm leFH18M Howitzer (0477) – Build Limit increased from 55 to 97.
- 82mm GrW 274(r) Mortar (0482) – Upgrade to 81mm GrW 34 Mortar (0077) added.
- 120mm GrW 378(r) Mortar (0483) – Upgrade to 120mm GrW 42 Mortar (0078) added.
- 75mm K/17 Field Gun (0485) – Type changed from Artillery (9) to Light Artillery (46).
- Stalingrad to Berlin, Vistula to Berlin, Steel Inferno scenarios Campaign 43 and Campaign 44 changes:
  - re-built German Panzer Brigades
  - StoB, C43, C44 - added 150<sup>th</sup> Panzer Brigade
  - C43 - I./SAGr 125 starts in AR. It does not go Map to Map on Turn 1
  - C43 - I./KG 3 is On-Map, so I removed the Map to Map on Turn 1
- Steel Inferno - AGA Part I/Case Blue II scenarios:
  - Fixed 1./11 AufklarGr Airgroup
- Steel Inferno - Drama on the Danube scenarios:
  - Fixed grammatical errors in an event

### V1.03.03 – 29<sup>th</sup> September 2023

#### New Features and Rule Changes

**IMPORTANT NOTE 1:** All save game and scenario files created with this or later versions may only be loaded with this or a later version. Versions prior to 1.03.03 may not load these newer save game or scenario files. Old saves and scenarios may be loaded with this and newer versions.

**IMPORTANT NOTE 2:** The extensive changes made to the OB and map files in 1.03.03 will require that any modded scenario created prior to 1.03.03 will need to have their generic data locked using generic data from 1.02.52 or an earlier version. If you are going to start a modded scenario that was created prior to 1.03.03, make sure that you are using a version of the scenario that had its generic data locked.

- Editor – On the OB tab of the old editor, the centre column now contains a “Counter Idx” entry for each OB as well as a visual showing the counter symbol being used. This allows editors to change the counter symbol used by units using each OB. The default value of 0 uses the original system of symbols, which relied on the unit type info and some hard coded adjustments by OB slot number. By entering a 3-digit value, different symbols can be assigned to each OB. The first digit represents the row, and the next two digits represent the column for the location of the symbol in the counter art files (found in the dat/art/units folder). Rows and columns start counting from 0, so the Panzer symbol is symbol 100 (row 1, column 00, the ski symbol is 212, row 2, column 12). The counter symbol shown changes to reflect any new value you’ve entered. Modders can add additional symbols in the blank spaces on the right of columns 1 and 2, although there are several different sized files, as well as a non-NATO counter set, and all would need to be modded. Note: Air HQs and City Forts use pre-assigned symbols that override the OB Counter Idx.
- Clarification – Ground units can suffer casualties from the interdiction value of the hex they are located in at the end of the air execution phase. These losses do not show up in a battle report, but are shown in the losses screen as happening during the air execution phase.
- Updated the Living Manual.pdf file in the \Manuals folder. This is up to date with changes through game version 1.03.03.

#### Bug Fixes and AI Improvements

- Aircraft weapons were using penetration value when attacking AFVs when they should have been using anti-armor value. Fixed.
- Flak units located in cities are incorrectly adding their flak value to the hex (in the map display) containing the HQ they are assigned to (display bug only, they were not firing as if they were in the HQ hex). Fixed.
- CR/Equipment/Weapons display has two columns labeled as Range. Fixed.
- When loading a save game file, air units with TPI replacements would only count pilots that are at or above the national morale when considering putting planes in reserve. This causes planes to incorrectly be placed into reserve during the load. Fixed.

- Fixed several bugs in the airborne drop interface, especially involving situations where there were more than one airborne unit in the same hex.
- Added additional checks to improve the chance that Steam MP players, with connectivity issues, will be able to make repeated attempts to save the game.
- Fixed a case where bombers could be used for air transport without paying an AP cost.
- Disabled F9 hotkey during the air planning phase (air transport is not allowed during the air planning phase).
- Certain types of motorized units are becoming non-motorized when they change their OB, even when changing to a motorized OB. Fixed. Note, a side effect of this change is that when a non-motorized unit, that is temporarily motorized, upgrades to a non-motorized OB, it will lose its temp motorization status.
- Editor – Fixed a crash bug in the new editor when clicking on an air unit in the Air Group tab that has a rename. Now, just like ground units, air unit renames now must be set in the new editor.
- Editor - Fixed a crash bug in the new editor when clicking on the unit section after entering a name to search in the air group section.
- AI – Increased Axis AI utilization of support units by improving its ability to get German support units out of the national reserve.

### **Data and Scenario Changes**

- Major changes to the OB.dat file:
  - Reorganization of data list by nation, unit type and size for easier and more logical viewing
  - Comprehensive review and update of all Axis units (Italians are divided into Metropolitan, African and Russian variants of organization)
  - Hundreds of new OBs to fill in gaps
  - German Divisions now have numerous archetypes to reflect the varied nature of their organization and equipment (there used to be one standard infantry and panzer division - now there are numerous variants to use a wider variety of equipment)
  - Better transition of Axis units that become equipped with Panzerfausts in late 1943 (all units should now have unit upgrades when the squads get updated to panzerfausts in Oct 43)
  - Revised inclusion of German imported equipment into Axis minor OBs (Panzerschreks in Finnish units, German anti-tank guns and panzers in Italian, Rumanian, Finnish and Hungarian units)
  - Different OBs with appropriate naming of motorized and non-motorized variants of units (Standard Pioneer unit versus a Motorized Pioneer unit)
  - Reviewed/corrected the unit symbols used by OBs using the new editor feature and updated some units' symbols as being marine and light infantry.
- All scenarios - All scenario files were reviewed and their OBs updated to the new OB list and many units were rebuilt to incorporate these changes. Changes were also made to adapt to the map changes. Scenarios with Italy had at least a partial review of Italian air units. Many other changes were made in specific scenarios, many noted below.
- All campaigns - Reduced the level of air combat that takes place in the Finland TB before the Axis Finnish Offensive and between the end of the Axis Finnish Offensive and the start of the Soviet Northern Front offensive. Increased the level of air combat in the Northern Front TB during the Soviet Northern Front offensive. Made several other minor event corrections. Surrender events for FIN/RUM/ITA/BUL/SLO will now zero out these nation's manpower pool.
- 1941 Campaign (both versions):
  - NW Africa (except Tunisia) removed from NA TB, Iran removed from TC TB, both set to Neutral control
  - 2nd RFSS mot. Brigade delayed to T4, arrives near Warsaw
  - I/57th Werfer Bn: to AR mid-September 43
  - II/57th Werfer Bn: to AR early November 43
  - III/57th Werfer Bn changed into heavy variant, to AR in early August 44
  - LW Mot. Light Flak Bns rebuilt as SP version: 75,84,86,91-93,98

- 83rd LW Mot. Light Flak Bns reforms into SP version in 8/44
- 89th LW Mot. Light Flak Bn rebuilt to full strength (formed from existing units)
- 99th LW Mot. Light Flak Bn removed (duplicate of SP version)
- 236th LW mixed Flak Bn: reinforcing duplicate removed, add 10/44 Balkans transfer to existing unit
- 202nd Stug Bn (BA, reinforcing) - rebuilt as (Beute) Panzer Bn with French tanks, available 9/41, disbands at the end of 1943 recreated one turn later fully equipped with Italian tanks (none produced or captured so the only way to do that)
- 211 Panzer bn rebuild to OB 136 at full strength, lock in TB, add transfer to NO in 10/44
- 223 'Krim' Panzer Bn: -Krim, arrives as Beute Flammpanzer Bn to AR at full strength, disbands end of 1943
- 90 Stug Battery changed from mixed StuG/StuH to pure StuG
- 3./177 and 3./244 Heavy Stug Battery disband at the end of May 1943 (special units for Stalingrad, lost there)
- Arezzo/Brennero Alpini Divisions rebuilt as standard mountain div (Line Infantry mountain type)
- increase Italy's pool of 75mm M11/M15 from 50 to 100
- Italian mountain-type divisions changed from 75mm M11 to M15
- Italian non-Russian-front Alpina Divs changed from modern M34 back to old M15 mountain gun
- Ravenna/Sforzesca/Cosseria Divs are reformed to Russian Front Semi-Mot Infantry Div OB prior to map release
- Add TB-lock and no rebuild to Italian Coastal Divisions
- Appoint Nasci as leader of Alpini Corps
- New land units:
  - 701-706 SP Infantry Gun companies with 6x sIG33 PzI each, attached to their historical parent units, all disband over time, no rebuild
  - 707/708 SP Infantry gun companies to NA in spring 42, 6x sIG33 II each, TB locked/no rebuild, 708 disbands end of 42, 707 end of 1/43
  - zBV 12th Panzer Bn in Balkans, TB locked, French tanks, disbands 6/44, recreated with Italian tanks
- added three more SB-2, eight Pe-2 and 5 MBR-2 to FIN pool
- add 20 Ro.43 and 50 each Ro.37, SM.81 and Ca.148 to Italian pool
- Four Hurricane I and 9 PZL 23 added to Rumanian pool, Bloch 210 pool reduced to 3
- II./NJG 2 arrives with 25 aircraft on hand
- SKG 210 AOG - GE Light Bomber added as permitted Air Profile
- ZG 2 AOG - GE Light Bomber added as permitted Air Profile
- III./ZG1 changed from Bf 109E-7 FB to E-7/U1 TacB, add force-upgrade to Me 210 in time for NA transfer
- Savoiastaffel arrives with 24 SM.82
- AufklarGr 125/126 (See) changed to He 114
- some pilots added to axis onmap KG/ZG/StG air groups to match allocated aircraft
- Several Luftwaffe Transport Group renames unified to turn 98
- 1st Rum. Night Ftr Sqn renamed 68th
- 2nd Rum. LR Recon Sqn arrival moved forward to 7/41, equipped with missing 7 Blenheims
- 4th Rumanian LR Recon Sqn disbands at the end of 1941
- 8th Rum. Fighter Grp renames to 8th Rum Assault Grp in 6/1943, the reinforcing Assault Group is removed
- 73rd Rum. Bomb Sqn added with 12x PZL 23
- 80th Rum. Bomb Sqn added with 12x He 111H-3, arrives in 7/41 and disbands at the end of 1941
- 82nd Rum. Bomb Sqn added with 12x Bloch 210, arrives in 7/41
- 123 IAP moved to Kobrin
- New air units:
  - 245/246 Ital. Transport Squadrons with SM.81

361/371 Ital. Ftr Squadrons for use in Russia, both disband when the parent fighter group is withdrawn to ITA

119 Ital. Recon Sqn with Ca.311 for use in Russia, disbands when parent unit is withdrawn

- Fixed event 145, Soviet Reorg Continues, which was never activating
- 1st Mountain Rifle Bde - delay SR transfer to T4
- 250th AA Bn (SOV) disabled as duplicate
- Changed the 1 July 1943 Axis Suden Victory check so it will happen on the last turn of June 1943
- Stalingrad to Berlin(s) (both versions):
  - StuIG33 pool deleted
  - sIG33 II removed from 10th Panzer Division and from LAH Panzergrenadier Division
  - sIG33 II moved from 15/21 Panzer Divs to separate companies
  - 8 SS Cavalry division - StuIG 33B replaced by StuG IIIf
  - 202nd Stug Bn (BA, reinforcing) - rebuilt as (Beute) Panzer Bn with French tanks, available from start, disbands at the end of 1943 recreated one turn later fully equipped with Italian tanks (none produced or captured so the only way to do that)
  - 90 Stug Battery changed from mixed StuG/StuH to pure StuG, made rebuild restricted, add disband in 7/43 (Afrika unit)
  - 3./177 and 3./244 Heavy Stug Battery disband in July 1943 (special units for Stalingrad, lost there)
  - 701,703,704 Stug Battery reformed as SP Infantry Gun Company with five sIG33 PzI each
  - 211 Panzer bn rebuild to OB 136 at full strength, lock in TB, add transfer to NO in 10/44
  - New land units:
    - 707/708 SP Infantry gun companies in NA, 4x sIG33 II each, locked/no rebuild, 708 disbands end of 42, 707 end of 1/43
    - 223 'Krim' Panzer Bn - reactivate, -Krim, at XXXXII Korps, change to French Flammpanzer, disbands end of 1943
    - zBV 12th Panzer Bn in Balkans, TB locked, French tanks, disbands 6/44, recreated with Italian tanks
  - 30 SM.81 added to Italian pool
  - New air units:
    - 162 Ital. Atk Grp added with CR.42AS
    - 245/246 Ital. Transport Squadrons added, equipped with SM.81
    - 361 Ital. Ftr Sqn added, equipped with C.200CB, disbands instead of withdrawing to ITA
  - Increased starting Soviet men disabled
  - XII SS Corps Commander from Guenther Blumentritt to SS Officer Curt von Gottberg.
  - LeLv 26 had two squadrons changed to the Bf-109G-2 (FI)
  - Added 150 Bf-109G-6/N and 100 Fw-190A-5/U2 to the Pool.
  - Fixed event 145, Soviet Reorg Continues, which was never activating
  - Changed the 1 July 1943 Axis Suden Victory check so it will happen on the last turn of June 1943
  - AOG ZG 26 Renames to JG 6 on Turn 85
  - AOG JG 5 Added
  - AOG KG 1 Renames to JG 7 on Turn 89
  - Many German Air Units Unlocked in WE TB and have a corresponding AOG in the file.
- Vistula to Berlin:
  - Two hexes in South Netherlands made Allied controlled
  - Portugal made neutral controlled
  - Karelian Isthmus added to Northern Front
  - Thrace made Offmap and added to Transcaucasus TB
  - Macedonia changed to Soviet control and added to Transcaucasus TB
  - Montenegro changed from Northern Front to Transcaucasus TB
  - Dalmatia changed to Soviet control and added to Transcaucasus TB
  - XII SS Corps Commander from Guenther Blumentritt to SS Officer Curt von Gottberg.

- Added 50 Bf-109G-6/N and 50 Fw-190A-5/U2 to the Pool.
  - AOGs for JG's 2, 26, 53, 54, and 27 added in the East.
  - AOGs for JGs now allow Multi-Engine German Fighters.
  - Fixed event 245.
- Red Army Resurgent:
  - added more planes and pilots to 21 Ital Ftr Grp
  - added 361 Ital Ftr SqN with C.200CB
  - split 71 Ital Recon Grp into 38/116 SqN, one with BR.20 and the other with Ca.311
  - added 245/246 Ital. Transport Sqns with SM.81
- Steel Inferno - 1943 Campaign:
  - Alpi Graie Div rename (remove Alpini)
  - 2nd/5th Gds Tank Corps: CW Churchill IV replaced with Soviet version
  - Chertkov airbase unit: attached to proper location, add Chertkovo airbase unit and attach to proper location
  - remove Volosovo airbase
  - remove Italian pool of Do 217J, add 20 CR.42CN/Ca.310/Ca.311/BR.20 Rcn/SM.84/SM.79 pool, move Italian pool of CR.42 to CR.42AS
  - Increased starting German fuel pool
  - XII SS Corps Commander from Guenther Blumentritt to SS Officer Curt von Gottberg.
  - LeLv 26 had three squadrons changed to the Bf-109G-2 (FI)
  - Downgraded Tatra to Panzer Kampfgruppe
  - Changed the Spanish Fighter Squadron from Axis Generic to German so that the unit was able to upgrade aircraft type.
  - Added 150 Bf-109G-6/N and 100 Fw-190A-5/U2 to the Pool.
  - AOG ZG 26 Renames to JG 6 on Turn 52
  - AOG KG 1 Renames to JG 7 on Turn 56
  - 15./KG 53 (Croat) moves from AG Air Unit to German so it can change aircraft type.
  - Aufkl. Kroatian moves from AG Air Unit to German so it can change aircraft type.
  - Many German Air Units Unlocked in WE TB and have a corresponding AOG in the file.
- Steel Inferno – 1944 Campaign (May Start):
  - removed several active airbase units that were not attached to their location and the location had no airbase size defined
  - Kupyansk,Marmyzi,Novy Oskol,Kastornoe,Gorshechnoe,Lgov,Kolpny,Manturovo,Bogodukhov
  - remove Volosovo airbase
  - remove duplicate 945th LW Light Flak Battalion
  - Increased starting German fuel pool
  - XII SS Corps Commander from Guenther Blumentritt to SS Officer Curt von Gottberg. This change also impacts C43, StB, and Stb (No Early End).
  - 859<sup>th</sup> Howitzer Bn from AR to Map in XXXXII Corps.
  - II/14<sup>th</sup> LW Mot Mixed Flak in XXVII Corps was Frozen 4 Turns changed to Unfrozen.
  - All German StuG Battalions upgraded to StuG Brigades
  - 4.(H)/AufklarGr 31 at Orsha (Removed from Game)
  - 13.(H)/AufklarGr 14 at Orsha moved to AR
  - Made equipment changes to Night Fighters in C44 (May Start) to better reflect historical aircraft.
  - Added 150 Bf-109G-6/N and 100 Fw-190A-5/U2 to the Pool.
  - Added Axis AI first turn script
  - AOG ZG 26 Renames to JG 6 on Turn 8
  - AOG KG 1 Renames to JG 7 on Turn 12
  - 15./KG 53 (Croat) moves from AG Air Unit to German so it can change aircraft type.
  - Aufkl. Kroatian moves from AG Air Unit to German so it can change aircraft type
  - Many German Air Units Unlocked in WE TB and have a corresponding AOG in the file.
  - AOG JG 301 added as an option.
  - AOG KG 1 added as an option.
  - III/KG 1 from AOG KG 51 to KG 1

- IV/KG 1 from AOG KG 51 to KG 1
  - KG 26 Air Units changed from Level Bombers to Torpedo Bombers
- Steel Inferno - Case Blue Phase II (both versions):
  - fix name of Italian Cuneense Alpina division
  - Ravenna/Sforzesca: change 75mm M11 to 75mm M15
  - add 50 Italian M15 mountain guns to pool
- Steel Inferno - Western Ukraine:
  - fixed motorization of 89th LW Mot. Light FlaK Battalion
  - fixed event Slovakia surrenders
- Map changes to city, hex, hexart, maptext, mapregion and factory dat files:
  - Region renames
    - N Ireland (UK,2) - North Ireland
    - Pfalz (GER,41) - Rheinland
    - (GER,42) - Ruhr Area
    - Samara (SOV,152) - Kuybyshev
    - Perm (SOV,158) - Molotov
    - Bashkortostan (SOV,162) - Bashkiria
    - Basilicata (ITA,214) - Lucania
    - North East Syria (SYR, 288) - Northeast Syria
  - New region
    - Pfalz (GER,53), Southeastern part of former Pfalz region 41 (between Mosel and Rhine)
    - Dalmatia (CRO,193), split-off from Croatia region, covers Croatian coastline + Zara (ITA) location
  - Location changes/renames
    - Baden (GER,345) - renamed Baden-Baden
    - Kalach (SOV,1695) - renamed Kalach (v) to avoid a duplicate location name
    - Strigovo (SOV,2964) - renamed Valuets, moved two clicks East to 220.151
  - Miscellaneous minor corrections and changes
- Gtype.dat file changes in aircraft air profiles:
  - 0004 GE Light Bomber
    - Flight size name changed from Schwarm (x4 formation) to Kette (x3 formation)
    - Default unit size from 30-9-3 to 40-12-3
    - October 1943 size change deleted
    - August 1944 changed from 48-16-4 to 49-15-3
  - 0005 GE Medium Bomber
    - default unit size from 30-9-3 to 40-12-3
  - 0006 GE Tac Recon
    - Default size from 30-10-2 to 29-9-2
    - add 1/43 increase to 38-12-2
    - add 1/44 increase to 50-16-2
  - 0007 GE Transport
    - Default size from 48-12-4 to 52-12-4
    - January 1944 size change deleted
  - 0008 GE Strat Recon
    - Flight size name changed from Rotte (x2 formation) to Kette (x3 formation)
    - Default size from 30-10-2 to 40-12-3
  - 0041 RU Bomber Group size reduced to 2x Squadron (18 aircraft)
  - 0044 RU Transport Group size reduced to 2x Squadron (24 aircraft)
  - 0090 GE M-E Fighter
    - June 1944 Gruppe size from 48 to 52
  - 0091 GE Biplane Bomber
    - Flight size name changed from Schwarm (x4 formation) to Kette (x3 formation)
    - Default unit size from 30-9-3 to 40-12-3
    - October 1943 size change deleted
    - August 1944 changed from 48-16-4 to 49-15-3



- New air profiles: 0110 ITA Night Fighter and 0111 ITA Attack/DB
- Ac.dat file changes:
  - Patrol/Torpedo bomber had fuel-only weapon sets upgraded with bombs/mines or a bomb/mine weapon set added if missing
  - Some Recon aircraft had cameras added or modified
  - Minor changes to end dates or upgrades paths for mostly Axis minor types
  - 0149 CR.42 FB ->F, weapon sets removed, ends 12/41, upgrades to C.202, main production version -> limited import
  - 0169 SM.84 changed from Torpedo Bomber to Level Bomber
  - 0170 SM.79bis changed from Torpedo Bomber to Level Bomber
  - 0172 BR.20 Rcn conversion total and per turn raised from 50/2 to 160/4
  - 0174 Z.1007 add torpedo option
  - 0176 Z.506B changed from Torpedo Bomber to Patrol
  - 0178 Re.2001CN activate imports from Re.2001CB
  - 0211 IAR 39Rcn Crew 2 -> 3,, replace 1x Fwd MG with 1x BR MG
  - 0212 IAR 37 Crew 2 -> 3, add BR MG, adjust ammo
  - 0213 IAR 38 Crew 2 -> 3, add BR MG, adjust ammo
  - 0214 IAR 39 Crew 2 -> 3, replace 1x Fwd MG with 1x BR MG, upgrades to Ju 87D
  - 0220 Ju 86E (RU) imports doubled to 24, upgrades to Ju 52
  - 0221 Potez 633B2 (RU) renamed Potez 633, ends 6/1943
  - 0440 Bf 109E-7/U1 increase imports to 250 (+50), add turn limit of 15
  - New aircraft
    - 0147 CR.42CN CR.42 Night fighter, importing from CR.42AS
    - 0181 CR.42AS CR.42 as Ground attack and main production variant
- Ground.dat file changes:
  - Panzer Pioneer Squad 43 (0102) – Upgrade changed from (0104) Panzer Pioneer Squad 44 to (0103) Panzer Pioneer Squad 43v2; Maximum Imports decreased from 1104 to 408; Last Year changed from 1944 to 1943; Scrap Date changed from 1944 to 1943 and Last Month changed from 10 to 9.
  - Panzer Pioneer Squad 43v2 (0103) – Maximum Imports increased from 174 to 870 and Build Limit increased from 3 to 15.
  - 105mm sK18 Field Gun (0105) – Build Limit increased from 5 to 8.
  - SdKfz-6/2 Flak36 (0127) – Upgrade to SdKfz-7/2 Flak36 (0210) added.
  - 280/320mm Nebelwerfer (0172) – Upgrade to 300mm Nebelwerfer (0173) added; Last Month changed from 8 to 12 and Build Limit decreased from 9 to 6.
  - 300mm Nebelwerfer (0173) – First Month changed from 7 to 1 and Build Limit decreased from 12 to 9.
  - 75mm PaK97/38 AT Gun (0189) – Maximum Imports increased from 0 to 100; Import From ID changed to 464; First Month changed from 6 to 4; Last Year changed from 1943 to 1942; Last Month changed from 4 to 10 and Build Limit increased from -1 to 10.
  - SdKfz-222 Armored Car (0241) – Upgrade to 504 (SdKfz-250/9) added; Last Year changed from 1945 to 1944; Last Month changed from 8 to 6.
  - Panzer B-2 740(f) (0390) – 47mm SA35 Gun ROF changed from -10 to -8.
  - Flammpanzer B-2(f) (0391) – 47mm SA35 Gun ROF changed from -10 to -8.
  - Panzer 35-S 739(f) (0392) – 47mm SA35 Gun ROF changed from -10 to -8.
  - 7.62mm ItKk/31 Twin AAMG (0484) – Last Month changed from 6 to 9 and Build Limit increased from -1 to 2.
  - Recon Squad (0486) – Build Limit increased from -1 to 0.
  - Bicycle Recon Squad (0490) – Build Limit increased from -1 to 0.
  - Motor Recon Squad (0491) – Build Limit increased from -1 to 0.
  - Armored Recon Squad (0492) – Renamed Armored Recon Section; 7.92mm Rifle decreased from 7 to 5; Panzerfaust added with Ammo of 3; Men decreased from 10 to 8; Front Armor increased from 0 to 1; Side Armor increased from 0 to 1; Maximum Imports increased from 0 to 24; Import ID changed from 0 to 0557 (SdKfz-250 chassis); First Year

changed from 1942 to 1944; First Month changed from 10 to 2; Load Cost decreased from 31 to 28; Ammo Use increased from 9 to 28 and Build Limit increased from -1 to 3.

- SMG Recon Squad (0493) – Build Limit increased from -1 to 0.
- Motorcycle Squad (0494) – Build Limit increased from -1 to 0.
- Cavalry Squad (0498) – Build Limit increased from -1 to 0.
- Bicycle Recon Squad (0499) – Build Limit increased from -1 to 0.
- Motorcycle Squad (0500) – Build Limit increased from -1 to 0.
- Labor Squad (0501) – Build Limit increased from -1 to 0.
- 50mm GrW 36 Mortar (0502) – Build Limit increased from -1 to 0.
- 88mm vz.36 AA Gun (0503) – Last Year changed from 1944 to 1941; Last Month changed from 8 to 12 and Build Limit increased from -1 to 1.
- SdKfz-250/9 (504) added – Maximum Imports of 16; Nation changed from None to Rumania; First Year of 1944; First Month of 5; Last Year of 1945; Last Month of 8; Build Limit of 4.
- IS-1 M1943 (0763) – Build Limit increased from 27 to 37.
- Panzer IIL Lynx (0004) – Fuel Use increased from 21 to 23.
- 122mm sFH396(r) Howitzer (0111) – ACC increased from 0 to 275 and Build Cost increased from 5 to 61.
- 122mm H/38 Howitzer (0160) – ACC increased from 0 to 275 and Build Cost increased from 5 to 61.
- M-15/42 (0181) – Fuel Use increased from 42 to 45.
- Semovente M43 da 105 (0185) – Fuel Use decreased from 71 to 43.
- Semovente M42 da 75 (0188) – Fuel Use increased from 38 to 45.
- 75mm M34 Mountain Gun (0190) – ACC increased from 0 to 150.
- 75mm M15 Mountain Gun (0240) – ACC increased from 0 to 150.
- 75mm M37 Field Gun (0389) – ACC increased from 0 to 700.
- Panzer M13/40 735(i) 0396) – Maximum Imports increased from 0 to 200; Import From ID changed from 0 to 180; Type changed from Foreign Medium Tank to Foreign Light Tank; First Month changed from 9 to 10; Build Cost increased from 1 to 171 and Build Limit increased from -1 to 5.
- Panzer M15/42 738(i) (0397) – Maximum Imports increased from 0 to 200; Import From ID changed from 0 to 181; Type changed from Foreign Medium Tank to Foreign Light Tank; First Month changed from 9 to 10; Fuel Use increased from 42 to 45; Build Cost increased from 1 to 192 and Build Limit increased from -1 to 5.
- Stug M42 850(i) (0406) – Maximum Imports increased from 0 to 100; Import From ID changed from 0 to 184; First Month changed from 9 to 10; Build Cost increased from 1 to 129 and Build Limit increased from -1 to 3.
- Stug M42 851(i) (0407) – Maximum Imports increased from 0 to 100; Import From ID changed from 0 to 188; First Month changed from 9 to 10; Fuel Use increased from 38 to 45; Build Cost increased from 1 to 150 and Build Limit increased from -1 to 2.
- Stug M43 852(i) (0408) – Maximum Imports increased from 0 to 50; Import From ID changed from 0 to 185; Fuel Use decreased from 71 to 43; Build Cost increased from 1 to 150 and Build Limit increased from -1 to 1.
- Stug M43 853(i) (0409) – Maximum Imports increased from 0 to 50; Import From ID changed from 0 to 185; First Month changed from 9 to 10; Fuel Use decreased from 71 to 43; Build Cost increased from 1 to 155 and Build Limit increased from -1 to 1.
- AB41 201(i) Armored Car (0411) – Maximum Imports increased from 0 to 130; Import From ID changed from 0 to 187; First Month changed from 9 to 10; Build Cost increased from 1 to 95 and Build Limit increased from -1 to 5.
- StuG L6 47/32 630(i) (0442) – Maximum Imports increased from 0 to 78; Build Cost increased from 68 to 69 and Build Limit increased from -1 to 6.
- 122mm M1909 Howitzer (0523) – ACC decreased from 175 to 0.

- Lorraine (SdKfz-135/2) (0544) added.
- Panzer L3 731(i) (0545) added.
- Panzer L6 733(i) (0546) added.
- 76.2mm ZiS AT Gun (0783) – ACC decreased from 400 to 375.
- Cavalry Squad 43 (803) – Upgrade changed to 0.
- Activated production for the Motorized Recon Squad (0487).
- Developer's Note: As can be gleaned from some of ground elements above the cost of captured or imported (German "lend-lease") equipment has been increased to conform better with the game system. Previously these ground elements had a net cost of 0, now most have a net cost of 1. Also note that except on a scenario basis the former Italian AFVs in German service have not yet been implemented into the campaign games.
- Device.dat file changes:
  - 76.2mm 3-K L/55 Gun (0374) - Max Ceiling changed from 40600 to 30350; Eff Ceiling changed from 29000 to 23800.
  - 20mm vz.36 L/70 Gun (0241) – Penetration decreased from 40 to 34.
  - 20mm Oerlikon L/70 Gun (0242) – Penetration decreased from 40 to 34.
  - 20mm Flak38 L/65 Gun (0243) – Penetration decreased from 47 to 36.
  - 20mm Quad Flak38 L/65 Gun (0244) – Penetration decreased from 47 to 36.
  - 20mm Twin Flak38 L/65 Gun (0252) – Penetration decreased from 47 to 36.
  - 20mm ItK/38 L/65 Gun (0257) – Penetration decreased from 47 to 36.
  - 20mm M35 L/65 Gun (0299) – Penetration decreased from 42 to 36.
  - 20mm KwK30 L/55 Gun (0300) – Penetration decreased from 47 to 36 and HVAP Pen decreased from 85 to 64.
  - 20mm KwK38 L/55 Gun (0564) – Penetration decreased from 47 to 36 and HVAP Pen decreased from 85 to 64.
  - 20mm M35 L/65 Gun (0630) – Penetration decreased from 42 to 36.
  - 20mm Flak30 L/65 Gun (0651) – Penetration decreased from 47 to 36.
  - 20mm Flak30 L/65 Gun (0677) – Penetration decreased from 47 to 36.
  - 20mm L/65 Cannon (0689) – Penetration decreased from 47 to 36.
  - 20mm Quad L/65 Cannon (0690) – Penetration decreased from 47 to 36.
  - 75mm leFK18 L/26 Gun (0350) – Accuracy decreased from 300 to 275.
  - 122mm M1909 L/13 Howitzer (0521) – Accuracy increased from 175 to 200.
  - 76.2mm K/02 L/30 Gun (0642) – Accuracy increased from 300 to 325.
- Art file corrections/additions:
  - 5 new event photos, 32 possibly previously missing event photos, 2 aircraft photos, 4 ground element photos
  - New/corrected 25 Italian air unit symbols/1 German air unit symbol
  - Steel Inferno - 2 new event photos for AG C scenario events
  - 12 corrected Italian ground unit symbols
  - 12 corrected air unit icons, 4 new ground unit icons

#### **V1.02.52 – 15<sup>th</sup> March 2023**

##### **New Features and Rule Changes**

- Set a maximum number of bombers and maximum number of fighters that can fly in any one mission during the air phase. The interface will not allow entering more than 200 for requested bombers or fighters. Missions automatically put together will be limited to around 200 bombers and around 200 fighters.
- Manual Correction: The supply priority of airbases cannot be changed on the CR/unit tab, and may only be changed by changing the Air Command HQ's supply priority via either the CR/HQ tab or by changing the Air Command's AOG supply priority.
- Added Living Manual v1.22.pdf file in the \Manuals folder. This is up to date with changes through game version 1.02.52.

##### **Bug Fixes and AI Improvements**

- In very rare circumstances, some Soviet airbases may change their nationality to German during the Soviet logistics phase. Fixed.

- In very rare circumstances, a bombing mission in the air phase could cause the number of ready ground elements in a unit to go negative. Once negative, bad things can happen during the ground phase. Fixed (both found and fixed one way that the elements could go negative, and put a fix in at the end of the ground phase to set any negative elements to zero).

### Data and Scenario Changes

- Device.dat file – Reinstated effect ratings for aircraft weapons that had been zeroed out in version 1.02.44 as it was found they are used for interdiction.
- Ground.dat file changes:
  - enabled production for the Hungarian Recon Squad (0496).
  - Panzer 35(t) (0013) – Upgrade changed from Panzer III L (0009) to Panzer 38(t)E (0015).
  - Panzer 38(t) (0014) – Upgrade changed from Panzer III m (0010) to Panzer III L (0009).
  - Panzer 38(t)E (0015) – Upgrade changed from Panzer IV h (0021) to Panzer III m (0010).
  - Revised w\_ground.dat file to fix the lack of production of the Soviet 76.2mm ZiS AT gun
- Ob.dat – Guards airborne divisions are no longer buildable until December 1942, and the build limit in 1942 has been changed to 2.
- Ac.dat changes:
  - endurance of all transport aircraft multiplied by 1.4
  - 0049 Go 244 - add aux tank options
  - 0165/0268 SM.75 Marsupiale -increase base range to ~2100 km at a slightly reduced cruise speed
  - 0089/0164/0168/0489 SM.82 Canguro - increase base range to ~2000 km
- Campaign 41(s) changes:
  - Adjusted starting Axis air directives by deactivating ground attack air directives that had no escorts within range.
  - Armenia region made part of the playable map area.
  - New National Supply Source depots added to Yerevan and Nakhichevan in Armenia, with freight levels of 1000 tons each.
  - 560 Panzerjaeger Bn (existing) - disbands mid 10/42 (became part of 27th Panzer Division)
  - 560th Heavy Panzerjaeger Bn (reinforcing) -arrival moved forward to 4/43 (as unit shell), copy 1943+ OB setup and TB transfers from existing 560th Panzerjaeger Bn
  - 1028th Grenadier Infantry Regiment - OB upgraded from 294 to 295, removed Grenadier from local unit name (induced by new OB)
  - 388th Grenadier Separate Infantry Regiment - remove Grenadier from local unit name (will get it back in late 1942)
  - New unit - 4 PAAK Sturm Infantry Regiment - arrives late 4/44 to Axis Reserves
  - Event change to 0081 Bulgaria switches sides - Thrace region stays offmap, added to Transcaucasus TB
  - Soviet GUN CHANGES x
    - Infantry guns
    - 76.2mm M27 - pool raised from 300 to 2382 (covers two similar types of mountain guns)
    - Light Artillery
    - 76.2mm USV - pool raised from 725 to 746
    - 76.2mm M1902- pool raised from 1200 to 2929
    - 76.2mm F-22 - units in Far East/Transcaucasus had this gun exchanged to the older M1902 gun, pool reduced from 700 to 329
    - Artillery
    - 122mm M1910 - pool reduced from 2049 to 783
    - 122mm M-30 - pool reduced from 251 to 223
    - 152mm M1909 - many guns in units updated to M-10 gun, other units reduced in strength; overall about 450 changed or reduced
    - 152mm M-10 - pool raised from 108 to 184
    - Medium Field Guns
    - 107mm M1910/30 - pool of 231 guns added
    - 122mm A-19 - pool raised from 24 to 300
    - Heavy Artillery

- 152mm ML-20 - pool reduced from 1380 to 959
- 152mm Br-2 - pool of 14 guns added
- 203mm B-4 - pool raised from 170 to 240 (to include limited production of 1941)
- Anti-tank guns
- 45mm M37 - pool reduced from 4200 to 3781 (too many)
- Light Flak
- 37mm Flak - about 1500 guns removed from airbases
- Medium Flak
- 76mm Flak - guns in units reduced from 5597 to 5128
- 85mm Flak - 52 guns added to units
- Destruction of SW Front gun changes:
  - Infantry guns
  - 76.2mm M27 - pool raised from 120 to 620
  - Light Artillery
  - 76.2mm M1902 - pool raised from 300 to 700
  - 76.2mm F-22 - pool removed
  - Artillery
  - 122mm M1910 - pool reduced from 800 to 200
  - 122mm M-30 - pool reduced from 500 to 250
  - Medium Field Guns
  - 107mm M1910/30 - pool of 100 guns added
  - 122mm A-19 - pool raised from 6 to 100
  - Light Flak
  - 37mm Flak - lots of guns removed from airbases
  - Medium Flak
  - 85mm Flak - pool reduced from 500 to 100
- Road to Leningrad gun changes:
  - Infantry guns
  - 76.2mm M27 - pool raised from 250 to 500
  - Light Artillery
  - 76.2mm M1902 - pool raised from 120 to 520
  - 76.2mm F-22 - pool removed
  - Artillery
  - 122mm M1910 - pool reduced from 500 to 100
  - Medium Field Guns
  - 107mm M1910/30 - pool of 50 guns added
  - 122mm A-19 - pool raised from 2 to 50
  - Heavy Artillery
  - 152mm ML-20 - pool reduced from 140 to 70
  - 203mm B-4 - pool raised from 2 to 3
  - Light Flak
  - 37mm Flak - pool removed, lots of guns removed from airbases
  - Medium Flak
  - 85mm Flak - pool removed
- Added 4 renamed German unit symbols for Grenadier Separate Infantry Regiment name variants
- Stalingrad to Berlin – minor map and miscellaneous changes

#### **V1.02.51 – 2<sup>nd</sup> February 2023**

#### **Bug Fixes and AI Improvements**

- Made additional improvements to the stage base selection code. The change in v1.02.50 for stage bases made more visible an issue where very inappropriate stage bases were being auto selected, sometimes very far in the rear. This problem should now be fixed.
- Calculation of the weather on some air missions was being incorrectly calculated, both in the air directive creation interface and during air execution. Fixed.
- Editor - Using top right X to close out of new editor causes issues when reentering the editor. Fixed.
- Editor - Game crashes after loading generic data and clicking on AOG in new editor. Fixed

(removed AOG option in new editor as it needs more work).

- Editor - Can't change some ground element values in some OB slots in OB file. Fixed.

### **Data and Scenario Changes**

- OB.dat - 1st and 2nd Wave Infantry Division – support put back to 544 (was accidentally set to 144 in v1.02.50).
- Ground.dat changes:
  - 76.2mm 3-K AA Gun (0811) - Upgrade path to 85mm KS-12 AA Gun (806) removed and Scrap Date changed to 1945.
  - 160mm MT-13 Mortar (0819) - First Month changed from 1 to 3 and Build Limit decreased from 16 to 14.
  - 152mm D-1 Howitzer (0827) - Build Limit decreased from 10 to 9.
- Device.dat: - 76.2mm M27/39 L/16.4 Gun (0370) - Accuracy increased from 175 to 200

### **V1.02.50 – 12<sup>th</sup> January 2023**

#### **New Features and Rule Changes**

- Reduced the number of aircraft (both bombers and fighters) that fly ground support in any given battle. Also, now, the defending side will generally commit less bomber aircraft and escorts than the attacking side, all things being equal.
- Increased the impact that air doctrine mission and escort settings have on ground support. Although only one factor, the air doctrine mission setting will now have a larger impact on the number of bombers that can fly into any particular ground battle. The escort setting should also have a larger impact on the number of fighters that will try to fly escort into a ground battle, although escorts are just one way in which fighters are committed to a ground battle.
- Greatly increased the chance that airstrikes during the air execution phase will be detected, which will mean they will now be intercepted when in the past they were not being detected (or at least not until it was too late to intercept them).
- Adjusted/improved the stage base selection code during the air execution phase when no air units or AOGs are specifically assigned to an air directive.
- Certain kinds of ground elements that are produced (items that are armaments builds that have a build limit, for example most guns) are now being placed in the active pool when produced. In many/most cases they used to go to the transit pool when produced.
- Reduced the chance of a leader being dismissed for poor performance, although the chance is still considerably higher than it was before the last adjustment was made in 1.02.39.
- Air units set to receive Trained Pilots Only will not receive “free” pilots that are below that nation's current air national morale. Free pilots are generally those that have become available when their air unit on the map was disbanded.
- Hooked up Scenario Early End functionality which has been in the editor, but was not yet working in-game. The rules for this are as follows: Player Triggered Early End – Any short scenario can have one side designated in the editor so that if that side captures all of the objectives of both sides, the scenario will immediately end. Points will be awarded as if the player held the objectives for all of the rest of the turns of the scenario and will score end game objective points as well. In addition, all units deemed isolated on the side that does not hold an objective will be destroyed and counted in the victory point casualty count. Note that the Victory screen states at the bottom that the game may end early if it is a scenario set up for this. Scenarios that have the possibility of an early end have this noted in their scenario description text on the Load Scenario screen.
- Change in Logistics Phase Report of air unit transfers - Air unit base transfers are now reported in the Arrival section of the Logistics Phase Report, instead of in the Air Execution section. Previously transfers conducted during the ground phase using the Planned Transfer were showing up in both players' Logistics Report, but now they will only show up for the owning player.
- Undocumented rule and adjustment – All non-isolated ports can, under certain conditions, convert a small portion of their supplies and fuel back into freight at the port depot with the supplies and fuel returning to the pool. Now, this can happen if the depot has less than 20,000 tons of freight. This conversion is not shown in the logistics reports, and explains why Batumi would often gain freight without getting a shipment.
- Undocumented rule and adjustment – Units with the following text included in their names can repair rail damage:

Rail  
Railway Construction  
Engineer GS  
R.A.D.  
O.T.  
RR Construction

A change was made so that units with "Railyard" in their name are now specifically excluded from repairing rail damage even though "Rail" is a part of Railyard. Before the change, some security units with Railyard in the name were repairing damaged rail.

- Added Living Manual v1.21.pdf file in the \Manuals folder. This is up to date with changes through game version 1.02.49.

### **Bug Fixes and AI Improvements**

- Changes made in version 1.02.47 caused the defending CV value of units in a city fort to not being included in the hex pop-up CV predictor. Fixed.
- A change made in version 1.02.47 caused the hex-pop up CV predictor and the start of battle CV values to incorrectly calculate the impact of weather/roads on the attacker CV using the defending hex instead of the attacking hex. Fixed. This was a display only bug that had no impact on the true odds calculated during and at the end of combat.
- In the 1944 campaign, most hexes turn green when the player enters air transport mode. Fixed.

### **Data and Scenario Changes**

- OB.dat changes - 1st and 2nd Wave Infantry Division - duplicate 7.92mm PzB 39 AT-Rifle slot was removed
- Ground.dat changes:
  - T-34 M1941 (0138) – ROF decreased from -2 to -5.
  - 76.2mm ZiS Field Gun (0727) – Build Limit decreased from 280 to 160.
  - KV-1s M1942 (0750) – Ammo Use decreased from 168 to 140.
  - 57mm ZiS-2 AT Gun (0782) – First Month changed from 6 to 7 and Build Limit decreased from 82 to 74.
  - 76.2mm ZiS AT Gun (0783) – Maximum Imports decreased from 9150 to 0 (production changed from conversion to direct production) and Build Limit increased from 50 to 100.
  - 76.2mm F-22 AT Gun (0817) – Import ID changed from 0785 (76.2mm USV Field Gun) to 0832 (76.2mm F-22 Field Gun) and Last Month changed from 2 to 12.
  - 76.2mm M1902 Field Gun (0831) – Upgrade to 0727 (76.2mm USV Field Gun) removed and Scrap changed from 1941 to 1942.
  - 76.2mm F-22 Field Gun (0832) – Scrap changed from 1942 to 1945.
  - KV-1 M1941 (0839) – Ammo Use decreased from 168 to 140.
- Device.dat changes:
  - 76.2mm ZiS-5 L/41.5 Gun (0368) – Rate of Fire decreased from 15 to 13 and HEAT Pen increased from 0 to 75.
  - 85mm D-5 L/52 Gun (0376) – Rate of Fire increased from 9 to 11.
- Factory.dat changes:
  - further 10 point reduction of fuel refineries in Saratov
  - Some HI points moved from Jerevan/Grozny (2 each) and Baku (4) to Saratov/Ashkhabad (4 each)
  - Ports added or increased by 1 at several Caspian sea locations
- Map changes with changes to hex/hexart/city/weather/control.dat files:
  - minor rail art fixes in Southern France and Corsica
  - missing rail link added at Besancon
  - minor sea art fixes across the map
  - add missing data for hexes on the eastern map edge
  - population data in several Caucasus locations updated to be back in sync with previous factory changes
  - road systems review across the map, most of the changes outside of the typically active areas

- Rail lines from Baku to Tbilisi (southwestern part) and Prokhladny via Grozny (northwestern part) fully upgraded to dual-track. Although in part single-track these were designed for very heavy loads, having to sustain overlength and/or very heavy oil/fuel trains. Multiple of these tracks also had oil and fuel pipelines laid near the rail track.
- Location changes:  
2125 Kudymkar (SOV) relocated from 272,70 to 272,64  
3851 Poissy (FRA) Airbase -> Town
- Renamed locations:  
2183 Blagodatnoe (SOV) ->Blagodarnoe  
2242 Vereschagino (SOV) ->Vereshchagino  
2333 Budenovka (SOV) ->Budyonivka  
2855 Khunz (SOV) ->Khunzakh  
2860 Rauchnik (SOV) -> Beyneu  
2865 Kryzylorda (SOV) -> Kzyl-Orda  
2866 Ayteke Bi (SOV) -> Novokazalinsk  
2874 Kandagatsch (SOV -> Kandagach  
2881 Akjubinsk (SOV) -> Aktyubinsk  
5515 Maineh (Iran) -> Mianeh  
5865 Kirovobad (SOV) -> Kirovabad (real Kirovobad is in Usbekistan)
- Iran, Morocco, Algeria and Tunisia made Neutral controlled
- Isle of Man added to Northern England region
- Ac.dat changes:
  - Weapon loadouts recalculated to adapt for soviet rocket changes
  - Aircraft made cheaper to produce  
Bf 109G, Bf 109K  
Bf 110 (airframe and night fighters)  
He 111H-6 series  
Fw 190 A-7,D-9,G,  
Me 210/410  
Ju 290 (both airframe and aircraft)  
G.55 Centauro (both airframe and aircraft)  
Pe-2 (airframe only)  
La-5, La-5F
  - Aircraft made more expensive to produce  
Ju 88 (airframe only)  
Bf 110G-3  
Fw 190 (airframe, A-8,A-9)  
Me 210 (airframe only)  
Do 217 (airframe only)  
IAR 80 (airframe, 80A)  
Blenheim  
RS.14  
SM.82 (airframe only)  
SM.84 (airframe only)  
Z.501  
Z.506 (airframe only)  
Z.1007 (airframe only)  
Yak-9 series  
Il-4
- Changes (where applicable) to 1941 Campaign(s), Velikie Luki, Road to Leningrad, The Destruction of Southwestern Front, Operation Typhoon, Red Army Resurgent scenarios:
  - adaption to map updates
  - typo fix in event 303
  - fix some hex control issues in Armenia/Turkey border area
  - unit name typo fix or minor rename:  
Walloonian -> Wallonian



Middle Cavalry Regiment -> Center Cavalry Regiment (= Cavalry Regiment of Army Group Center)  
5th Light (Panzer) Div -> 5th Afrika Light Division (used symbol/logo of 5th Light (Infantry) Division)

- Stalingrad to Berlin(s) changes:
  - adaptations to map updates
  - Removed 175 Turn Freeze labels from two Italian units in the Afrika TB.
  - Corrected Stab/KG 26 to having Torpedo aircraft rather than Transport aircraft.
  - Adjusted starting pools for both sides to give a better and more realistic start.
  - The 287<sup>th</sup> Arab Special Purpose Battalion Renames to the 92<sup>nd</sup> Motorized Brigade and finally to the 92<sup>nd</sup> Panzergrenadier Brigade. It was also changed to an Axis Generic Unit.
  - The three Cossack Battalions were changed into Axis Generic units and either Rename (Platow) or Disband (Schwerin) and (Jungschultz) to provide elements for the 1<sup>st</sup> Cossack Cavalry Division.
  - KG 1 was missing which Renames into JG 7 late war. The Rename can now take place as KG 1 is in the Campaign.
- Vistula to Berlin - adaptations to map updates
- Steel Inferno 1943 Campaign – adaptations to map updates, and now the 92<sup>nd</sup> Motorized Brigade Renames to the 92<sup>nd</sup> Panzergrenadier Brigade.
- Steel Inferno 1944 Campaign (May Start) – adaptations to map updates.
- Steel Inferno Road to Karelia - Added Early End Victory Conditions for Axis
- Steel Inferno Race for the Caucasus - Added Early End Victory Conditions for Axis
- Steel Inferno Case Blue Scenario(s) - Added Early End Victory Conditions for Axis
- Steel Inferno Kuban Bridgehead - Added Early End Victory Conditions for Soviets
- Steel Inferno Army Group Center - Kutuzov to Bagration - Added Early End Victory Conditions for Soviet
- Steel Inferno Western Ukraine - Added Early End Victory Conditions for Soviets
- Steel Inferno Drama on the Danube (H2H and AI) changes:
  - Added Budweis as an NSS
  - Added Early End Victory Conditions for Soviets
- Added 60 German and 12 Italian renamed land unit symbols

#### **V1.02.47 – 26<sup>th</sup> November 2022**

#### **New Features and Rule Changes**

- Improved the routine that determines where the map will be centered when a new scenario or a save is loaded (should now be more centrally located based on the on map units).
- Rule correction/display fix – The terrain combat modifier for non-isolated units in urban terrain is not +16 for heavy urban, and +12 for light urban. It is actually +4/+3 like for isolated units, but with an additional x4 for the adjusted CV if the unit is non-isolated. This results in a higher net defense value than has been previously displayed. This has always been calculated correctly in the final CV calculation in combat, but it was displaying a lower, incorrect defense value for the units and starting combat CV value. It now displays the correct value in all displays.
- Rule corrections/display changes - The hex pop-up CV predictor now includes the estimated modifiers to the attacking side's CV caused by the defender's hex terrain density. This is now also reflected in the start of combat CV value shown in the combat display, although there will often be a small difference between the combat predictor and the actual start of battle CV value. Also, the start of battle CV values now reflect the instant disruption caused by attacks across a river or due to first winter weather. These are not reflected in the combat predictor values. Note the manual was incorrect in stating that the CV predictor value accounts for the elements that will be disrupted.
- Display clarification – On the General tab of the battle report, the Total number of elements listed is determined by adding the Ready and Damaged elements. The number of disrupted elements are those disrupted instantly at the start of combat due to river crossing and/or first winter disruption. These elements are not in addition to the ready and damaged elements.
- Errata: Clarification - It is possible to move a unit that has a later transfer date from the map to one of the Theatre Boxes. This can be either their next scripted target or one of the other options.

This move does NOT clear any future set transfers, so the unit will still move its set destination on the designated turn. Equally this does not allow you to move units from the non-reserve Theatres. At the moment this can only be initiated if the unit is on the map and using the HQ change routine. That will open up the full list of possible Theatre Boxes. Note if you use the 'transfer' routines at the moment the only options are to move the unit to the map or to the relevant reserve. This removes the restriction in section 13.3.5 but all the other restrictions still apply in terms of unit disbands and merging.

- Errata: Not fully documented. For clarification if the Axis player retakes a VP city west of the 1941 border then they will gain a +6 time bonus since it is not a location they historically 'captured'.
- Errata: Not documented, when the 'Soviet Partisan Movement Ends' event occurs, all units in the Axis Garrison box are moved to the Axis Reserve and can be re-assigned as wished.
- Added Living Manual v1.20.pdf file in the \Manuals folder. This is up to date with changes through game version 1.02.47.

### **Bug Fixes and AI Improvements**

- A multi-role unit that upgrades to a combat unit while inside a HQ or combat unit disappears from the game (not counted as part of losses, but is out of play). Fixed. Instead, the unit is moved out of the HQ/combat unit and onto the map or into the reserve. This fix only prevents future upgrades from disappearing. It does not retroactively fix any units that have already disappeared in an active game.
- Non AI air units sent to the reserve can incorrectly change to automatic upgrade and Day/Night missions (this should not happen to non-AI controlled air units). Fixed.
- Ai – In some rare cases, the AI was losing the future use of support units, attached to combat units moved to the reserve. There were not being destroyed, just effectively removed from the scenario. Fixed.
- AI – In some cases, the AI was moving flak its city flak units to cities off the playable map. Fixed.
- AI – Fixed several cases where the AI was unable to get some of its units out of the reserve.
- Steel Inferno AI - Soviet AI on turn 1 of 1944 Campaign (May Start) launches illegal phantom attacks at hexes in the Axis rear (if no attack is made during Axis turn 1). Fixed.

### **Data and Scenario Changes**

- Added a No Early End version of the Stalingrad to Berlin Campaign. This scenario removes Sudden Victory and Sudden Loss victory rules. The game will always continue on to either the 31 December 1944 victory check, the fall of Berlin, or the end date of the scenario.
- Ground.dat changes:
  - Added panzerfaust equipped late war (10/43) cavalry and security squads and renamed the early war squads appropriately.
  - Corrected first month and top armor on captured British A13 used by the Germans.
- Factory.dat changes:
  - Soviet oil production reduced from ~350 to 310
  - Slovakian and Finnish armament production reduced by 2 points each
  - Some oil production moved from Maikop to nearby towns
  - Some factory adjustments trying to reduce the overload of the Caucasus rail net:  
Baku area fuel production raised by 20 points, Batumi fuel production reduced by 10 points, Saratov by 15 points  
12 points of Heavy Industry moved from Batumi, Tbilisi and Baku to Yerevan, Saratov and Stalingrad
- Ob.dat changes:
  - Changed the NKPS and the Rail Repair Brigades to a start date of July 1941.
  - Swapped in the new 1943 Cavalry Squads where appropriate.
- 1941 Campaign(s) changes:
  - Barbo Cavalry and Gennaio/Marzo CCNN Brigade now arrive in Braila (RUM)
  - event 136 (Soviet Partisan War Ends): now adds 100k men to soviet pool
  - Several minor text updates/fixes in events
  - event 252 (Soviet Partisans): added multiple missing regions (where required)
  - 1 NKPS and two independent RR repair Brigades arrive at the end of 7/41
  - removed duplicate 13th motorcycle regiment

- LXV zbV Corps disbands on 1st March 1942, rename removed
  - Hungarian infantry brigades 1,2,5,8,21,24 have their frozen time reduced to their time of transfer to Soviet Garrison
  - reinforcing Hungarian Heavy Tank and Assault Gun Bns have their frozen status removed
- Velikie Luki changes:
  - Corrected location 2864 Baygekum (378,114) which had been set to neutral
- Road to Minsk changes:
  - Several minor text updates/fixes in events
  - event 252 (Soviet Partisans): added multiple missing regions (where required)
- Road to Leningrad changes:
  - Several minor text updates/fixes in events
  - event 252 (Soviet Partisans): added multiple missing regions (where required)
  - two independent RR repair Brigades arrive at the end of 7/41
- Destruction of Southwestern Front changes:
  - Several minor text updates/fixes in events
  - event 252 (Soviet Partisans): added multiple missing regions (where required)
  - three independent RR repair Brigades arrive at the end of 7/41
  - Corrected location 2864 Baygekum (378,114) which had been set to neutral
- Operation Typhoon changes:
  - Several minor text updates/fixes in events
  - event 252 (Soviet Partisans): added multiple missing regions (where required)
  - 1 NKPS and two independent RR repair Brigades added
  - Corrected location 2864 Baygekum (378,114) which had been set to neutral
- Red Army Resurgent changes:
  - Several minor text updates/fixes in events
  - event 252 (Soviet Partisans): added multiple missing regions (where required)
  - Corrected location 2864 Baygekum (378,114) which had been set to neutral
- Stalingrad to Berlin changes:
  - Removed the German LXV Corps from the game. They controlled V-1 and V-2 units
  - Corrected location 2864 Baygekum (378,114) which had been set to neutral
- Vistula to Berlin changes:
  - Adjustments for new Cav Security Squads and Security Squads 43
  - Fixed unit that renames to the 36th SS Grenadier Division so it retains the SS non-elite status after the rename.
  - Corrected location 2864 Baygekum (378,114) which had been set to neutral
- Steel Inferno 1943 Campaign changes:
  - Removed the German LXV Corps from the game. They controlled V-1 and V-2 units
  - Adjustments for new Cav Security Squads and Security Squads 43
  - Removed some types of squads that are not yet available in July 1943
  - Corrected location 2864 Baygekum (378,114) which had been set to neutral
  - 55 BAP-PF had its airbase assignment removed. It is Locked in the FE TB.
  - 221<sup>st</sup> Rifle Division had its TO&E updated with Experience and Morale set to 50.
  - 341 TBAP (in the Reserve with Zero aircraft) had its aircraft changed to the B-25D for cosmetic purposes.
- Steel Inferno 1944 Campaign (May Start) changes:
  - Removed the German LXV Corps from the game. They controlled V-1 and V-2 units
  - Adjustments for new Cav Security Squads and Security Squads 43
  - Corrected location 2864 Baygekum (378,114) which had been set to neutral
  - 1 GShaP had its Naval Only Status removed.
- Steel Inferno AG C - Kutuzov to Bagration changes:
  - Added FBD 1 plus 2 rail repair battalions
- Steel Inferno Western Ukraine changes:
  - Added FBD 2 plus 3 rail repair battalions
  - Fixed some Soviet airgroups that were equipped with planes that were not in production yet

- Linked several photos to events
- Steel Inferno Drama on the Daube - H2H changes:
  - Added impassible hexes along the border between Rumania and Bulgaria to prevent Soviet units from crossing into Bulgaria, and to prevent directly supplying Soviet units from Bulgaria, prematurely. The Soviets were content to let the Bulgarians work out their own communist coup before stepping foot on Bulgarian soil. Hexes are made passable with the 'Bulgaria Switches Sides' event.
  - Freight in Sofia (NSS) reduced to 20k, Pernik to 5k. Soviets are getting way too much supply. This significant cut allows the Bulgarian forces to remain in supply but forces more supplies from the Soviets to be drawn further east.
  - Fixed II Bul. Corps rename to 7th Bul. Army
  - Added FBD 2 (Army Group South Ukraine)and FBD 8 (Army Group F) plus 4 rail repair battalions.
  - Disabled an errant US AAA Battalion
  - Linked several photos to events.
  - Note: The two Bulgarian ports have previously been set up as railyard depots and without the ports active on turn 1, so they will not receive freight by sea. Starting on turn 2, their port status will return and the player can use the top button to flip the port from import to export mode and back again in order to switch the depot to become a port depot.
- Steel Inferno Drama on the Daube – AI changes:
  - Added a few impassible hexes along the border between Rumania and Bulgaria to prevent Soviet units from crossing into Bulgaria prematurely. Hexes are made passable with the 'Bulgaria Switches Sides' event.
  - Fixed II Bul. Corps rename to 7th Bul. Army
  - Added FBD 2 (Army Group South Ukraine)and FBD 8 (Army Group F) plus 4 rail repair battalions.
  - Linked several photos to events.
  - Note: The two Bulgarian ports have previously been set up as railyard depots and without the ports active on turn 1, so they will not receive freight by sea. Starting on turn 2, their port status will return. The player can then use the top toggle port type button to flip the port from import to export mode (and back again, if desired), in order to switch the depot to become a port depot.
- Steel Inferno Kuban Bridgehead changes:
  - Added FBD 3 plus 2 rail repair battalions.
  - Linked several photos to events.
- New photos for ground elements 52 and 543, revised photo for leader 896.
- New event photos for several Steel Inferno scenarios.

#### **V1.02.45 – 18<sup>th</sup> October 2022**

##### **New Features and Rule Changes**

- Added Living Manual v1.18.pdf file in the \Manuals folder. This is up to date with changes through game version 1.02.44.

##### **Bug Fixes and AI Improvements**

- Air units in non-reserve theatre boxes stopped being set to automatic upgrades as they should be, and in fact were incorrectly being set to manual upgrades. Fixed. Now, units in non-reserve theatre boxes should spend no more than one turn, after their arrival there, in manual upgrade mode, before being set to automatic upgrades.
- Found another case where air units in the reserve could automatically upgrade even when set to manual upgrade. Fixed.

#### **V1.02.44 – 12<sup>th</sup> October 2022**

##### **New Features and Rule Changes**

**IMPORTANT NOTE: All save game and scenario files created with this or later versions may only be loaded with this or a later version. Versions prior to 1.02.44 may not load these newer save game or scenario files. Old saves and scenarios may be loaded with this and newer versions.**

- Brigades can no longer be used to create Soviet rifle corps.
- Adjusted combat so that various Mech ground elements will be considered dismounted when shot

at under 500 yards. Made it less likely they would be fired at by armored piercing direct fire at ranges over 500 yards.

- Made it so partisan type unit type units can be used and in most ways is treated as if it's a fort type unit. However, unlike a fort type unit it can retreat. Partisan type units are not used in the standard game scenarios, but are used in one of the Steel Inferno scenarios.
- When a leader is automatically replaced, the system will now attempt to find a leader of suitable rank, if one is available, before promoting a lower ranking leader.
- Removed the Vehicle Repair line from the left side of the production screen. You can still find the number of vehicles in repair on the right side of the production screen.
- Added Living Manual v1.17.pdf file in the \Manuals folder. This is up to date with changes through game version 1.02.42.

### **Bug Fixes and AI Improvements**

- In some cases the AI depot assist will not function until the game is saved and reloaded. Fixed.
- Fixed typos in logistics report loss by phase section and in send air units back to reserve text.
- Temp port was not retaining its city ID link. Fixed.
- Airbases could end up with over 20 air units, and/or over 300% of airbase capacity. Made adjustments to transfer routines to prevent this.
- The production screen aircraft build numbers for 2 German aircraft models was increasing by thousands each turn (display issue only). Fixed.
- Damage to an airbase in a temporary port hex in displaying as overlapping text in the city detail screen. Fixed.
- Unit moving onto a ferry is incorrectly able to undo its move even after moving next to an enemy unit. Fixed.
- Vehicles listed as built in the production screen incorrectly includes captured vehicles. Fixed.
- When Soviet corps are broken down, the interface should automatically select the first unit on the right unit panel. Fixed.
- Air groups in the reserve set to Manual Upgrade are automatically upgrading. Fixed.
- Some ski units were not displaying the ski unit symbol (but were getting their CV bonus). Fixed.
- Editor – Changing the 'action' in one action line in an event (example: SET TO) could change other action lines in the same way. Fixed.
- Editor - Going to the Ground Elements tab in old editor forces you into the new editor. Fixed.

### **Data and Scenario Changes**

- Changes to OB file:
  - All FKL units are now armored instead of engineer
  - Added zbV Mot. Regiment OB
  - Fixed TK SS upgrade paths
  - Adjusted number of Panzer recon elements in some OBs
  - Doubled Sdkfz 250 Recon Sections in all German units
  - Doubled Mot. Recon Section in all German units
  - Added OB for SS Mountain Sturm Brigade
- Changes to device file:
  - Unused Effect rating removed from all aircraft weapons.
  - RS-82 Rocket (0070) – Load increased from 15 to 24, Range decreased from 6800 to 0, Accuracy decreased from 8 to 2, Blast decreased from 6 to 5, Anti-Soft decreased from 92 to 80, Anti-Armor decreased from 80 to 7, Penetration decreased from 6 to 0, and HEAT Pen increased from 40 to 50.
  - RP-3 60lb SAP Rocket (0071) – Load increased from 97 to 98, Range decreased from 1700 to 0, Accuracy decreased from 8 to 4, Anti-Armor increased from 0 to 44, Penetration decreased from 6 to 0, and HEAT Pen decreased from 75 to 0.
  - 5in HVAR/HE Rocket (0073) – Load decreased from 141 to 134, Range decreased from 1650 to 0, Accuracy decreased from 8 to 4, Anti-Soft increased from 182 to 186, Anti-Armor increased from 0 to 15, Penetration decreased from 15 to 0, and HEAT Pen decreased from 125 to 90.

- RS-132 Rocket (0074) – Load increased from 50 to 86, Range decreased from 7750 to 0, Accuracy decreased from 6 to 2, Blast decreased from 11 to 10, Anti-Soft decreased from 197 to 185, Anti-Armor increased from 0 to 15, Penetration decreased from 12 to 0, and HEAT Pen increased from 62 to 75.
- 132mm M-13 Rocket (0433) – Range decreased from 9250 to 7350, Blast decreased from 15 to 9, Anti-Soft decreased from 296 to 156, and Anti-Armor decreased from 25 to 13.
- 300mm M-31 Rocket (0440) – Blast decreased from 19 to 16, Anti-Soft decreased from 419 to 348, and Anti-Armor decreased from 35 to 29.
- 300mm M-30 Rocket (0442) – Range decreased from 3100 to 2900, Blast decreased from 19 to 16, Anti-Soft decreased from 419 to 348, and Anti-Armor decreased from 35 to 29.
- Changes to Ground file:
  - Fiat 3000B (0344) renamed L5/30 – Fuel Use decreased from 71 to 15.
  - FT-17/37 (0345) – Fuel Use decreased from 71 to 24.
  - Added (import) production of panzer recon sections
- Changes to factory file:
  - German vehicle factories - all size-1 factories either removed or increased to size-2, some removed points redistributed to larger factories
  - German/Soviet vehicle factories - some size optimizations to reduce rounding losses from production modifiers
- Changes to map in maptext, hexart, hex, control, city, mapregion files:
  - Road system review in Hungary, Slovakia, Yugoslavia, Alps region between eastern France over Northern Italy and Southern Germany to Austria
  - Fixed wrong names and some layout issue of Carpathian mountain passes
  - Fixed multiple issues with map texts
  - Italian hexes in Tyrol region moved to Alto Adige
  - Some region/border changes in southern Caucasus, central/northern Italy, southern/southeastern Germany/Austria, Rumania/Hungary
  - Two swiss hexes ceded to Germany, one each from France/Italy ceded to Switzerland
  - Changes to locations:
    - 0098 Schulau renamed Wedel
    - 0246 Bad Hersfeld renamed Hersfeld
    - 2561 Telav renamed Telavi
    - 5627 Bad Langensalza renamed Langensalza
    - 5650 Puettnitz renamed Puettnitz
    - 829 Targu Ocna HUN -> RUM
- 1941 Campaign(s) changes:
  - rebuilt soviet airbases to limit their available supply, fuel and ammunition to ~50-60% of their needs
  - added 20k Axis vehicles to pool after removing 15k excess vehicles from existing units and 5k+ from delayed units
  - added 40k damaged Soviet vehicles after removing ~33k excess vehicles from existing units (mostly airbases) and ~7k+ from delayed units
  - invalid rename in unit slot 1751,8661 removed
  - invalid rename in air unit slot 2294 removed
  - Airbase units renamed: Bad Langensalza,Puettnitz
  - Airbase unit added: Stavropol
  - XVII Ital. Corps removed from Balkans (duplicate), Armored Ital. Corps in IT renamed to XVII Corps with Barbieri in command
  - Giovani Fascisti Division reduced to 75% strength
  - Savona Ital. Infantry division rebuilt as mot. Inf
  - Brennero,Venezia,Ferrara,Marche,Puglie,Arezzo Infantry Division reformed as Ital. Mountain Division
  - Piacenza, Montova, Rovigo Ital. Mot. Infantry Divisions downgraded to plain Infantry

## Divisions

-> all three had either limited motorization or had to give up motorized elements to Eastern Front or North Africa

- Piacenza remove NA transfer; Rovigo available mid 3/42, add WE transfer in early 11/42
- 303rd FKL Panzer-Pioneer Bn disabled - became part of PzDiv Schlesien while forming
- 638th French Infantry Regiment disbands mid 7/44 (became part of the Charlemagne Brigade)
- Polish/Czechoslovak unit arrival changed from Map to Reserve, all equipment except non-specialist combat and support squads removed
- 1st Polish Rifle Division arrives 9/43 with combat and support squads full
- 1st/2nd Polish Army HQs upgraded to larger late war organization and fully equipped with support squads
- other 1st Polish Army divisions arrive with 50% of their squads available, the support units are equipped with 100% support squads
- 2nd Polish Army divisions and support units arrive with 50% of their support squads filled
- Czechoslovak Tank brigade arrives with just 50% of their support squads
- 1st Czechoslovak Rifle Corps downgraded to Brigade, arrives 9/43 with just squads filled, upgrades to Division in 4/44
- 2nd Czechoslovak Rifle Brigade added, arrives 6/44, upgrades to Division in 1/45
- 3rd Ski Brigade - conflicting rename removed
- 8th Tank division - conflicting rename removed
- 20th Tank division - conflicting rename removed
- fixed minor issues and typos with events 88, 93, 94, 252.
- Road to Leningrad, Operation Typhoon, Road to Minsk, Red Army Resurgent, Destruction of Southwestern Front change:
  - fixed a small number of broken HHQ links.
  - fixed minor issues and typos with events 88, 93, 94, 252.
- Changes to icon G0344 and phot GP0756

### V1.02.41 – 4<sup>th</sup> September 2022

#### New Features and Rule Changes

**IMPORTANT NOTE: All save game and scenario files created with this or later versions may only be loaded with this or a later version. Versions prior to 1.02.37 may not load these newer save game or scenario files. Old saves and scenarios may be loaded with this and newer versions.**

- The odds brackets for the loss of combat preparation points (CPPs) have been changed slightly from v1.02.39. They are now as follows:
  - Deliberate attack
    - <20 to 1 odds – 50% reduction
    - >=20<35 to 1 odds – 40% reduction
    - >=35<50 to 1 odds – 30% reduction
    - >=50 to 1 odds – 25% reduction
  - Hasty attack
    - <20 to 1 odds – 50% reduction
    - >=20<35 to 1 odds – 35% reduction
    - >=35<50 to 1 odds – 20% reduction
    - >=50 to 1 odds – 10% reduction
- Lowered front line attrition by roughly 30%, although it is still roughly double what it was in 1.02.32.
- Amphibious HQ units may no longer enter ferry hexes.
- Added visibility to losses due to front line attrition in logistics report losses by phase section.
- On map units in reserve mode will no longer commit into hasty attacks.
- Reduced the amount of lend lease vehicles received by the Soviets per turn as follows:
  - 1943 - 4500 -> 2500
  - 1944 - 6000 -> 4000
  - 1945 - 1500 -> 1000

- Improved the system for sending back non-standard OB ground elements during the logistics phase and when building up units. The system will be less likely to send items that don't match the items in the unit TOE, and will better account for items that are subbing in for non-standard items. However, there is still a chance that items will be sent back due to limited slots and/or having non-standard items.
- Audited flak code to bring air phase and ground phase flak into alignment. The changes are expected to bring down flak losses in some cases in the air phase, while increasing them in some cases in the ground phase.
- Air unit transfers in the ground phase are no longer reported in the logistics report. These had been getting reported to both players. Now, only air unit transfers that happen during the logistics phase are listed in the logistics report, and this info is not in the enemy report.
- Editor Clarification – To create a temp port in the editor, first set the x,y coordinate, player and nation for a location slot, name the slot. Next, with that slot selected, press the Build Temp Port option.
- Added Living Manual v1.16.pdf file in the \Manuals folder. This is up to date with changes through game version 1.02.41.

### **Bug Fixes and AI Improvements**

- Air group renaming does not change aircraft as listed in the rename. Fixed.
- Rallying appears to be automatic and not dependent on range to HQ. Fixed.
- Axis vehicles in depots goes negative, resulting in millions of vehicles. Fixed.
- Soviet unit gets freight from an Axis depot. Fixed.
- In some cases, airbases with aircraft never received any ground elements. Fixed.
- Editor - Can't delete objective cities from campaign victory screen. Fixed.

### **Data and Scenario Changes**

- OB.dat file changes – Soviet Mountain units now have their own OB chains and they are unbuildable. A few other minor OB changes.
- Factory.dat change – Complete review of vehicle factories in Soviet Union, Axis minor and occupied countries. Reduced vehicle overproduction in Germany.
- 1941 Campaign(s) changes:
  - 50k damaged vehicles added to Soviet pool
  - several low-priority depots added to supply frozen units in Hungary, Rumania and Slovakia
  - Tyrol removed from Italian Theater Box
  - several small scale fixes to events
  - several units slightly moved and/or reassigned in Rumanian sector to better match historical positioning/command structure
  - fixed OB issue for 718th Static division rename
  - 66th Flak Regiment now moves to West in 4/43
  - all Italian Coastal Divisions are now TB-locked
  - Added three Italian Flak, one SP Gun and three Tank Destroyer Battalions (1/43)
  - LXXXX corps reformed into 5th Panzer Army, arrives 3 turns later
- Stalingrad to Berlin and Vistula to Berlin – several minor changes to depots and AOG air profiles allowed.
- Destruction of Southwest Front – Added 15k damaged vehicles to Soviet pool.

### **V1.02.39 – 2nd August 2022**

#### **New Features and Rule Changes**

**IMPORTANT NOTE:** All save game and scenario files created with this or later versions may only be loaded with this or a later version. Versions prior to 1.02.37 may not load these newer save game or scenario files. Old saves and scenarios may be loaded with this and newer versions.

- Increased general front line attrition (damage/destruction of ground elements in units next to an enemy controlled hex).
- Increased the chance of leaders being dismissed due to perceived poor performance.
- Increased the base costs of dismissing Soviet Front/Army/Corps leaders.
- The loss of combat preparation points (CPPs) by attacking units, instead of always being a 50% reduction in CPP, is now based on the type of attack and the final combat odds:



- Deliberate attack
    - <10 to 1 odds – 50% reduction
    - >=10<20 to 1 odds – 40% reduction
    - >=20<50 to 1 odds – 30% reduction
    - >=50 to 1 odds – 25% reduction
  - Hasty attack
    - <10 to 1 odds – 50% reduction
    - >=10<20 to 1 odds – 35% reduction
    - >=20<50 to 1 odds – 20% reduction
    - >=50 to 1 odds – 10% reduction
- When the sub units of an Axis Division or Soviet Corps reform into the larger unit, the unit with the lowest CPP value is weighted as if it was two units, when calculating the unit CPP. Example: When units with 25, 50, and 100 CPPs recombine, the combined unit will have 50 CPPs  $((25 \times 2) + 50 + 100 / 4)$ .
- Adjustments to ground combat:
  - Reduced AFV losses, focusing on reducing the extreme losses of AFVs by the losing side (90%+). Now, as AFV losses climb, there will be a chance that the remaining AFVs will try to refrain from engaging in combat.
  - Increased the willingness of armored cars to engage soft targets.
  - Small increase in fire against soft targets.
  - Reduced the amount of shots taken by medium flak ground elements, more so against soft targets than AFVs.
- Changes to Max TOE for Axis units in non-reserve theatre boxes:
  - Units will normally have their Max TOE automatically set to 100 when in a non-reserve theatre box.
  - Axis non-motorized, non-elite units, in non-reserve theatre boxes will have their TOE's lowered if they do not have the sufficient manpower in their national active manpower pool as follows:
    - a) German non-motorized, non-elite units, will be set to Max TOE of 80 if the German active manpower pool begins the turn below 150,000. They will have Max TOE set to 65 if the pool begins the turn below 75,000.
    - b) Italian, Romanian, and Hungarian, non-motorized, non-elite units, will be set to Max TOE of 80 if their national active manpower pool begins the turn below 20,000. They will have Max TOE set to 65 if the pool begins the turn below 10,000.
    - c) Finnish non-motorized, non-elite units, will be set to Max TOE of 80 if their national active manpower pool begins the turn below 10,000. They will have Max TOE set to 65 if the pool begins the turn below 5,000.
    - d) Slovakian non-motorized, non-elite units, will be set to Max TOE of 80 if their national active manpower pool begins the turn below 2,000. They will have Max TOE set to 65 if the pool begins the turn below 1,000.
- Removed the additional sound effect clean up routines added in 1.02.32 as they were unnecessary and they caused some bad side effects.
- Adjusted ground support commitment routines to better ensure that there will rarely be more than 300 aircraft committed to any one battle. Also, increased the chance that the Soviets will commit less bombers to any battle before 1943.
- Increased the chance that level bombers will destroy or damage an element when conducting ground support (more so for defensive ground support), as opposed to just disrupting.
- Soviet vehicle mobilization during the first 10 turns of the war will now mobilize 60% of the original number of vehicles. Instead of 260,000 vehicles mobilized, The Soviets will mobilize 156,000 vehicles.
- Changed the display of air unit range circles shown in the AOG view for fighters and fighter-bombers that are set to Mission: Fighter. They used to show a purple line equal to their escort range, but now, they show the purple line equal to their combat (intercept/patrol) range. The unit detail screen has been changed so that for fighters and fighter-bombers set to mission:fighter, show escort range/intercept (combat) range. Clicking on a hex with an airbase in the normal map view (with no ground unit in the hex), will still show both the green (escort range) circle, and the

- purple (combat range) circle, for each air unit at the airbase.
- Added x and y coordinate columns to the CR screen for ground units.
- Entrained units are no longer susceptible to first winter rules.
- The Reinforcement & Transfers screen now has a new Renames tab under the Units and Air Groups tabs. The Renames tab shows all scheduled ground and air unit renames, as well as some information about these renames.
- Editor – A new editor is under construction. It is possible to switch back and forth between the new and the old editors when on the editor main screen. The old editor is still fully functional, except for unit and air group renames. These renames must be done in the new editor. Each rename no longer takes up a slot in the editor. Instead, all the rename info is contained in the original unit's slot. Note there is now expanded search capability. For a directed search with multiple words, start with a quote (“) sign to limit the search. The new editor has improved use of larger screens and in-game scaling, but is not yet fully functional. Work is continuing to complete full functionality in the new editor.

### **Bug Fixes and AI Improvements**

- German and Italian leaders are never promoted. Fixed.
- Ground units in the Axis national reserve were skipping key logistics routines that increase morale/experience and deal with damaged elements. Fixed.
- Fixed another bug that was causing defensive ground support to completely miss all targets.
- The Max TOE values of human controlled German units were, under some rare conditions, being altered during the Soviet AI turn. Fixed.
- Axis Allied units can merge into German units. Fixed.
- Air transport freight airdrops are benefitting when delivering to hexes with size 0 airfields (airfields starting construction). Fixed.
- Units that required a very small amount of support help were not receiving it as they should (example: Motorized Flak Companies). Fixed.
- Fixed rollover text over requested aircraft in the air directive creation panel (used to say required aircraft).
- AI – Brigades in city forts could be moved out of the city fort by the AI in a way that had it showing in two locations at once. Fixed.
- AI – Improved the Axis AI use of Max TOE settings based on manpower remaining in the national manpower pools.
- AI – Improved Axis rail repair in Road to Leningrad.

### **Data and Scenario Changes**

- OB.dat changes:
  - Added Panzergrenadier Panzer Battalion (45 x StuG-III)
  - Changed Soviet Fortified Region build limit to 50
  - Changed Axis Fortified Region build limit and AP costs as follows:
    - June 41 to Dec 42 – 4 AP / 20 build limit
    - Jan 42 to Jun 43 – 4 AP / 40 build limit
    - Jul 43 to Dec 43 – 3 AP / 60 build limit
    - Jan 44 to Dec 44 – 2 AP / 60 build limit
    - Jan 45 to end – 2 AP / 80 build limit
- Ground.dat changes:
  - changes to the Soviet 203mm and 280mm guns to prevent them from swapping out
  - 8mm Schwarzlose AAMG (0306) - Build Limit increased from 2 to 4
  - 75mm M37 Field Gun (0389) - Symbol corrected to Light Artillery
  - 105mm 31M Field Gun (0466) - Symbol and Type temporarily changed to Artillery.
  - extended the scrap date on most Italian ground elements to 1945
- Device.dat changes:
  - upgraded the Italian HEAT ratings.
  - adjusted the armor penetration of the Soviet 76.2mm F-32 gun to that of the 76.2mm L-11 gun.
- 3 new photos for ground elements 150,247,337, 1 new photo for aircraft 428
- Ac.dat changes:

- 0094 Fw 190A-8 - production reduced by 500 to account for the new A-9 '44'
- 0251 CR.42 (HU) - upgrade change from Me 210C to Bf 109G-2
- 0260 Ju 86K-2 (HU) ends in 5/42 now
- 0261 Ju 87D (HU) - +12 imports to 60, delayed to 3/43, turn import limit +2 to 3
- 0262 Ju 88A-4 (HU) - +27 imports to 80, delayed to 3/43, turn import limit +2 to 3
- 0265 Me 210Ca-1 (HU) - changed from FB to TacB
- fuel reduced for IAR 3x series aircraft and PZL 11
- add aux tank option for IAR 3x series aircraft
- gun changes for multiple Rumanian aircraft
- fuel and endurance reduction for IAR 80 series aircraft
- multiple minor data corrections
- 5 new/adjusted aircraft symbol files
- New aircraft - 0428 Fw 190A-9 1944 - available 9/44 with limited production
- Factory.dat change - IAR 39 airframe production moved to Bucharest (SET)
- Nat.dat changes:
  - Albania: Oil/Fuel production 1941-45 from 0 to 100%
  - Luxembourg: Resource production 1941-45 from 0 to 100%, Supply production 1941-45 from 0 to 40,90,90,110,90
  - France: Fuel production 1941-45 from various percentages to 100%
  - Italy: Manpower production 1944-45 from 300 to 50, Armament production 1944-45 from 100 to 50
  - Yugoslavia: Fuel production 1941-45 from various percentages to 100%
- Map Changes to hexart/hex/control/city/maptext .dat files:
  - Location changes
    - 291 Rheine 114,173 -> moved 1 click W to 113,173
    - 1016 Imely Slov -> HUN
  - Hex changes
    - 113,172 missing border added
  - Other changes
    - small rail changes around Venlo and Enschede
    - rail rearranged in Leningrad
    - very limited rail changes in BUL/YUG
- 1941 Campaign(s) changes:
  - Reduced the German vehicle pool by 20,000 to 5,000.
  - Reduced the per turn admin points received by the Germans to 14 and the Soviets to 20.
  - Event 87 changed to make Bosnia & Herzegovina an off map Soviet area.
  - Changed event 156 to bomb fuel/railyard factories with 3 raids of 25 damage
  - Fixed event 160 to bomb airframes
  - Increased pool of Panhard 178 Armored Cars to 140
  - Replaced 223B armored cars in 4 units with 223 armored cars
  - Locations
    - 0943 Dubova at 157,203 deleted and factories removed, locally enforced location not present in generic data
    - 1443 Torn at 161,162 deleted, locally enforced airbase not present in generic data, possible confusion with Torun (Thorn in German)
    - 3857 Le Bourget at 0,0 deleted, locally enforced location not present in generic data
    - 5847 Kotelnikovo at 173,170 deleted, locally enforced airbase not present in generic data, possible confusion with an airbase near Stalingrad
  - Land Units
    - x ITALY x
      - 48th Taro Infantry Division moved to Balkans
      - 52nd Torino Infantry Division - IT transfer delayed to end of 3/43 (destroyed in/around Stalingrad)
      - 75mm M34 mountain gun replaced with older M15 gun, 50 guns each placed in pool for M11 Field and M15 mountain gun
    - x HUNGARY x

1st Infantry Brigade becomes 1st Security Division in 10/42 and move to SG  
 2nd Infantry Brigade becomes 102nd Security Division in 10/42  
 3rd Infantry Brigade disbands 8/41  
 21st Infantry Brigade becomes 121st Security Division in 8/43  
 8th/9th Border Guard Brigades made Axis-Elite - these were actually mountain troops, built to higher strength/exp/morale  
 1st Security Division transformed into rename from 1st Infantry Brigade  
 1st mot. Brigade transfers to West early 12/41 but comes back to AR in 5/42  
 2nd mot. Brigade disbands early 12/41  
 1st Armored Division rename moved forward to 1/42  
 2nd Armored Division changed to separately arriving division, 1/44 in Kecskemet  
 2nd Security Brigade transformed into 2nd Cavalry Brigade, disbands mid 12/43  
 9th Security Brigade disabled  
 31 CSABA armored cars added to pool  
 x RUMANIA x  
 Army Group Antonescu is removed on turn 19  
 x GERMANY x  
 721,723,743,745,751,773,830,834,849 LW Light Flak Bn - Remove -> Disband  
 641 LW Mixed Flak Bn - Remove -> Disband  
 142,245,323,342,363,384,541,662 LW Heavy Flak Bn - Remove -> Disband  
 West schnelle Brigade - add lots of converted French SP guns instead of German ones to provide the approximate amount of them historically available  
 Rhodos Sturm Division - remove rebuild restriction  
 334th Infantry Division had PzJ II changed to Marder I  
 338th Static Division changed to infantry-type OB  
 344th Static Division delayed to mid 9/42  
 43rd Sturm Pioneer Bn disbands early 4/42 - became part of GD Div  
 90th Stug Battery disbands 9/43 (Afrika unit)  
 287th Stug Battery - disband delayed to 5/43  
 x SOVIET x  
 137,430,515,522,527 BM Howitzer Bn changed from 280mm to 203mm gun  
 32,34,245,315,316,317 High Power Artillery Bn - add two damaged guns  
 40,226 High Power Artillery Bn - 6+6 guns reduced to 4+2  
 280mm Br-5: 12 guns added to pool  
 203mm B-4: 170 added to pool

- o New Land Units
  - 102nd Hun. Security Division, 10/42 from 2nd Ind Bde
  - 1st Reserve Panzerjaeger Bn - arrives 8/42 to AR (locked) and disbands a turn later. Provides 170x Marder I
  - 1st Reserve Mixed Artillery Bn - arrives 8/42 to NA (locked) and disbands a turn later. Provides 23x Lorraine sFH, 50x 25-pounder and 12x sIG33-II
  - Added frozen Rumanian fort units to Constanta and Sulina, Axis Elite with 60 exp/morale and fort-level 3 (Coastal Defense units)
  - LXX Corps transfers to Norway instead of Finland
  - 757<sup>th</sup> Pioneer arrives in Norway instead of Finland
- o Air Units
  - x GERMANY x
  - Stab/KG 26 will arrive with He 111 torp bombers
  - I-III/KG 26 will become naval-only with He 111 torp bombers in 2/42
  - KG 77 (except IV.) becomes naval-only with Ju 88 Torp bombers in 7/43
  - x HUNGARY x
  - some air units renamed
  - Para Transport Sqn will become 1st Transport Sqn
  - II./1st Fighter Group will become I./101st fighter Group in 5/44 flying G-6, remove disband
  - I./2nd Fighter Group will become II./101st fighter Group in 9/44 flying G-14, remove disband

I./5th Fighter Group will become 102nd Fighter Group flying G-6 and III./101st flying G-10 in 1/45

I+II Recon Squadrons changed from disband to rename into 1+2 Squadron of 4th Recon Grp

Both units of 3rd Bomb group disband on T90 (3/43)

1/102nd FB Group changed into group-sized 102nd FB Grp arriving late 12/43 with Me 210

1/102nd DB Sqn changed into 102nd DB Grp

2/102nd DB Sqn changed into 102nd Bomb Grp flying Ju 88A-4, renames from II./4th bomb Grp on T90 (3/43)

102nd Assault Bomb Grp delayed to mid 12/44 flying Fw 190F, renames from 102nd DB Grp

multiple rename slots or arriving units disabled/removed

- Destruction of SW Front changes:
  - RUMANIA  
Army Group Antonescu is removed on turn 19  
Added frozen fort units to Constanta and Sulina, Axis Elite with 60 exp/morale and fort-level 3 (Coastal Defense units)
  - HUNGARY  
8th/9th Border Guard Brigades made Axis-Elite - these were actually mountain troops, built to higher strength/exp/morale  
31 CSABA armored cars added to pool
  - SOVIET  
137,430,515,522,527 BM Howitzer Bn changed from 280mm to 203mm gun  
34,245,315,316,317 High Power Artillery Bn - add two damaged guns  
203mm B-4: 44 added to pool
- Red Army Resurgent changes:
  - 75mm M11 field guns replaced by M37 ones in Italian units
  - 37mm Anti-tank guns replaced by 40mm Anti-tank guns in frontline Hungarian units
- Stalingrad to Berlin changes - added the 153<sup>rd</sup> Field Training Division to the Axis OOB

### V1.02.32 – 23<sup>rd</sup> June 2022

#### New Features and Rule Changes

**IMPORTANT NOTE: All save game and scenario files created with this or later versions may only be loaded with this or a later version. Versions prior to 1.02.32 may not load these newer save game or scenario files. Old saves and scenarios may be loaded with this and newer versions.**

- HQs on map and in the national reserve may now be placed into refit mode. This can be done on the CR screen or by right clicking on the unit within the Reserve box on the map.
- Added more frequent use of clean up routines for processes created by sound effects.
- Editor - Added an option to disable the Soviet ability to create new units. When disabled, the build new unit menu button does not appear (and the hotkey will not function).
- Editor - Added a function to clear all ground element and aircraft production pools.
- Editor – Added a function to remove off playable map depots, and zero out their vehicles and freight.
- Errata: Undocumented rules - For a deliberate attack there are some important modifiers. If the attacker (in the current phase) or the defender (in the previous phase) has moved the relevant HQ there is a -1 modifier to the chance of a Support Unit being committed. If the attacker has not moved their HQ in the current turn, then there is a +3 bonus to the chance of a Support Unit commitment.
- Errata: In addition to the rules above, a Soviet Rifle Corps can be formed with 3 rifle brigades. This will follow the usual rules for Guards/non-Guards status and will need at least one turn to refit to full strength
- Added Living Manual v1.13.pdf file in the \Manuals folder. This is up to date with changes through game version 1.02.27.

#### Bug Fixes and AI Improvements

- Crash in CR screen after filtering down a list of units that had been created by clicking in the

Production screen on the number of units using a specific weapon (like Romanian Rifle Squad 39). Fixed.

- Airbase units switch support to Hiwis but get no support. Fixed by never allowing Hiwis into airbases. This will also correct existing games.
- Airbases don't send men back to the pool when no a/c are at the base. Fixed.
- Scroll is missing from list of cities in campaign victory screen. Fixed.
- Editor - CR/Production link for units with a specific weapon produces incorrect numbers when filtering on the CR screen. Fixed.
- Editor - Improved ability to move/edit air groups without altering AOG assignments.
- Editor - Generic factory data is displaying incorrectly in editor. Fixed.

### **Data and Scenario Changes**

- 1941 Campaign(s) changes:
  - 19th Panzer division - OB change to Czech tank based PzDiv OB 31, added some missing ground elements
  - 8th Italian Army - arrives directly to MAP
- Ac.dat file changes:
  - finetuning for some Italian airframe factories
  - slight capacity reduction for 1944 Bf 109 airframe factories
  - slight capacity reduction for late 1944 Ju 88 airframe factories
  - changes to SM.82 production
  - Reduced forward guns to 1 for Pe-2 recons
  - Improved loadouts of Ju 88A-4 and He 111H
- Map Changes to city, factory, hex, hexart, maptext and unit generic .dat files:
  - Off map changes
    - Road and rail system in Finland and bordering soviet area
    - Road systems in northern Norway, Bulgaria and in parts of Greece/Yugoslavia with minor rail changes
    - Rail/border review Turkey/Syria and road/border review Soviet/Iran with minor changes
    - three new Finnish locations
  - On map changes:
    - Beloretschenskaya renamed Belorechenskaya
    - Goryachy Klyuch moved from 261,202 to 263,201
    - Heilsberg moved from 166,154 to 167,155
    - Volnovakha moved from 248,183 to 249,183
    - Road system review in Rumania with minor rail changes
    - Partial review of road system in Hungary
    - fix river layout/conflicting river data around Nikopol(e)
- Ground.dat and device.dat changes:
  - increase in 88mm and 105mm flak gun production
  - addition of captured Soviet 76mm 3-K and 85mm KS-12 re-bored to new 88mm devices 510 and 511
  - re-classified Czech tank (Panzer 35(t), Panzer 38(t) and Panzer 38(t)E from medium to light tanks
  - addition of 76.2mm FK39(r) field gun so the Germans can use captured Soviet 76.2mm USV field guns
  - over 125 other minor changes to ground elements
- Photos for ground elements 290, 424,540,541
- Ob.dat changes – Added reduced size Soviet Rifle Corps to be used in future scenarios.

### **V1.02.29 – 13<sup>th</sup> May 2022**

#### **New Features and Rule Changes**

- Several tweaks were made to reduce the intensity of air to air combat.
- Added a line to the scenario victory screen to display victory points scored from Events (campaign victory screen already shows event points).
- Editor – Added the ability to Lock Generic Data in a scenario file. On the main tab in the editor, selecting yes will allow you to alter generic data in your scenario file, save the changes in your

scenario, and not have the changes overwritten when loading the scenario. This functions as it did in WitW. There are 16 generic/semi-generic files. When you have these locked, there is the ability to either update your scenario with all of these files, or check just those you want to use to update and click on the 'update selected generic data' option. Locking the generic data in a scenario file will only impact the scenario. Note that for the 3 semi-generic files, only some of the data in these files have been treated as generic (i.e. things like depot levels and storage in cities are not generic and never required locking in order to make changes in each scenario, while the name of a city is generic and to change this in a scenario would require locking). Note: Currently you will not see all the generic files listed if using a minimum resolution display. A height of at least 960 is required. This will be corrected in future versions when we add in-game scaling to the editor.

- Editor – Added the ability to set starting number of ships in the production screen. Also added the ability to set the number of ships in Lake Ladoga.

### **Bug Fixes and AI Improvements**

- Combat execution slowdown caused by a bug fix in v1.02.27. Fixed.
- Theater box garrison values, and CV values of units in the unit display were dropping the 0 to the right of the decimal place (i.e. 0.08 was displaying as 0.8). Fixed.
- At minimum resolution, in the production screen the number of ships was not displaying in all sea zones. Fixed.
- Game crashed during set weather phase of the logistics phase. Fixed.

### **Data and Scenario Changes**

- Ob.dat file changes:
  - Fixed Sturm Brigade so that it fields 88 FlaK instead of 88 PaK
  - Removed the Soviet "upgrade" from Corps Artillery Regiment to Corps Artillery Battalion
  - Renamed Reduced Shtat Rifle Division OBs to Reduced Shtat RDs so they are not created by combining two rifle brigades. These OBs are intended for smaller scenarios and their size has been set to brigade.
- Ground.dat and device.dat files – Several minor corrections including but not limited to:
  - 12.7mm Breda AAMG corrected to size 1
  - speed of the Panzer Pioneer 44 squad corrected to 6
  - Soviet Churchill IV 6 Pounder accuracy corrected to 675
- Stalingrad to Berlin changes:
  - III./ZG 1 - Aircraft Change - Bf 109E-7 to Me-210A-1 in [IT] TB (aircraft added)
  - All Medium SU and Light SU depleted units removed from the [SR] TB. They will have to be built using the Build Function.
  - IV./JG 3 Renames to IV(Sturm) JG 3 on Turn 77 after receiving the Fw 190A8/R8
  - II./JG 300 Renames to II(Sturm) JG 300 on Turn 81 after receiving the Fw 190A8/R8
  - JG 301 Unlocked in the [WE] TB as part of it fought over Ploesti
  - I./JG 302 Unlocked in the [WE] TB as it fought over Budapest
  - All Groups of ZG 1 and ZG 26 set to Trained as Fighter for Reich Air Defense
  - Norway Panzer Division removed from [NO] TB
  - Norway Panzer Brigade replaced German AFVs with Foreign AFVs
  - 21st Tank Division removed from [NF] TB. It was replaced by three Tank Brigades (103rd, 104th and 168th)
  - In the {SR} Theater Box the following changes were made:
    - 16th Rifle Division Delayed to Turn 14 and reduced to 5% strength
    - 62nd Rifle Division Delayed to Turn 22 and reduced to 5% strength
    - 124th Rifle Division to 5% strength
    - 174th Rifle Division Delayed to Turn 22 and reduced to 5% strength
    - 184th Rifle Division to 1% strength
    - 187th Rifle Division transferred to [FE] TB\* and Locked in TB
    - 201st Latvian Rifle Division Renamed to 43rd Latvian Guards Rifle Division
    - New 201st Latvian Rifle Division arrives on Turn 53
    - 207th Rifle Division arrives Turn 30 and reduced to 1% strength
    - 230th Rifle Division arrives Turn 30 and reduced to 1% strength
    - 231st Rifle Division transfers to [FE] TB\* and reduced to 1% strength
    - 242nd Rifle Division (No changes)

- 255th Rifle Division sent to [FE] TB\* at 50% strength
- 259th Rifle Division (No changes)
- 261st Rifle Division transferred to 45th Army in [TC]\* TB
- 264th Rifle Division Renamed to 48th Guards Rifle Division Delayed to Turn 35 and to [FE]\* TB
- 268th Rifle Division is now a Reserve of Leningrad Front (On Map)
- 271st Rifle Division a reinforcement arriving at Nazran (294,196) North Caucasus Front
- 275th Rifle Division Delayed to Turn 33 in [FE]\* TB
- 289th Rifle Division now Locked in [NF]\* TB
- 292nd Rifle Division Delayed to Turn 33 in [FE]\* TB and at 1% strength
- 296th Rifle Division Delayed to Turn 33 in [TC]\* TB and at 1% strength
- 297th Rifle Division Delayed to Turn 32 in [SR} TB and at 1% strength, and to Map on Turn 36
- 301st Rifle Division Delayed to Turn 33 in [SR] TB and at 1% strength, and to Map on Turn 37
- 313th Rifle Division to [NF]\* in 7th Independent Army
- 319th Rifle Division Delayed to Turn 38 in [SR] TB at 1% strength, and to Map on Turn 42
- 329th Rifle Division Delayed to Turn 55 in [SR] TB and at 1% strength, and to Map on Turn 59
- 335th Rifle Division Delayed to Turn 77 in [FE]\* TB at 1% strength
- 340th Rifle Division Delayed 3 Turns and Arrives at 246,147 (Krasnoksny) as part of Voronezh Ft
- 341st Rifle Division Delayed to Turn 76 as part of Karelian Ft [NF]\* TB
- 349th Rifle Division joins 45th Army in [TC]\* TB at 50% strength
- 350th Rifle Division (No changes)
- 351st Rifle Division to Map at Grozny at 70% strength on Refit
- 355th Rifle Division Delayed to Turn 107 in [SR] TB at 1% strength, and [FE]\* on Turn 111
- 361st Rifle Division Delayed to Turn 106 in [FE]\* TB
- 363rd Rifle Division in 35th Army [FE]\* at 1% strength
- 365th Rifle Division in [FE]\* TB at 1% strength
- 367th Rifle Division sent to [NF]\* (32nd Army)
- 32nd Army added to [NF]\*
- 393rd Rifle Division to [FE]\* TB at 1% strength on Turn 103
- 411th Rifle Division Disbanded (June 1942)
- 421st Rifle Division Disbanded (February 1942)
- 86th Guards Rifle Division to [SR] on Turn 22 (April 15, 1943)
- All Airborne Corps Reduced to 100% of TO&E

(An \* means the unit is Locked in the relevant TB)

After these changes Ground TB Strengths are as Follows:

|                     |     |
|---------------------|-----|
| Northern Front      | 97% |
| Transcaucasus Front | 99% |
| Far East Front      | 93% |

#### V1.02.27 – 22<sup>nd</sup> Apr 2022

##### New Features and Rule Changes

- Air units with custom loadouts are now set to Auto loadout, during the logistics phase, if the availability date of their loadout has passed.
- Increased the fuel used by aircraft each time they engage in air to air combat, thus reducing their ability to engage large numbers of enemy aircraft in any one mission.
- Editor – Changed the default air doctrine settings that are created when the Init Air Doctrines function is used on the air doctrine screen in the editor.
- Manual Addendum: Fighters, and fighter bombers with a Mission setting of Fighter, display their escort range for radius in their air unit detail screen. Fighter bombers with a Mission setting of Bomber, display their combat range (in this case bombing range) for radius in their air unit detail screen. When the range circles are shown on map using the AOG functionality if the unit consists of fighter bombers one of two circles will be shown. If its Mission setting is Fighter, the purple



circle will show the area within which it can escort missions. If the FB's Mission setting is Bomber then a purple circle will be shown indicating the range over which the plane can fly to strike a ground target. This distance is 4/3 further than the escort range, but is usually then lowered due to having a bomb loadout (this can be checked on the load out tab for the air unit). If an airbase has aircraft but no ground units present in the hex, then left-clicking on the hex will generate one or two range circles depending on the aircraft at the airbase. The green circle is the greatest escort range of any fighters or fighter bombers with Mission set to Fighter that are at the base. The purple circle is the greatest combat range of any air unit at the base. So if the airbase only has level bombers only the purple combat range circle will be shown but for fighters and fighter bombers with their Mission set to Fighter, both the shorter escort and the combat range circles are shown.

- Added Living Manual v1.12.pdf file in the \Manuals folder. This is up to date with changes through game version 1.02.27.

### **Bug Fixes and AI Improvements**

- Several bug fixes and adjustments for flak:
  - Defending side ground support was not being properly fired at by attacking side flak support units. Fixed.
  - Axis flak during June 22 1941 turns was being reduced along with Soviet flak. Fixed.
  - Flak and bombing for air units that were diving down to 1000 feet were not being handled correctly for ground support. Fixed.
  - The listing of the number of guns being reported in the battle report as contributing flak has been improved to be more accurate re the exact number of guns that contributed flak value against the enemy air mission.
  - The current turn column of the losses screen was often showing higher flak losses than were actually occurring. Fixed.
  - Other miscellaneous changes/improvements were made as the flak code was reviewed.
- Several fixes were made involving displacement of HQs and support units in the HQs:
  - Support units in non-isolated HQs in isolated hexes (units just surrounded during the current player turn) are being destroyed when forced to displace. Fixed.
  - HQ units in airhead supply that are forced to displace are being destroyed. Fixed.
  - AI – AI support units in HQs that voluntarily displace, while isolated or in airhead supply, are not being destroyed. Fixed.
- Air units, on vary rare occasions, have 255 damaged aircraft. Fixed.
- Units in city forts, and fort type units, are prepping for amphibious invasions, which causes several issues when an invasion is ordered. It was not intended that these units be allowed to prep for invasions. This has been blocked so no further preparation is possible. If you have been prepping any of these kinds of units, we strongly advise you not launch an invasion while those units are still in the hex with the amphibious HQ.
- AI and AI Air Assist – Improved the air AI so it tries not to fly air transport missions in bad weather except to resupply isolated units. Bad weather is heavy rain, snow and blizzard. Other improvements to air transport missions were made, including eliminating missions to hexes more than 25 hexes from supplied enemy units.

### **Data and Scenario Changes**

- Ob.dat file – Removed duplicate AT-rifles in OB slot 272.
- 1941 Campaign(s) changes:
  - Adjusted starting air directives, air doctrines and pilot pools. Note: We've tried to improve the Axis 22 June 1941 airfield attacks and other air directives, causing as much damage to the Soviet air force while reducing Axis air losses where possible. For players using the AI Air Assist, you'll want to push the button to activate it on turn 2 (if using auto AI air assist, this will happen automatically). Experienced players are free to delete these air directives (easiest from the Air Directive Summary screen) and create their own. Changes to the starting air doctrines have also been made to generally maximize effectiveness and minimize losses. Players are encouraged to review the standard air doctrines, experiment with changes, and adjust them to suit their air force play style and goals.
  - Added event 137 alerting the Soviet player of the imminent disbanding of rifle/mech corps HQs.

- Changed several Axis Baltic ports to export ports.
- Changed depot priorities of Bucharest and Buzau to 1.
- Changes to land units:
  - 999th Afrika Mot Bde - rename removed, demotorized, set to 65 exp/morale (penal unit) split into Two Inf Rgts, one Pioneer Bn and two 105mm Howitzer Bns
  - III/999 Howitzer Bn demotorized, changed to 105mm Howitzers, renames to 645th in 4/45
  - IV/999 Howitzer Bn removed, became part of Sturm Div Rhodos
  - 41st Fortress Div - arrives 8/43 directly to BA with squads at full strength (except motorcycles, unit comprised of 999th Inf Bns)
  - all 999th set to rebuild restricted (except III/999th Howitzer Bn)
  - all 999th start with full-strength squads, just lacking MG and heavier weapons
- New land units:
  - III+IV/999th Construction Bns added to WE (8/44)
  - I/999 Fortress Inf Bn added to BA (mid 5/43), mid 2/44 to AR
  - XIV+XV+XVII/999 Fortress Inf Bn added to BA (10/43), 12/43 to AR
  - XXIII/999 Fortress Inf Bn added to WE (8/44)
- Air unit changes:
  - JGr Sued available early 2/42, renaming from new Erg-Stfl/JG 27
  - II./JG 1 transformed into rename from new Erg-Stfl/JG 3
  - III./JG 1 transformed into rename from new Erg-Stfl/JG 52
  - IV./JG 1 transformed into rename from new Erg-Stfl/JG 26
  - I./JG 4 delayed to mid 12/42, transformed into rename from new Erg-Stfl/JG 77 via Oelschutzstaffel/JG 77, change to Bf 109G-2
  - Stab/JG 6 rename source changed to delayed Stab/ZG 26
  - I./JG 6 rename source changed to V./KG 40, delayed to 10/44
  - II./JG 6 rename source changed to 5./BoFIGr 196
  - II./JG 7 becomes IV./JG 301 in late 11/44
  - 10.(Jabo)/JG 26 disbands in early 10/43, after rename to Jabo/JG 54 it renames back to Jabo/JG 26 in 6/43
  - IV./JG 26 transformed into rename from second incarnation of II./ZG 76
  - IV./JG 54 rename to II./JG7 added for 2/45
  - I./JG 76 changed rename source unit to new Aufklar-Stfl XI Flgkorps
  - 1.(Z)/JG 77 rename chain updated: 6.(Z)/JG 5->10.(Z)/JG 5 -> 13.(Z)/JG 5 -> IV./ZG 26, add 8/44 TB transfer to NO
  - JGr 200 transformed from rename to reinforcing unit
  - IV.(Sturm)/JG 300 (removed Sturm designation), transformed into rename from new Aufklar-Stfl XI Flgkorps
  - IV./JG 301 transformed to rename from III./KG 1 (via II./JG 7)
  - IV./NJG 1 renames from III./NJG2 in 10/42
  - III./NJG 2 renames to IV./NJG 1 in 10/42
  - IV./NJG 2 rename source changed to II./KG 40
  - Stab/NJG 3 delayed to 9/41
  - II./NJG 3 transformed into rename from new Erg-ZGr
  - V./NJG 6 (6/43) renamed III./NJG 2, was active for just 1 month before rename
  - I./NJG 7 transformed into rename from II./KG 40
  - PzJ/ZG 1 disbands mid 9/43
  - Stab/ZG 2 disbands early 1/43
  - I./ZG 2 disbands mid 8/42
  - II./ZG 2 stays in WE and becomes TB-locked
  - Stab/ZG 26 rename removed, disbands 9/41
  - I./ZG 26 disbands 7/42 (delayed by 3 months to cover for II./ZG 2 which stays in WE)
  - II./ZG 26 disbands 4/42, stays in East until disband
  - IV./ZG 26 - rename delayed to mid 8/44, rename source changed to 1.(Z)/JG 77
  - Stab/ZG 76 delayed to 8/43 in WE with Bf 110G-2
  - I./ZG 76 transformed into rename from new Aufklar-Stfl XI Flgkorps
  - II./ZG 76 TB-locked in WE

- II./ZG 76 (8/43) change rename source to 3.(F)/AufklarGr 11, add rename to IV./JG 26 in 2/45
- III./ZG 76 disbands in late 4/44 (formation never fully completed, then abandoned)
- I./StG 1 renames to II./StG 3 in 1/42 and II./SG 3 in 10/43, add TB transfers
- II./StG 3 transformed into rename from I./StG 1
- Stab/Sch.G 1 - disband removed, renames to Stab/SG 9 in 10/43
- 10.(Pz)/SG 1 transformed from rename slot to reinforcing unit, renames to 2.(Pz)/SG 9 in 1/45
- I./SG 1 - rename source changed to delayed I./StG 1
- II./SG 3 - rename source changed to original I./StG 1
- I.(Pz)/SG 9 changed into 3.(Pz)/SG 9 (Staffel)
- 10.(Pz)/SG 77 (reinforcing) removed
- NSGr 30 rename source changed to II./KG 40
- III./LG 1 renames to III./KG 6 in 9/42
- I./KG 1 transformed into rename from KuFIGr 506 in 6/42
- V./KG 2 transformed into rename from II./KG 40
- III./KG 6 (9/42) transformed into rename from III./LG 1, adapting follow-up rename to III./KG(J) 6
- III./KG(J) 6 - rename source changed to III./LG 1
- II./KG 40 (original) locked in WE, renames to V./KG 2 6/43 -> I./NJG 7 2/44 -> IV./NJG 2 late 10/44 -> NSGr 30 late 2/45
- V./KG 40 renames to I./ZG 26 in mid 10/43 and to I./JG 6 in 10/44, some TB transfers between West and East added
- I./KG 50 renames into II./KG 40 in 10/43
- III./KG 51 (original) delayed disband to 3/44
- III./KG 51 (rename) change to Fw 190F-8
- I./KG 60 split into 1./2. Staffel, both disband early 2/43 (1. in NO, 2. in ITA)
- KGz zbV 5 renames to III./LG 1 in 5/43 (instead of TGr 10)
- TGr 10 transformed from rename to reinforcing unit (1/44 in FI), arrives with 40+40 LeO 451T
- SAGr 128 changed into 1./SAGr 128 (Staffel), transformed into rename from 5./BoFIGr 196
- SAGr 131 split into Stab/1./2., 1. from 3./406 (to AR 7/43), 2. from 3./906
- 1./BoFIGr 196 changed to Gruppe, added TB transfers to NO 4/43 and to AR in 6/44
- 5./BoFIGr 196 changed to Gruppe, renames to 1./SAGr 128 6/43 -> II./ZG 26 12/43 -> II./JG 6 7/44, added some TB transfers
- Stab/KuFIGr 406 disbands late 12/42
- 2./KuFIGr 406 disbands mid 7/43
- 3./KuFIGr 406 renames to 1./SAGr 131 and moves to AR in 7/43
- KuFIGr 506 renames to non-naval I./KG 1 in 6/42
- KuFIGr 606 disbands late 8/42
- Stab + 2./KuFIGr 906 disband 4/42
- 3./KuFIGr 906 renames to 2./SAGr 131
- 3.(F)/11 removed disband, add rename to II./ZG 76 in 8/43 and IV./JG 26 in 2/45, add 8/43 TB transfer to WE
- 3.(H)/12 disbands 1/43
- 6.(H)/13 disbands 1/43
- 1./NAGr 16 transformed into rename from new Aufklar-Stfl XI Flgkorps
- 2.(H)/31 disbands 2/44
- 2.(H)/32 disbands 1/43
- 3.+4.(H)/32 disband in late 7/42
- 2.(H)/41 disband late 12/42
- 4.(H)/41 disbands late 7/42
- 6.(H)/41 disband late 12/42
- New air units:
  - Erg-Stfl/JG 2, Staffel with 15x Bf 109E-7 in WE, becomes JGr West in 2/42

Erg-Stfl/JG 3, Staffel with 15x Bf 109E-7 in WE, becomes II./JG 1 in mid 1/42  
 Erg-Stfl/JG 26, Staffel with 15x Bf 109E-7 in WE, becomes IV./JG 1 in mid 1/42 and II./JG 11 in 4/43  
 Erg-Stfl/JG 27, Staffel with 15x Bf 109E-7 in WE, becomes JGr Sued in 2/42  
 Erg-Stfl/JG 51, Staffel with 15x Bf 109E-7 in WE, becomes I./JGr Ost in 2/42  
 Erg-Stfl/JG 52, Staffel with 15x Bf 109E-7 in WE, becomes III./JG 1 in mid 1/42  
 Erg-Stfl/JG 53, Staffel with 15x Bf 109E-7 in WE, -> 10.(Jabo)/JG 53 mid 2/42 -> 1./Jabogruppe Afrika late 8/42, disbands late 11/42  
 Erg-Stfl/JG 54, Staffel with 15x Bf 109E-7 in WE, becomes II./JGr Ost in 2/42 and JGr Nord in 9/44  
 Erg-Stfl/JG 77, Staffel with 15x Bf 109E-7 in Mizil/ROM, becomes Oelschutzstaffel/JG 77 in early 1942 and I./JG 4 in late 42  
 Oelschutzstaffel/JG 77, early 42 rename slot for Erg-Stfl/JG 77  
 JGr Nord, renames 9/44 from new Erg-Stfl/JG 54 via II./JGr Ost  
 I./JGr Ost, renames 2/42 from new Erg-Stfl/JG 51  
 II./JGr Ost, renames 2/42 from new Erg-Stfl/JG 54  
 JGr West, renames 2/42 from new Erg-Stfl/JG 2  
 10.(Z)/JG 5 - rename slot for 1.(Z)/JG 77  
 II./JG 7 (2/45), renames from IV./JG 54  
 10.(Jabo)/JG 26 (6/43), rename slot for 10.(Jabo)/JG 54 as it renamed back to JG 26  
 Erg-ZGr, Bf 110 Group locked in WE, becomes II./NJG 3 in 9/41  
 Stab/ZG 26 (10/43), renames to Stab/JG 6 in 7/44  
 I./ZG 26 (10/43) rename slot for V./KG 40, to I./JG 6 in 10/44  
 II./ZG 26 (12/43), renames from 1./SAGr 128 and to II./JG 6 in 7/44  
 Erg-Stfl (Stuka)/LG 1, Ju 87 Staffel in NO, renames to 4./StG 5 in 2/42, disbands 6/43  
 I./StG 1 (6/43), renames to I./SG 1 in 10/43  
 4./StG 5 (2/42), rename slot for new Erg-Stfl(Stuka)/LG 1  
 Stab/SG 9 (10/43) - rename slot for Stab/Sch.G 1  
 2.(Pz)/SG 9 (1/45) - rename slot for 10.(Pz)/SG 1  
 ErgGr/LG 1, LB Group in BA, renames to IV./LG 1 in 2/42, to ITA 4/42, to BA 10/42, to WE 3/43  
 III./LG 1 (5/43) - rename slot for KGr zbV 5  
 IV./LG 1 (2/42), renames from new ErgGr/LG 1  
 II./KG 40 (10/43), rename slot for I./KG 50  
 Transportstaffel 1, 10/43 in BA  
 Transportstaffel 2, 10/43 in NO  
 Transportstaffel 3, 10/43 in NO, to BA 12/43  
 Transportstaffel 4, 12/43 rename from new Savoia-Staffel  
 Transportstaffel 5, 12/43 rename from new Transportstaffel 290  
 Transportstaffel 290, 3/43 in ITA, to Transportstaffel 5 in 12/43, to WE in 7/43  
 Savoia-Staffel, 7/42 in ITA, to Transportstaffel 4 in 12/43  
 Kuestenstaffel Krim reactivated, made a naval-only Staffel with Bomber-trained Bf 110G, disbands 7/44  
 Aufklar-Stfl Ostsee reactivated, made a naval-only Staffel with Ju 88A bombers, disbands 7/43  
 2./SAGr 128, a naval patrol staffel arriving 6/43 to WE  
 Stab/SAGr 131 - 7/43 to NO  
 2./SAGr 131 - 7/43 rename slot for 3./KuFIGr 906  
 2./BoFIGr 196, naval patrol Staffel arriving 8/43 to ITA

Erg-AufklarGr/ObdH, Hs 126 recon group in WE, renames to Erg-NAGr in 4/42  
 Erg-AufklarGr/ObdL, Ju 88 recon group in WE, renames to Erg-FAGr in 4/42  
 Aufklar-Stfl XI Flgkorps, Staffel with Hs 126 in BA, to 1./NAGr 16 in 10/42 -> I./ZG76 in 8/43 -> I./JG 76 in 7/44 -> IV./JG 300 in 10/44  
 2.(H)/33 (1/42) - rename slot for 2.(F) 33

- DSWF scenario changes:

- Adjusted starting air directives, air doctrines and pilot pools.
- Added event 137 alerting the Soviet player of the imminent disbanding of rifle/mech corps HQs.
- Changed depot priority of Buzau to 1.
- Rtl scenario changes:
  - Adjusted starting air directives, air doctrines and pilot pools.
  - Added event 137 alerting the Soviet player of the imminent disbanding of rifle/mech corps HQs.
  - Changed Hel to export port.
- RtM/OpTyphoon scenario changes – Adjusted starting air directives, air doctrines and pilot pools.

## **V1.02.25 – 28<sup>th</sup> Mar 2022**

### **New Features and Rule Changes**

- Non-motorized units in the Axis non-reserve Theatre Boxes will now on occasion automatically adjust their Max TOE levels. Generally these Max TOE levels will be lower than 100% when there is less manpower available in the pool. This is something the AI was already doing, and we realized we should be doing the same for the human player forces since they cannot be controlled by the human player. The impact will be lower force levels in the Axis non-reserve Theatre Boxes, especially later in the game.
- Destroyed units that rebuild are arriving in the reserve set to 100 Max TOE. They should arrive set to 0. Fixed. Note, players will have to consciously increase the unit's Max TOE for it to receive replacements. ---- This item was originally noted as a bug fix in version 1.02.14, but as it was never mentioned in the manual, it appears it was more of a rule change to bring it in line with WitW, than a bug fix. In any case, it has been in operation since 1.02.14 and it is very important players realize these units won't take replacements until the player increases their Max TOE from 0.
- Added Living Manual v1.11.pdf file in the \Manuals folder. This is up to date with changes through game version 1.02.24.

### **Bug Fixes and AI Improvements**

- Moscow depot in isolated pocket incorrectly received freight points, due to trucks from outside the pocket returning to the depot and then converting to freight (this also incorrectly triggered airhead supply for the pocket). Fixed.
- Game crashes upon loading a save made after the German air execution phase. In the air phase a ground attack air directive had bombed units in a city fort, causing data corruption. Fixed.

### **Data and Scenario Changes**

- 1941 Campaign(s) changes:
  - General HQ North Africa (Ital.) - add disband on T116 like other NA-only units
  - Norway Army disbands at the end of 1944
  - Norway Territorial Mountain Corps - remove rebuild restriction (renames to standard-name German corps)
  - Finnish Army renamed Finland Army (name indicated Finnish unit)
  - Lapland Army changed into rename from Finland Army
  - 20th Mountain Army - rename source changed to Finland Army
  - II Luftwaffe Field Corps - remove rebuild restrictions (scheduled rename), add Schlemm as leader
  - III Luftwaffe Field Corps - disbands end of 1943, add Odebrecht as leader
  - IV Luftwaffe Field Corps - remove rebuild restrictions (scheduled rename), add Hoffmann as leader
  - IV Felderrnhalle Panzer Corps - renamed Feldherrnhalle Panzer Corps
  - V Panzer Korps - disabled, V Korps stayed/was rebuilt as standard Infantry Korps
  - Flak towers equipped with four 128mm twin guns from start (non-producible special gun), made LW-Elite with 80 Exp/Morale
  - Zoo Flak tower built to 100% strength
  - Norway Panzer Div - disabled
  - 5th Light Division, remove non-organic 10/4 (606th Flak Bn) and Panzerjäger I (605th PzJ Bn)
  - 19/20th Sturm LW Field Div - remove Sturm from name, added back via 6/44 rename

- 22nd LW Field Div - disabled, formation was delayed then cancelled
- 25th Panzer Division delayed to early 4/1943, was merely a reinforced Rgt until then
- Finland MG Ski Bde renamed Finland
- Norway Panzer Bde - arrives T119, built to full strength (no StuGs, German tanks -> French, limited vehicles)
- 1st Luftwaffen Jaeger Brigade (rename slot): Luftwaffen -> Luftwaffe, rename moved forward to 9/42
- 1st Luftwaffe Jaeger Brigade (IT, reinforcing): disabled as duplicate
- Moscow Luftwaffe Jaeger Rgt - disbands 3/43 (used to form 19th LW Field div)
- HG Fallschirm Flak Rgt - available in IT 6/43, to AR 7/44
- Cavalry Rgt Middle/North/South - remove rebuild restriction
- Cavalry Rgt South disbands at the end of 5/44 (became part of 4th Cav Bde)
- 13th Flak Rgt attached to Hannover (in Bremen from 9/42)
- 56th Flak Rgt disabled, was just commanding searchlights units, replaced by new 179th
- 63rd Flak Rgt (10/43) - renamed 76th
- 141st Flak Rgt rebuilt as I/141st Mot. mixed Flak Bn
- 241st Flak Rgt disabled, only I+II mot mixed Bns existed and they are already present
- 369th Croat Inf Rgt arrival changed from MAP/T9 to AR/T8
- I+IV/Goering LW Mot. Mixed Flak Bns made LW-Elite, disband mid 6/42 (became part of Goering Bde/Div)
- II/5th LW Mot. Mixed Flak Bn transformed into rename from new 905th Mixed Flak Bn in 11/42
- II/6th LW Mot. Mixed Flak Bn renames to I/30 in 6/44
- I/15th LW Mot. Mixed Flak Bn delayed to 10/43
- I/20th LW Mot. Mixed Flak Bn available 10/43
- I/28th LW Mot. Mixed Flak Bn starts in BA, to AR in 11/44
- I/30th LW Mot. Mixed Flak Bn renames from II/6 in 6/44
- I/33rd LW Mot. Mixed Flak Bn moves to AR 9/43
- zbV 40th Panzer Bn - renamed 40 zbV, delay disband to early 4/1943 (to 25 PzD)
- I/43rd LW Mot. Mixed Flak Bn renames to 78th LW Mot. Light Flak Bn in 2/44
- I/46th LW Mot. Mixed Flak Bn available from start at full strength (was existing as reserve unit)
- II/46th LW Mot. Mixed Flak Bn available from start at full strength (was existing as reserve units), to FI in 10/41
- I/47th LW Mot. Mixed Flak Bn present at start, built to full strength
- I/49th LW Mot. Mixed Flak Bn disbands 2/44 (became part of HG Flak Rgt)
- II/49th LW Mot. Mixed Flak Bn transformed into rename from I/491 in early 10/41
- II/52nd LW Mot. Mixed Flak Bn built to full strength (renamed from existing unit)
- I/54th LW Mot. Mixed Flak Bn built to full strength (renamed from existing unit)
- II/64th LW Mot. Mixed Flak Bn present at start, built to full strength
- zbV 66th Panzer Bn - rename 66th zbV, arrives with 12 Pz IIL (representing heavily armored Pz I/II prototypes)
- 71st LW Mot. Light Flak Bn rebuilt as SP version
- 72nd LW Mot. Light Flak Bn available from start with full strength (present in NO as Flak Ersatz-Abteilung 98)
- 77th LW Mot. Light Flak Bn rebuilt as SP version
- 78th LW SP Light Flak Bn downgraded to Mot. Light Flak, renames from I/43rd LW Mot. Mixed Flak Bn in 2/44
- 80th LW SP Light Flak Bn transformed into rename from new 144th Mixed Flak Bn
- 81st LW Mot. Light Flak Bn rebuilt as SP version, available from start at full strength, to AR in 1/43
- 95th LW Mot. Light Flak Bn arrives with full strength (renamed from existing reserve unit)
- 96th LW SP Light Flak Bn - rename delayed to 7/43
- III/204th Panzer Bn disbands 10/42 (became part of newly-formed 27th PzD)
- 214th Panzer Bn - delay disband to early 4/1943 (to 25 PzD), remove rebuild restriction
- I/401st LW Mot. Mixed Flak Bn renamed I/501

- II/411th LW Mot. Light Flak Bn rebuilt as SP version
- II/491st LW Mot. Mixed Flak Bn renamed I/491, becomes II/49 in 10/41
- 603rd Mot.Army Light Flak Bn rebuild as 3-company SP Flak bn
- 607th SP Army Light Flak Bn - disband removed, moves to WE in mid 6/43
- 609th SP Army Light Flak Bn - moves to NA in 6/42, disband delayed to 9/43, rebuild restricted
- 612th SP Army Light Flak Bn rebuild as Mot. Army Light Flak Bn, disbands 9/43, rebuild restricted
- 613th Mot.Army Light Flak Bn built to 100% strength, moved from NA to MAP/OKH (just 1/613 was in Africa from late 41)
- 614th SP Army Light Flak Bn delayed to mid 8/41, arrives to AG South
- 615th Mot.Army Light Flak Bn disband delayed to 10/43, moved to WE, arrives to AR in 6/43
- 616th Mot.Army Light Flak Bn rebuild as 3-company SP Flak Bn with some 2cm quad AAs at 50% strength
- 617th SP Army Light Flak Bn changed to OB 1913, disbands 9/43, rebuild restricted
- 618-619th SP Army Light Flak Bn changed to OB 1913
- 620th SP Army Light Flak Bn disabled - formation was cancelled
- 744th Pioneer Bn - moves to NO 1/43, disbands early 4/1943 (to 25 PzD)
- 761st LW SP Light Flak Bn downgraded to mot light Flak, rebuilt to full strength
- 772nd LW Light Flak Bn - Remove -> disband (became part of reinforcing 65th Flak Rgt)
- 851st LW Light Flak Bn rebuilt to full strength SP version, starts in WE with AR transfer in 8/41
- 860th LW Mot. Light Flak Bn disabled - just 1/860 was ever existing
- NEW land units or rename slots:
  - 179th Flak Rgt, 5/43 to Schweinfurt
  - I/2nd LW Mot. Mixed Flak Bn, 10/43 to AR
  - I/10th LW Mot. Mixed Flak Bn, 10/44 to WE with full strength
  - II/18th LW Mot. Mixed Flak Bn, 10/44 to WE
  - III/27th LW Mot. Mixed Flak Bn, 9/44 to WE
  - I/32nd LW Mot. Mixed Flak Bn, 2/43 to AR
  - II/33rd LW Mot. Mixed Flak Bn, from start in NO, late 6/44 to AR
  - I/42nd LW Mot. Mixed Flak Bn, attached to Breslau, 10/44 to WE
  - II+III/42nd LW Mot. Mixed Flak Bn, 10/44 to WE
  - 96th LW Mot. Light Flak Bn - 6/42 rename slot for 761st LW Mot Light Flak Bn
  - 144th Mixed Flak Bn, from start in FI, to Light Flak and WE in 4/43, to 80th SP Light Flak in 4/44
  - I/241st LW Mot. Mixed Flak Bn, arrives to AG South in mid 7/41, moves to IT in 10/43
  - I/604th LW Mot. Mixed Flak Bn, attached to Rastenburg, disbands 6/44
  - 606 SP Army Light Flak Bn added to NA with 10/4 SP Flak removed from 5th Light Afrika Div, disbands 9/43, rebuild restricted
  - I/611th LW Mot. Mixed Flak Bn, from start in NO, late 12/44 to AR
  - 905th Mixed Flak Bn, attached to Ploesti, renames to II/5th LW Mot. Mixed Flak Bn in 11/42, to IT mid 11/42
- Stalingrad to Berlin changes:
  - Added Three Naval Only torpedo carrying Soviet air units to the Black Sea Fleet:
    - 47 ShAP-ChF (IL-2T) Delay 12
    - 13 GMRAP-ChF (A-20Bt)
    - 40-BAP-ChF (IL-4T)
  - Changed the aircraft in the Soviet Baltic Front to torpedo carrying:
    - 57 ShAP-KBF (IL-2T) Delay 14
    - 40 ShAP-KBF (IL-2T) Delay 16
    - 1 MTAP-KBF (IL-4T)
    - 73 BAP-KBF (A-20Bt)
  - Added two Naval Only air units to the Rumanians:
    - 101<sup>st</sup> HS RM Patrol (Z.501s)

- 102<sup>nd</sup> HS RM Patrol (He 114s)
  - Stalingrad Front renames to Southern Front and then to 4<sup>th</sup> Ukrainian Front
  - a few Morale/Experience changes to Soviet air units
  - 2<sup>nd</sup> Tank Corps renames to 8<sup>th</sup> Guards Tank Corps in September 1943
- Vistula to Berlin changes:
  - Changed the aircraft to Torpedo carrying for the Soviet Baltic Fleet:
    - 57 ShAP-KBF (IL-2T)
    - 40 ShAP-KBF (IL-2T)
    - 1 MTAP-KBF (IL-4T 1943)
    - 75 BAP-KBF (A-20Gt)
  - Renamed to Guards Status:
    - 5 IAP-KBF to 3 GIAP-KBF
    - 13 IAP-KBF to 14 GIAP-KBF
    - 71 IAP-KBF to 10 GIAP-KBF
- Ground.dat file - The M17 GMC (0843) was renamed to M17 MGMC (Multiple Gun Motor Carriage).
- OB.dat file – Corrected OB 2256 for 44 Type 2 Infantry Division (support squads were incorrectly listed as manpower).

### **V1.02.24 – 14<sup>th</sup> Mar 2022**

#### **New Features and Rule Changes**

- Changes impacting combat in “high intensity” combat (combat versus defenders in heavy urban/urban/port hexes):
  - Many different combat adjustments that generally reduce losses in high intensity combat, for both sides.
  - Isolated units suffer additional penalties in high intensity combat. Units must be fully isolated and not in aerial re-supply, not just be in isolated hexes, to suffer these additional penalties.
  - The attackers in a failed high intensity attack take no retreat attrition.
- Changes to combat delay rules:
  - A deliberate attack that fails, versus a defender in a non-isolated hex in urban/heavy urban/port, adds 9 to the combat delay. A hasty attack in this case adds 5 combat delay.
  - Hexes that have 9 (maximum) combat delay may not be attacked.
  - Note: Bombardment attacks (2 hex range artillery only attacks) cause no combat delay (this has always been the case).
- Manual Addendum: Changing the Intensity setting shown on the Air Directive (right side of map) Window for an air directive, changes the Air Doctrine intensity setting for the given type of air directive, for the controlling Air Command. Changing this, will also automatically alter all ADs of the same type, within the Air Command, that are not using a Custom intensity. Players wishing to alter the intensity of only one air directive, should set a Custom value by manually setting the Strike Num for the air directive.

#### **Bug Fixes and AI Improvements**

- Changes to ground combat that effectively reduces the number of shots taken by AFVs that have been shot at, with by far the greatest impact on low experience/morale ground elements. We found experience/morale checks were inadvertently left out of one of the routines that allowed AFVs to return fire.
- Kherson is not receiving any sea shipments of freight. Fixed.
- The final ground combat odds are sometimes expressed as a negative number. Fixed.
- Editor – Pressing ‘next’ in the device screen crashes the game. Fixed.

#### **Data and Scenario Changes**

- ob.dat file – Guard Tank Corps OBs have been linked to Tank Corps OBs. This should allow the building of a guards tank corps with 2 or 3 guards brigades if a guards tank corps OB is available on the date of creation.
- ground.dat file change - Panzer IIIIf (0438) end date extended from 3/42 to 6/42.
- device.dat file changes:
  - 170mm K18 L/50 Gun ROF increased from 1 to 2.



- Slight changes to 210mm devices 429 and 625
- cityOwner.dat file – Added city capture dates to many locations in central Europe
- 7 renamed German air unit symbols
- Campaign 41 scenarios – Mostly changes to air units:
  - Soviet
    - SB-2 Rcn pool reduced by 2/3 to ~150, add 300 to SB-2 pool instead
    - yak-2 pool changed to 62
    - yak-4 pool changed to 55
    - 38/53 SBAP disabled
    - 65,66,215 ShAP changed from I-15bis FBs to I-153BS TacBs
    - 116 ORAE rebuilt with 12 SB-2 rcn placed at NW Leningrad airbase and attached to Leningrad recon AOG
    - 117-119 ORAE equipped with 12 SB-2 Rcn and added to NF
    - 136 BAP changed to SB-2
    - 655 LBAP changed to SB-2
    - 311 RAP disabled
    - 314 RAP changed to 30+3 Yak-4
    - 316 RAP changed to 40+3 Yak-2
    - 318 RAP added to FE with 24+6 SB-2 Rcn
    - 319/320 ORAE disabled
  - Axis
    - Ground units -
    - reinforcing Lw Kdo West transformed into rename from Luftflotte 3
    - 4th PzG Div renamed 4th SS PzG Div
    - 22nd SP Army Light Flak Bn rebuild as Mot. Army Light Flak Bn, follows 22nd Airlanding div to Balkans
    - III/388th Howitzer Battalion changed to motorized
    - Pool -
    - Bf 110C-5: 10 added to pool
    - Bf 110E-1/U1: 10 added to pool
    - He 115: 20 added to pool
    - Do 215B-1: 10 added to pool
    - Air units -
    - Einsatzkommando Schenck changed to bomber-trained Me 262A-2a
    - 7.(F)/LG 2 becomes (H) in 1/42 and disbands in 1/43
    - 9.(H)/LG 2 disbands at the end of 1941
    - 10.(Sch)/LG 2 removed disband, renames to 8./Sch.G 1 with Hs 129 in 2/42 and later to 11.(Pz)SG 9
    - I./JG 1 present from start with Bf 109E-7
    - IV./JG 1 renames to II./JG 11 in 4/43
    - 10.(Jabo)/JG 2 - disbands in late 9/43
    - 11.(Hoeh) and 12./JG 2 disband mid 9/43
    - IV.(Sturm)/JG 3 removed Sturm designation, renames to Sturm in 5/44 and gets matching Fw 190A-8/R8
    - Jabostaffel/JG 3 renames to 10.(Jabo)/JG 27 in early 5/42, to 2./Jabogruppe Afrika in early 9/42, disbands late 11/42
    - JG 4 removed Sturm designation from all except II.
    - II.(Sturm)/JG 4 changed to Fw 190A-8/R8
    - IV./JG 5 available from start as JGr Drontheim, renames to IV./JG 5 in 6/42
    - 14.(Jabo)/JG 5 disbands mid 4/44
    - II./JG 11 transformed into rename from IV./JG 1 in 4/43
    - 10./JG 11 disband in mid 8/44
    - 11./JG 11 disband mid 8/44
    - JG 25 renames/downgrades to Jagdstaffel Erla in late 11/43, disbands 4/44
    - 11./JG 26 disbands in late 12/42
    - 12./JG 26 disbands in late 9/43

10.(Jabo)/JG 27 changed to Bf 109F-2, transformed into rename from Jabostaffel/JG 3  
15./JG 27 (Span) available from start in WE with 12x Bf 109E-7, to AR on T4, disbands in late  
2/44, set to fighter mission/training  
JG 50 renames to I./JG 301 in mid 10/43  
15./JG 52 (Croat) available from start in WE with 12x Bf 109E-7, to AR in late 9/41, to BA in  
late 4/44  
10.(Jabo)/JG 53 disbands late 11/42  
II.(Sturm)/JG 300 removed Sturm designation, renames to Sturm in 7/44 and gets matching  
Fw 190A-8/R8  
IV.(Sturm)/JG 300 removed Sturm designation  
I./JG 301 renames from JG 50 in mid 10/43  
10./JG 301 changed to Bf 109G-6, disbands in late 7/44  
V./NJG 5 renames to III./NJG 6 in 5/44  
III./NJG 6 renames from V./NJG 5 in 5/44  
Stab II./NJG 100 - moved fromward to 12/43, renames from 7./NJG 200  
4./NJG 100 transformed to rename from 8./NJG 200 in 12/43  
5./NJG 100 transformed to rename from 1./NJG 200 in 5/44  
6./NJG 100 transformed to rename from 4./NJG 200 in 5/44  
1./NJG 200 renames to 5./NJG 100 in 5/44  
4./NJG 200 renames to 6./NJG 100 in 5/44  
5./NJG 200 transformed to rename from 10./ZG 1, renames to new 7./NJG 100 in 6/44  
7./NJG 200 renames to Stab II./NJG 100 in 12/43  
8./NJG 200 arrives with 12+5 aircraft, renames to 1./NJG 100 in 12/43  
10./ZG 1 removed disband, renames to 5./NJG 200 in mid 8/43 and to new 7./NJG 100 in  
6/44  
III./ZG 2 changed to Bf 109E-7/U1  
Stab/Sch.G 1 changed to Bf 109E-7/U1  
I./Sch.G 1 changed Bf 109E-7/U1  
8./Sch.G 1 changed to Hs 129, transformed into rename from 10.(Sch)/LG 2  
Stab/Sch.G 2 changed to Fw 190G  
I./Sch.G 2 changed Bf 109E-7/U1  
II./Sch.G 2 changed to Fw 190G  
SKG 10 (all) changed from Fw 190A FBs to Fw 190G TacBs  
III./SG 4 changed to Fw 190F  
I./SG 5 changed to Ju 87D-5  
11.(Pz)/SG 9 - rename source changed to 10.(Sch)/LG 2  
NSGr 11 rename source changed to new Gruppe Buschmann  
I.+II./KG 2 disband mid 10/44  
10./KG 3 (Croat) available at start in BA, retaining the later TB transfers  
III./KG 6 (10/44) renamed to II./KG 200 arriving 5/44 with Ju 188  
Stab/KG 28 disbands 12/41  
I./KG 28 renames to naval-only II./KG 100 in mid 12/41  
Stab,I.,II./KG 51 removed (J) from rename slots, made bomber-trained  
II./KG 100 transformed into rename from I./KG 28 in 12/41, changed to He 111H-6  
III./KG 100 delayed to 4/43, changed to naval-only with Do 217K, starts in WE and moves to  
AR in 8/44  
IV./KG 100 delayed to late 11/41  
KG 101/102 disabled (advanced school units)  
IV./KG 200 arrives 10/44 without aircraft  
II./LLG 2 reduced to 5. Staffel (the only operational unit)  
Stab/TG 5 arrives with aircraft (drafted from school)  
II.+III./TG 5 changed to Me 323  
KGr zbV 900 disbands mid 1/44  
AufklarGr 126 (See) renames to SAGr 126 now, delay AR transfer to 10/44  
SAGr 126 changed into rename from AufklarGr 126 (See)  
SAGr 127 rename source change to new Gruppe Buschmann via AufklarGr 127 (See)

- 1./SAGr 129 arrives with 10x BV222
- 3.(H)/31 changed to Bf 110E-3, typo in name fixed
- 5.(F)/123 arrives with 10+2 Fw 190A-3/U4
- 6.(F)/123 arrives with 10+5 Ju 86P
- NEW air units -
- 2./Jabogruppe Afrika, renames 9/42 from Jabostaffel/JG 3 via 10.(Jabo)/JG 27
- 7./NJG 100, renames from 5./NJG 200 in 6/44
- NJ-Stfl Norwegen (12/44), renames from NJ-Stfl Finnland
- Gruppe Buschmann, Naval patrol group with 30+15 He 114 (6/42 to AR, -> AufklGr 127 (See) 4/43 -> SAGr 127 (7/43) -> NSGr 11 (mid 10/43)
- AufklarGr 127 (See) - renames 4/43 from new Gruppe Buschmann
- OP Typhoon 41 - 15./JG 27 (Span) changed to Fighter-trained Bf 109E-7
- Red Army Resurgent
  - 15./JG 51 (Span) changed to fighter mission/training
  - Stab and I./Sch.G 1 changed from Bf 109E-7 to E-7/U1
- Destruction of SW Front - 66 ShAP changed from I-15bis to I-153BS
- Road to Leningrad
  - 53 SBAP disabled
  - 65 ShAP changed from I-15bis to I-153BS
- Road to Minsk - 215 ShAP changed from I-15bis to I-153BS

#### **V1.02.21 – 20<sup>th</sup> February 2022**

##### **New Features and Rule Changes**

- The baseline chance a displaced/relocated HQ will lose a leader was changed, from 15% (50% if isolated), as follows:
  - June 1941 – 5% (10% if isolated)
  - July 1941 – 10% (15% if isolated)
  - All other dates – 15% (30% if isolated)
  - Note: in-game loss percentages, on average, appear to be slightly higher than these baseline values.
- No more than one leader may be killed, per player turn within any given HQ, due to HQ displacement/relocation.
- HQs that have lost a leader due to displacement/relocation may suffer an additional MP reduction at the start of their next logistics phase.
- Added Living Manual v1.10.pdf file in the \Manuals folder. This is up to date with changes through game version 1.02.21.

##### **Data and Scenario Changes**

- OB file – Removed recently added Reduced Rifle Division Shtat OBs from showing up on build menu (they are not intended to be buildable in-game)
- Changes in ac file (update include one corrected aircraft symbol file):
  - 0004 Bf 109E-4/B - changed to TacBomber, upgrades to Bf 109E-7/U1, ends 9/41, air profile change to GE Light Bomber
  - 0013 Bf 109G-4/R3 - camera changes
  - 0016 Bf 109G-8 - camera changes
  - 0019 Bf 110C-5 - upgrade changed to Ju 88D-1
  - 0021 Bf 110E-1/U1 - extended to 2/42, added small import from Bf 110E-2
  - 0090 Fw 190A-3/U4 - ends 1/43, upgrade changed to Bf 109G-4/R3
  - 0247 Bf 109G-8(HU) - camera changes
  - 0440 Bf 109E-7/U1 - moved forward to 9/41, imports doubled to 200
  - 0442 Bf 109G-6/R2 - camera changes
  - 0445 Bf 110E-3 - air profile changed to GE Tac Recon, change camera options
  - 0446 Bf 110G-3 - air profile changed to GE Tac Recon, change camera options, remove upgrade
  - 0453 Bf 109G-2/R2 - camera changes
  - 0454 Bf 109F-4/R3 - camera changes
  - 0458 Ju 88S - bombload raised to 3000kg, some weapon set changes

- several German bombers now use LMB mine instead of LMA as naval loadout

### **v01.02.20 – 12<sup>th</sup> February 2022**

#### **Bug Fixes and AI Improvements**

- Many ferry hexes are showing as Soviet controlled when they should not. Fixed.
- Air transport mission op losses were lower than other air mission op losses. Fixed. A part of the normal op loss formula was missing for air transports. With this fix, you will see much higher transport op losses (still low in daytime good weather missions). Op losses in bad weather will be noticeable. Op losses at night will be bad. Op losses at night in bad weather will be horrible (don't do it).
- Units ordered by the player to move from a TB (including reserve) to the map during a campaign game have their vehicles zeroed out. Fixed.
- Changing red color value for Set Formation Color does not work when using in-game scaling over 100%. Fixed.
- AI – Improved AI to reduce chance the AI will launch a very weak/bad hasty attack.

#### **Data and Scenario Changes**

- Gtype file – Changes in air group profiles:
  - FI Fighter changed from 36-12-4 to 40-10-3 (some units had 4 operating flights of ~10 each)
  - FI Bomber changed from 36-12-4 to 18-6-3 (some units had three operating flights of ~6 each)
  - FI Recon changed from 36-12-4 to 18-6-3 (some units had three operating flights of ~6 each)
- CityOwner file – Added city capture dates for some cities in the Balkans.
- OB file – Minor additions/adjustments to OBs, primarily for expansion scenarios.
- Device and ground files - Fixed the 20mm vz.36 and added a Bulgarian Air Support element (1596).
- Photos for ground elements 0242 and 1596.
- Leader file - raised the values of some Italian leaders (including Messe)
- Multiple map data files with changes in Finland for future scenarios. Also relocated maptext for Kiorstovo.

### **v01.02.19 – 31st January 2022**

#### **Bug Fixes and AI Improvements**

- Defensive ground support often totally misses the target. Fixed.
- Fixed several corner cases where isolation was being applied to hexes where it shouldn't due to ports having a connection with in supply ports (in the southern Caucasus and the Baltic Islands).
- Pressing F12 during a ground combat will freeze the game. Fixed.
- Made adjustments to the drop down engine code in an attempt to reduce the chance of rare/random game crashes caused by use of drop downs.
- Game crashes when viewing air units in the TBs. Fixed.
- Intercepts of air transport missions deep behind enemy lines are happening again. Fixed.
- AI Air Assist - Puts Ostsee aircraft into JG77 when FKIV is set to naval ops. Fixed.
- AI – German AI withdraws from Leningrad area prematurely and also doesn't defend its flanks near Leningrad in C41. Fixed.
- AI – Minor improvements to AI in small scenarios.

#### **Data and Scenario Changes**

- OB file – Minor additions and changes primarily for future expansion scenarios.
- Leader file – Changes to Soviet Allied leaders.
- Photos – New photos for Soviet Allied leaders.
- Campaign 1941 and C41 Early End :
  - I./1st Hun. Ftr Grp - remove disband
  - fixed name of LXXXXIX Corps
  - fixed setup of Wismar/Elbing airbases
  - fixed setup of LW Kdo East/Luffflotte 6

### **v01.02.15 – 15th January 2022**

#### **Bug Fixes and AI Improvements**

- Areas that should be in supply via ports are showing as isolated (Baltic Islands, cut off ports like Odessa – new bug created in 1.02.14). Fixed.
- Leaders in HQs forcibly displaced were not being killed as often as they should (15% non-isolated/50% isolated). Fixed.
- AI - Axis AI freezes at 33% of movement phase. Fixed.
- AI – Improved Axis Attacking AI so it should not leave large gaps in its lines at the end of its turn.

#### **v01.02.14 – 10th January 2022**

##### **New Features and Rule Changes**

- Several additional changes to flak. Flak during the air execution phase had inadvertently been increased in a recent update. This change was removed. The chance for flak hits was also reduced across the board in all phases.
- Increased the chance of intercept of air transport missions. You should now see air transport missions close to the front line and especially over enemy territory being intercepted. Given this change, along with the air transport fix noted below once again allowing escorts, be careful with flying unescorted transports near the front line. Intercepts will be limited far into enemy territory.
- Theater boxes (including the reserve) are now limited during the logistics phase in that they will never use more than 2/3 of the trained pilots that begin the replacement phase in the pool. 1/3 of the trained pilots are reserved for air units on the map, which receive their replacements after the theater boxes.
- Added details about non-afv fire in the combat report at high combat message levels (6 and 7).

##### **Bug Fixes and AI Improvements**

- Note regarding the Losses screen: The 'Current Turn' column losses by reason (A2A/flak/ground/operational) are often incorrect. Several reasons for this were fixed in this update, but there are still cases where these losses will be incorrect, too high or too low. The Total column losses are correct, as are the losses by aircraft type, and the losses on the left side of the screen losses by aircraft model. We will continue to try to improve the losses by reason (and the total that appears in the Current Turn column), but for now, you have to use the losses by aircraft type to get an accurate view of current turn losses.
- Destroyed units that rebuild are arriving in the reserve set to 100 Max TOE. They should arrive set to 0. Fixed. Note, players will have to consciously increase the unit's Max TOE for it to receive replacements.
- Not able to assign escorts to air transport missions. Fixed.
- Access to Inland Port is not preventing area from being isolated. Fixed.
- Axis Allied nationalities are not importing captured equipment. Fixed.
- Interdiction caused by Ground Attack/Interdiction is much higher than by Ground Attack/Unit missions that switch to interdiction. Fixed.
- Entrained static units come out of static mode automatically at no AP charge. Fixed.
- When air groups is sent to TB/Reserve aircraft loss is not recorded when damaged plane is destroyed. Fixed.
- Game crashes during AI Air Assist in the air planning phase. Fixed.

#### **v01.02.13 – 24th December 2021**

##### **New Features and Rule Changes**

- Several changes to flak, some bug fixes (especially in what flak guns were listed as participating), some adjustments to formulas, with the net being a major reduction in flak losses. Also reduced air to air and op losses.
- Several changes to ground combat, including reducing the effectiveness of towed guns in the attack, and adjustments to mortars. Also added a chance for indirect fire weapons to participate in hasty attacks (on both sides). If they participate, their rate of fire will be greatly reduced.
- Scaled HQ set color window and ground element/aircraft icons.
- Change to Logistics – It is possible for supplies and fuel in cities to automatically be converted to freight in the depot in the hex, with the supplies and freight returning to the pool (I don't think this was ever documented but has always been the case). This has now been changed so it no longer happens in isolated cities.

##### **Bug Fixes and AI Improvements**

- Enemy equipment is imported even when none is in the captured pool, as it could incorrectly take from the enemy equipment pool of the weapon instead of the friendly pool of captured equipment. Fixed.
- Fixed a problem when air units that don't have the same number of aircraft and pilots are sent from the map to the reserve. Now, if there are more pilots than aircraft, the excess pilots will be removed from the unit and put in the free pilot pool. If the unit has more aircraft than pilots, the extra aircraft will be sent to the pool.

### Data and Scenario Changes

- Device changes:
  - 20mm Flak38 L/65 (0121 & 0243), 20mm Quad Flak38 (0126 & 0244), 20mm Twin Flak38 (0252), 20mm ItK/38 L/65 (0257), 20mm Flak30 L/65 (0677), 20mm Triple MG151 (0668) 20mm L65 Cannon (0689), and 20mm Quad L65 Cannon (0690) guns - Accuracy increased from 350 to 400;
  - 45mm M35 (0179) - Accuracy increased from 0 to 100;
  - 50mm DBT (0184) - Accuracy increased from 0 to 100;
  - 2in Mk II (0186) - Accuracy increased from 0 to 100;
  - 50mm GrW36 (0188) - Accuracy increased from 0 to 100;
  - 50mm M40/41 (0189) - Accuracy increased from 0 to 100;
  - 60mm M2 (0208) - Accuracy increased from 0 to 100;
  - 60mm Mle 1935 (0209) - Accuracy increased from 0 to 100;
  - 20mm Mle1939 L/60 (0240) - Accuracy increased from 375 to 400;
  - 20mm 36M L/72 (0298) - Accuracy increased from 300 to 350;
  - 40mm 40/41M L/51 (0248) - Accuracy increased from 400 to 475;
  - 40mm Bofors L/56 (0249) and 40mm Twin Bofors (0250) - Accuracy increased from 400 to 425;
  - 88mm Flak18 L/56 (0125 & 0253) - Accuracy increased from 450 to 500;
  - 105mm Flak39 L/63 (0254) - Accuracy increased from 475 to 525;
  - 37mm M18 L/40 (0308) - Accuracy increased from 250 to 300;
  - 45mm M32/34 L/46 (0322) - Added HVAP penetration of 96;
  - 47mm M39 L/40 (0324) - Accuracy decreased from 375 to 350;
  - 75mm 41M L/25 (0334) - Range increased from 2,500 to 3,000;
  - 75mm KwK37 L/24 (0335) - Range increased from 2,500 to 3,000 and HEAT penetration decreased from 94 to 90;
  - 75mm StuK37 L/24 (0336) - Range increased from 2,500 to 3,000 and HEAT penetration decreased from 94 to 90;
  - 75mm DT-UDR 26 L/48 (0342) - Accuracy decreased from 600 to 575;
  - 75mm SA35 (0347) - Range increased from 2,500 to 3,000;
  - 75mm leFK18 L/26 (0350) - HEAT penetration decreased from 94 to 90;
  - 76.2mm KT-28 L/25 (0351) - Range increased from 2,500 to 3,000;
  - 76.2mm ZiS-3 L/42.6 (0352) - HEAT penetration decreased from 80 to 75;
  - 76.2mm ZiS-3 L/43 (0353) - HEAT penetration decreased from 80 to 75;
  - 75mm M34 L/46 (0354) - Range increased from 2,800 to 3,000;
  - 75mm leIG18 L/11 (0356) - HEAT penetration increased from 94 to 90;
  - 75mm M34 L/18 (0357) - Range increased from 2,500 to 3,000, Accuracy increased from 225 to 250, Penetration decreased from 58 to 52, and HEAT penetration increased from 70 to 100;
  - 3in L/25 (0359) - Range increased from 2,500 to 3,000;
  - 75mm M2 L/31 (0362) - Range increased from 2,600 to 3,000;
  - 75mm M3 L/42 (0363) - Ranged increased from 2,800 to 3,000;
  - 76.2mm L-11 L/30.5 (0366) - Range increased from 2,600 to 3,000;
  - 76.2mm F-34 L/41.5 (0367) - Range increased from 2,800 to 3,000 and HEAT penetration decreased from 80 to 75;
  - 76.2mm ZiS-5 L/41.5 (0368) - Range increased from 2,800 to 3,000;

- 76.2mm PS-3 (0369) - Range increased from 1,250 to 3,000;
- 76.2mm M27/39 L/16.4 (0370) - Added HEAT penetration of 75;
- 75mm Mk V L/36.5 (0377) - Range increased from 2,800 to 3,000;
- 76.2mm L-10 L/30.5 (0378) - Range increased from 2,500 to 3,000;
- 88mm KwK36 L/56 (0379) - Range increased from 3,400 to 4,000 and Accuracy increased from 425 to 475;
- 88mm KwK43 L/71 (0380), 88mm PaK43/1 L/71 (0381), and 88mm PaK43 L/71 (0382) - Range increased from 4,400 to 4,800 and Accuracy increased from 550 to 600;
- 90mm M41C L/53 (0383) - Range decreased from 5,400 to 5,000, Accuracy increased from 450 to 500;
- 95mm Mk I L/21.5 (0384) - Range increased from 3,000 to 4,000;
- 90mm M3 L/53 (0386) - Range increased from 3,600 to 4,000;
- 122mm A-19 L/46.3 (0387) - Accuracy increased from 450 to 500 and added HEAT penetration of 120;
- 107mm M-60 L/43 (0388) - Range increased from 3,200 to 4,000;
- 105mm sK18 L/52 (0389) - Accuracy increased from 450 to 500;
- 105mm StuH42 L/28 (0390) - Range increased from 3,000 to 4,000 and HEAT penetration increased from 104 to 110;
- 105mm da 105 L/25 (0391) - Range increased from 3,000 to 4,000, accuracy increased from 250 to 275, Penetration increased from 76 to 91, and HEAT penetration increased from 100 to 120;
- 105mm FH18 L/25 (0393) - HEAT penetration increased from 104 to 110;
- 100mm D-10S L/53.5 (0397) - Range increased from 4,000 to 4,400 and Accuracy increased from 500 to 550;
- 105mm 40/43M L/20 (0399) - Range increased from 3,000 to 4,000 and Accuracy increased from 200 to 250;
- 128mm PaK44 L/55 (0404) - Range increased from 4,200 to 4,600 and Accuracy increased from 525 to 575;
- 122mm D-25 L/45 (0407) - Range increased from 3,400 to 4,000 and Accuracy increased from 450 to 500;
- 122mm M-30S L/23 (0408) - Range increased from 3,000 to 4,000;
- 75mm Pak 97/38 L/36 (0409 & 0680) - Range increased from 2,500 to 3,000;
- 150mm StuH43 L/12 (0415) - Range increased from 3,000 to 4,000;
- 150mm L10 (0420) - Range increased from 2,500 to 4,000;
- 152mm M-10 L/25 (0423) - Range increased from 3,000 to 4,000;
- 152mm ML-20S L/29 (0424) - Range increased from 3,000 to 4,000;
- Added 152mm M-10 L/25 Howitzer (0512) with Accuracy of 300 and Penetration of 0;
- 75mm M1897A4 L/36 (0559) - Range increased from 2,500 to 3,000;
- 100mm BS-3 L/59.6 (0580) - Range increased from 4,000 to 4,400 and Accuracy increased from 500 to 550;
- 105mm M4 L/24.5 (0588) - Range increased from 3,000 to 4,000;
- 3.7in Mk I L/12 (0595) - Range increased from 3,000 to 4,000;
- 2in Mk VIII (0605) - Accuracy increased from 0 to 100;
- 75mm M6 L/40 (0607) - Range increased from 2,800 to 3,000;
- 75mm M1A1 L/16 (0608) - Range increased from 2,500 to 3,000;
- 128mm (2) Flak40 L/61 (0625) and 128mm Flak40 L/61 (0629) - Accuracy increased from 475 to 525;
- 20mm M35 L/65 (0630) - Accuracy increased from 350 to 375;
- 90mm M41 L/53 (0633) - Range increased from 3,600 to 4,000 and Accuracy increased from 450 to 500;
- 75mm IeIG37 L/24 (0666) - HEAT penetration increased from 85 to 90;
- 75mm K51 L/24 (0667) - Range increased from 2,500 to 3,000 and HEAT penetration decreased from 94 to 90;

- 114mm H/18 L/16 (0670) - Range increased from 3,000 to 4,000;
- 150mm sIG33 L/11 (0671) - Range increased from 3,000 to 4,000;
- 76.2mm F-22 L/31.5 (0676) - Range increased from 2,600 to 3,000;
- 75mm M37 L/34.3 (0685) - Range increased from 2,800 to 3,000 and Penetration decreased from 89 to 79;
- 105mm FHM L/31 (0688) - HEAT penetration increased from 104 to 110;
- Ground Element changes:
  - Tiger (0025 & 0285) - Accuracy increased to 975 from 825, Front Armor increased to 110 from 107, Side Armor decreased to 75 from 80, and Top Armor increased to 29 from 25;
  - King Tiger (0026) - Accuracy increased to 1,600 from 1,400;
  - Nashorn (0038) - Accuracy increased to 1,600 from 1,400;
  - Jagdpanther (0042) - Accuracy increased to 1,700 from 1,600;
  - Ferdinand (0043) and Elefant (0350) - Accuracy increased to 1,600 from 1,400;
  - Jagdtiger (0044) - Accuracy increased to 1,725 from 1,575;
  - SdK-10/4 Flak 30 (0048), Flakpanzer 38 (0049), Wirbelwind (0050), 20mm Flak38 AA Gun (0072), SdKfz-251/17 Halftrack (0090), 20mm Quad Flak38 AA Gun (0106), SdKfz-7/1 Flak38 (0209), SdKfz-251/21 AAMG (0421), SdKfz-10/5 Flak38 (0473), 20mm Fortress Cannon (0479), 20mm Quad Fortress Cannon (0480), 20mm Flak38 AA Gun (0515), 20mm Flak38 AA Gun (1024), and 20mm Quad Flak38 AA Gun (1025) - Accuracy increased to 700 from 650;
  - 88mm PaK43 AT Gun (0071) - Accuracy increased to 1,100 from 1,000;
  - 88mm Flak18 AA Gun (0073, 0352, 0459, 0489, 0503 & 0518) - Accuracy increased to 1,300 from 1,150;
  - 105mm sK18 Field Gun (0105) - Accuracy increased to 1,300 from 1,050;
  - 105mm Flak39 AA Gun (0132) - Accuracy increased to 1,375 from 1,225;
  - 40mm ItK/39 AA Gun (0146) - Accuracy increased to 625 from 600;
  - 75mm ItK/37 AA Gun (0162) - Accuracy decreased to 450 from 600;
  - 20mm ItK/38 AA Gun (0163) - Accuracy increased to 600 from 550;
  - 152mm H/38 Howitzer (0165) - Device changed to (0152) with accuracy of 0;
  - L6/40 (0178) - Accuracy decreased to 250 from 300;
  - M-11/39 (0179) - Accuracy increased to 200 from 100;
  - M-13/40 (0180) and Panzer M13/40 735i (0396) - Accuracy decreased to 200 from 300;
  - M-15/42 (0181) and Panzer M15/42 738i (0397) - Accuracy decreased to 300 from 325;
  - P-26/40 (0182) and Panzer P40 737i (0398) - Device changed to 75mm M37 L/34.3 (0685);
  - Semovente L40 da 47 (0183) and Stug L6 47/32 630i (0442) - Accuracy decreased to 200 from 350;
  - Semovente M40 da 75 (0184) and Stug M42 850i (0406) - Accuracy decreased to 150 from 225;
  - Semovente M43 da 105 (0185) and Stug M43 853i - Accuracy decreased to 175 from 200;
  - Semovente M41M da 90 (0186) - Accuracy decreased to 350 from 400;
  - AB41 Armored Car (0187) - Accuracy decreased to 250 from 300;
  - Semovente M42 da 75 (0188) and Stug M42 851i (0407) - Device changed to 75mm M37 L/34.3 (0685);
  - 47mm M35 AT Gun (0192) - Accuracy decreased to 200 from 250;
  - 20mm M35 AA Gun (0193) - Accuracy decreased to 275 from 550;
  - 90mm M41C AA Gun (0194) - Accuracy increased to 750 from 700;
  - 75mm DT-UDR 26 AT Gun (0246) - Accuracy decreased from 750 to 575;
  - Toldi II (0278) - Accuracy decreased to 250 from 350;
  - Turan I (0279), Toldi IIa (0303), and 40mm 40M AT Gun (0359) - Accuracy decreased to 325 from 575;
  - Turan II (0280) - Accuracy decreased to 175 from 275;
  - Nimrod (0287) and 40mm 36M AA Gun (0292) - Accuracy decreased to 275 from 600;
  - 39M CSABA Armored Car (0288) - Accuracy decreased to 100 from 350;
  - Zrinyi II (0307) - Accuracy decreased to 200 from 250;



- 80mm 29M AA Gun (0308) - Accuracy decreased to 250 from 600;
- 47mm Breda AT Gun (0244) and 47mm M34 AT Gun (0290) - Accuracy decreased to 200 from 300;
- 128mm Twin Flak40 AA Gun (0339) and 128mm Flak40 AA Gun - Accuracy increased to 1,375 from 1,225;
- Toldi I (0353) - Accuracy decreased to 250 from 350;
- Stug M43 852i (0408) - Accuracy decreased to 250 from 350;
- SdKfz-8 Flak18 (0422) and SdKfz-9 Flak18 (0423) - Accuracy increased to 1400 from 1150;
- 47mm M1935 Infantry Gun (0460) - Accuracy decreased to 200 from 250;
- IS-2 M1944 (0759) - Accuracy increase to 850 from 750;
- IS-2 M1945 (0760)- Accuracy increased to 850 from 750;
- SU-100 (0767) - Accuracy increased to 950 from 850;
- ISU-122 (0769) - Accuracy increased to 850 from 750;
- 122mm A-19 Field Gun (0824) - Accuracy increased to 500 from 450;
- IS-2 M1943 (0829) - Accuracy increased to 500 from 450;
- Ob changes:
  - Added reduced infantry division OBs for Germans (three are variations of 2 regiments with 3 battalions and three variants of 3 regiments with 2 battalions). For expansion scenarios.
  - Added Kampfgruppe OBs for Infantry Divisions, Panzer Divisions and Motorized/Panzergrenadier Divisions. All kampffgruppes are brigade sized and are about 6-8k men. Infantry KGs are based around a single infantry regiment and its artillery regiment. Panzer KGs are based on a single panzergrenadier regiments, artillery regiment and a single panzer battalion. Mot/Panzergrenadier KGs are based on a single panzergrenadier regiment and artillery regiment. If any unit becomes depleted in the scenario, it automatically "upgrades" to the Kampfgruppe OB. For expansion scenarios.
  - Some of my OB upgrade paths of the new OBs were broken and have been fixed.
- Increased air national morale for Axis Generic nationality to 65 in the early war and then lowered to match German air NM as it drops in later years.
- Added new photos for the following leaders:
  - Croatia (all Leader have the German nationality flag)
    - 481 Kvaternik Slavko
    - 482 Moskov Ante
    - 484 Luburic Vjekoslav
  - Polish-Sov:
    - 826 Berling Zigmund
    - 1208 Poplowski S.G.
    - 1209 Swierczewski Karol
  - Allied British
    - 1759 Elliott William
    - 1760 Mills George
    - 3000 \*\*\*YUGOSLAVIA-SOV\*\*\*
    - 3001 Ambrozic-Novljan Ladislav
    - 3002 Apostolski Mihailo
    - 3003 Dapcevic Peko
    - 3004 Drapsin Petar
    - 3005 Gosnjak Ivan
    - 3006 Ilic Pavle
    - 3007 Jaksic Pavle
    - 3008 Jerkovic Mate
    - 3009 Jovanovic Arso
    - 3012 Krstulovic Vicko
    - 3013 Lekic-Spanac Danilo
    - 3014 Mandic Gligo
    - 3016 Nad Kosta
    - 3017 Orescanin Bogdan

- 3018 Popovic Koca
- 3020 Rodic Slavko
- 3021 Rozman-Stane Franc
- 3022 Rukavina Ivan
- 3023 Sakic Micun Milan
- 3025 Tanaskovic Rajko
- 3026 Vuckovic Ljubo
- 3027 Vukanovic Radovan
- 3028 Tito Josip
- o \*\*\*BRITISH-SOV\*\*\*
- 3046 Elliott William
- 3047 Mills George
- Map data changes in maptext/city/hexart/hex/factory/mapregion/cityOwner files:
  - o 0009 Vienna (GER) correct text overlap with flag in Zoomlevel 1
  - o 0043 Elbing (GER) add size-3 port and add to Baltic Sea zone
  - o 0097 Wismar (GER) add size-1 port and add to Baltic Sea zone
  - o 0119 Guben (GER) one part of Oder river was minor instead of proper major
  - o 0289 Verden (GER) Lay Aller river from Northeast to Southeast of Verden
  - o 0307 Flensburg (GER) added size-4 port with a water connection to the Baltic Sea
  - o 0453 Helsinki (FIN) correct text overlap with Gulf of Finland in Zoomlevel 1/2
  - o 0498 Petsamo (FIN) add 1x pop/manpower, added to Barents Sea zone
  - o 0846 Sulina (ROM) added to Black Sea zone
  - o 1772 Murmansk (SOV) added to Barents Sea zone
  - o 2161 Eysk (SOV) added to Azov Sea zone
  - o 2609 Kronstadt (SOV) remove port damage
  - o 2851 Krasnovodsk (SOV) added to Caspian Sea zone
  - o 3404 Oslo (NOR) added 5x pop/manpower/port/rail and added to Skagerrag Sea zone
  - o 3424 Steinkjer (NOR) gets population/industry from Stod, linked to Atlantic
  - o 3425 Stad (NOR) renamed Stod, Population/industry moved to nearby Steinkjer
  - o 3976 Assens (DEN) fix odd map text placement
  - o 3979 Abenra (DEN) renamed Aabenraa
  - o Romania (maptext) changed to Rumania (Zoomlevel 1) to be in sync with general ingame use
  - o Sea of Azov correct text overlap with green terrain in Zoomlevel 1
  - o removed sea zones from several inland water hexes in Finland and northern Soviet Union
  - o fixed southern soviet border and rail around the Aras river (Iran/Turkey)
  - o added rail from Port Said to Suez via Ismailia, slightly rearrange rail around Ismailia
  - o added rail from Cairo to Suez
  - o connected Marsa Matruh to rail net
  - o added some rail around Benghazi and Tripoli
  - o removed location 2954 Pechenga (Soviet name for Petsamo, misplaced)
  - o slightly changed Dnestr river layout NW of Oknitsa
  - o Several (lake) water hexes removed from land regions (or sea region regions if they had no access to the sea/ocean)
  - o Mittellandkanal extended from Wolfsburg to Magdeburg, some flow changes between Hannover and Wolfsburg
  - o Leine river re-routed from east side of Hannover to west side
  - o change most parts of Hunte river into a canal, add real Hunte to SSE of Oldenburg
  - o re-route Donau to flow north of Linz
  - o fix map text of both Przemysl locations
  - o some minor rail changes in Caucasus + change some tracks to dual there (especially around Baku)
  - o some minor rail changes E/SE of Bodensee
  - o Lomza connected to rail net
  - o added rail Willenberg <-> Ostroleka

- added rail connection from Braunschweig to Salzgitter
- some minor rail layout changes around Hildesheim
- Rail line Trieste-Ljubljana-Zagreb changed to dual-Track
- Rail line Maribor-Celje changed to dual-track
- Rail line Novska-Belgrade changed to dual-track
- several rail lines in Yugoslavia added or modified to better reflect rail layout there
- removed dual-track from Csap (HUN)
- Rail layout changes round Ostrava
- several minor rails in Poland changed to dual-track
- Location renamed:
  - 0916 Szerenes (HUN) Szerencs
  - 2311 Lisko (SOV/POL) Lesko
  - 2327 Lomzha (SOV/POL) Lomza
  - 2590 Novograd-Volynsky (SOV) Novograd-Volynsky
  - 3519 Palanka (YUG) Velika Plana
- Location rename + Data change x
  - 0274 Dollbergen (GER) Lehrte, add 2x railyard
- Location Data change
  - 0290 Lueneburg (GER) -1 population/manpower for new location Uelzen
  - 1664 Yelets (SOV) add 1 railyard
- New Location
  - 0357 Uelzen (GER) 127,168 with 1x population/manpower/railyard
  - 2940 Kiestinki (SOV) 187,151 an airbase already existing in GC41
- Map regions changes:
  - Northern Bucovina and Jan Mayen created, Moldova renamed Moldavia, changed some map region colors if two regions with similar colors were next to each other
  - Narva and 2 hexes below moved from Leningrad to Estonia region
  - Bessarabia region extended westwards towards Khotin using Dneestr river as northern border, hexes taken from Podolia region
  - Chernovtsy and surrounding hexes moved from Podolia to new Northern Bucovina region
  - The 2 rocky islands of Jan Mayen added to new Jan Mayen region
  - Hex SW of Lomza moved to Bialystok region
  - The 2 hexes SE of Friedrichshafen (GER) moved from Tyrol to Württemberg and Bayern region
  - Extended Ligurian Sea region to SE towards Elba island
  - Extended Western Mediterranean region to NE towards a line Nice <-> Calvi (Corsica)
  - Sudetenland region expanded to include Nesselsdorf (which is kept with Czech nation though)
- Changes in ac file – Increased the imports of Slovakian Bf 109E-7 and G-2 by 10 a/c each, fixed a small mishap with wrong nation of Romanian PZL 23B.
- SoundFXconfig file – Fixed one of the music tracks which had a typo and was not being played.
- OP Typhoon changes:
  - fix name of 271-276 mot. Army Flak Bn
  - fix name of 12 IAP "A"
  - disabled some duplicate AA units in Moscow
  - Eremenko removed from delayed Kalinin front due to a bug + being wrong leader
  - Updated with appropriate map changes made to generic data in this update
- Red Army Resurgent changes:
  - fixed name of 279 mot. Army Flak Bn
  - Updated with appropriate map changes made to generic data in this update
- RtL changes:
  - fixed name of 272-280 mot. Army Flak Bn
  - 1st NKVD RD OB change to then-current 991
  - 20th NKVD RD OB change from future 992 to then-current 991
  - Updated with appropriate map changes made to generic data in this update
- RtM changes:

- fix name of 271/276 mot. Army Flak Bn
- 190 ShAP changed from I-153 to I-153BS
- remove duplicate Pz Ib entry in 19th Panzer Div
- fix 2 soviet HQ motorization issues
- Updated with appropriate map changes made to generic data in this update
- VL changes:
  - demotorized 30th Guards Rifle Regiment
  - Updated with appropriate map changes made to generic data in this update
- Destruction of SW Front changes:
  - Reactivated VI Rum. Korps with 15-Turn freeze
  - disabled 141st PVO AA Bn in Kirovograd (duplicate unit)
  - renamed duplicate 364th PVO AA Bn into 3364
  - fixed name of 275-279 mot. Army Flak bn
  - III./JG 52 changed to Bf 109F-4 full
  - III./JG 77 changed to Bf 109F-4 20+15
  - 69 IAP renamed 69 IAP PVO
  - 146 IAP changed to MiG-3
  - 146 RAP renamed 2/146 IAP, changed to 20x I-16 Type 24, assigned to 20 SAD AOG, disbands turn 12
  - removed Ju 86E-2 pool (not a frontline bomber, withdrawn to schools)
  - Husi airbase (ROM) removed, was built ~1943
  - demotorized Soviet Black Sea Amphib HQ
  - Updated with appropriate map changes made to generic data in this update
- 1941 Campaigns changes:
  - Updated with appropriate map changes made to generic data in this update
  - some german air unit rename to use Gr and not Gr. as abbreviation for Gruppe
  - removed Ju 86E-2 pool (not a frontline bomber, withdrawn to schools)
  - 13th Slov Fighter squadron changed disband into AR withdrawal on T11, returns 10/42, withdraws west 1/44
  - 13./JG 52 (Slov) rename slot changed to use Slovakian Bf 109E-7
  - 14./KG 3 (Eis) changed from Ju 88 C-2 NF to A-4 bomber
  - 14./KG 55 (Eis) changed from future He 111H-20 to H-16
  - LLG 1/2 air units change to Go 244
  - III./KG zbV 323 change to use Me 323
  - 12 IAP "A" name fixed
  - 69 IAP renamed 69 IAP PVO
  - 146 IAP changed to MiG-3
  - 146 RAP renamed 2/146 IAP, changed to 20x I-16 Type 24, assigned to 20 SAD AOG, disbands turn 12
  - 190 ShAP changed from I-153 to I-153BS
  - KG zbV renamed KGr zbV: 4-8,20-25,172
  - KGr zbV 4 arrives 2/42 with full complement of Ju 52 and gets removed in mid 6/42
  - KGr zbV 5 arrives 2/42 with full complement of He 111, transfers to WE in 5/43 and to FI in 3/44
  - KGr zbV 6/7 arrive 2/42 with full complement of Ju 86, disband at the end of 3/42
  - KGr zbV 8 arrives 2/42 with full complement of Ju 52 and gets removed at the end of 4/42
  - KGr zbV 20 arrives with full complement of He 111 in early 12/42, gets removed late 3/43
  - KGr zbV 21 arrives with 25 Ju 86 in early 12/42, gets removed late 3/43
  - KGr zbV 22 arrives with 14 Ju 86 in early 12/42, disbands late 2/43
  - KGr zbV 23 arrives with full complement of He 111
  - KGr zbV 25 arrives with full complement of He 111 in 1/43, gets removed late 3/43
  - KGr zbV 200 changed to Fw 200 transports, arrive 1T earlier with high exp/morale, will be removed early 3/43
  - KGr zbV 300 arrives with full complement of Ju 52, gets removed late 6/42
  - KGr zbV 400 remove double West TB transfer
  - KGr zbV 999 arrives 1/42 with full complement of Ju 52, gets removed late 4/42

- KGr zbV Frankfurt, Wittstock, S.7 and S.11 arrive with full complement of aircraft and will be removed instead of disbanded
- KGr zbV S.7/11 disband earlier in late 1/43
- KGr zbV S.13 - disabled, its formation was cancelled
- remove movement points from frozen Romanian rail repair unit
- fix name of 139th Mountain Rgt
- fix name of 271-280 mot. Army Flak bn
- 1439th Medium SU Regiment rebuilt to proper 1943 OB
- 2.(H)/AufklarGr 32 moved to Suwalki airbase
- 36 VG Div rename slot set to non-motorized
- Husi airbase (ROM) removed, was built ~1943
- set Hexes around Orestieada to Axis control
- island of Bornholm made Axis controlled
- unfreeze several Italian support units assigned to Ital. Expeditionary Corps
- reduce frozen turns for three Hungarian support units
- 239/712 Marine Flak Bns arrival moved from Liepaja to Memel
- Kharkov Air Command AOG is now removed on turn 7 just like its parent unit
- Konotop Airbase moved from Odessa to Kharkov Air Command
- Removed rebuild restrictions: 7th/16th NKVD Border Guard detachment, 4th/20th/21st NKVD Rifle Division
- removed FE transfer from 16th NKVD border guard: 1st/4th NKVD RD OB change to then-current 991
- 20th NKVD RD OB change from future 992 to then-current 991
- set Hexes around Orestieada to Axis control
- island of Bornholm made Axis controlled
- Vistula to Berlin, Stalingrad to Berlin, Red God of War - Updated with most of the appropriate map changes made to generic data in this update.
- Multiple scenarios:
  - set player for Ronne, Anina, Cugir, Orestiada,Uelzen, Kiestinki
  - Location removed - 2954 Pechenga
  - Airbases/airbase units added:
    - 1499 Krasnodar size 2 262,198
    - 1505 Velikie Luki size 2 201,129
    - 1585 Yelnya size 1 215,138
    - 1664 Yelets size 2 240,144
    - 1665 Lipetsk size 2 244,142
    - 1671 Chernigov size 2 214,164
    - 1675 Nezhin size 1 217,167
    - 1951 Kashira size 1 233,129
    - 2008 Mikhailov size 1 236,131
    - 2277 Lyuban (s) size 1 198,159
    - 2346 Slutsk size 1 196,158
    - 2376 Dretun size 1 198,135
    - 2394 Rechitsa size 1 208,159

### **v01.02.12 – 15th December 2021**

#### **New Features and Rule Changes**

- This version includes the War in the West editor manual in the /Manuals folder that was accidentally left out of the 1.02.11 official update. Although there are many differences between the WitW and WitE2 editors, the WitW editor manual is a useful guide to understanding the WitE2 editor.
- Greatly reduced the chance that more men show as disrupted in the combat report detail than were in the battle. If it happens, this indicates an element has been disrupted more than once.

#### **Bug Fixes and AI Improvements**

- Day/night button on top menu display not appearing during air transport ops. Fixed.
- Can air transport any unit into an enemy hex adjacent to friendly airbase and it acts like an airborne drop. Fixed (not allowed into enemy hexes).

- More AT guns are built than the build limit. Fixed.
- Guards Rifle Corps was incorrectly downgraded to a Guards Rifle Division. Unit used to create corps had a rename that was not cleared that should have been cleared at the time of corps creation. Fixed.
- AI - Soviet unit warps to near Vienna (far behind enemy lines). Fixed.
- AI – Improved Axis AI in late war.

#### **v01.02.11 – 8th December 2021**

##### **New Features and Rule Changes**

- Reduced the chance of indirect fire disruption hits.

##### **Bug Fixes and AI Improvements**

- Game crashes during ground combat. Fixed.
- AI – AI warps units into an isolated pocket. Fixed.

#### **v01.02.08 – 2nd December 2021**

##### **New Features and Rule Changes**

- Reduced the chance that HE fire by non-infantry type weapons will gain extra shots during direct fire phases.

##### **Bug Fixes and AI Improvements**

- Escorts are not flying in ground support air missions. Fixed.
- Vehicles in isolated depots are being returned to the pool in exchange for freight. If enough are sent back, this can make the pocket think it is in airhead supply. Isolated trucks should not be returning vehicles. Fixed.
- Soviet Romanian HQs are being disbanded automatically for the human player. Fixed.
- AI - Axis AI moves a unit into an enemy controlled hex without taking control of the hex, and is then destroyed. Fixed.

#### **v01.02.06 – 17th November 2021**

##### **New Features and Rule Changes**

**IMPORTANT NOTE: All save game and scenario files created with this or later versions may only be loaded with this or a later version. Versions prior to 1.02.06 may not load these newer save game or scenario files. Old saves and scenarios may be loaded with this and newer versions.**

- New rule - A mission generated by a ground attack air directive that is performing an attack on a unit has a chance of having the mission converted to an interdiction attack. The chance of switching to interdiction increases with the number of movement points expended by the unit in the unit's prior turn, and increases against units smaller than divisions.
- Changes/Clarifications with flak
  - Clarification – A ground element can be counted multiple times in a single battle report in the list of anti-aircraft elements. This is because the attack is broken up into 'flights', and each flight has the chance of being engaged by a ground element. So, a ground element could fire at 6 different flights and be counted 6 times.
  - Non-flak elements were being added into the anti-aircraft count in cases when they should not have been. This was a display only issue as they weren't actually adding to the anti-aircraft value firing at the aircraft. This has been fixed.
  - Non-flak elements will never fire at aircraft flying into or through and adjacent hex. This was rare before, but has been removed entirely.
  - Increased the importance of aircraft armor in mitigating damage from flak.
  - Reduced op losses for day missions and ground support. Also, fixed the function that was supposed to credit some aircraft damaged by flak, that crashed during landing routine, as flak losses. This was incorrectly always counting them as op losses.
- AFV losses in combat were tweaked down slightly.
- Production of guns with build limits was limited when the amount in the pool exceeded 10x the build limit. This limit has been changed to 100x the build limit.
- Increased op losses for night missions for pilots with experience less than 70 experience, with those under 60 experience experiencing roughly double the op losses previously experienced.
- Reduced night bombing accuracy by air units that do not have navigational aids (currently only Allies in War in the West have them).
- Until the Axis control a port on the Caspian Sea, every Caspian Sea hex will automatically receive

20 interdiction points at the end of each air execution phase (enough to make the hexes Soviet controlled).

- Made changes to the layout of the right side of the campaign victory screen.
- Editor - Set hex sea zone and weather zone values as fully generic.
- Editor – Hooked up ability to set an event to activate in the air planning phase (actually executes at the end of the logistics phase).
- This version includes the War in the West editor manual in the /Manuals folder. Although there are many differences between the WitW and WitE2 editors, the WitW editor manual is a useful guide to understanding the WitE2 editor.

### **Bug Fixes and AI Improvements**

- Display of load outs - Air group loadouts listed in CR don't show the same as in the air unit detail screen
- CR screen was very slow to respond in certain coming expansion scenarios. Fixed.
- Heavy tank regiments are not built with guards designation. Fixed.
- Editor - Button to cancel withdrawals for units in the editor does not work. Fixed.
- Editor – Can't change sea zone of some ports in scenarios. Fixed.
- Support units are not being committed to battle during the first turn of a scenario if the first player is played by the AI. Fixed.
- Dynamic hex sea zone value is not changed when changing sea zone in editor, so it keeps displaying old value. Fixed.
- Show AD targets rollover text is incorrect on the last button which should read Active Targets Only. Fixed.
- Metrics screen logistics phase losses are always showing 0 in Metrics. Fixed.
- Fixed several bugs with the campaign city bonus victory points.
- AI – During first turn AI script, support units are not getting included in combats. Fixed.

### **Data and Scenario Changes**

- Ob.dat changes – These changes reported in 1.02.00 were accidentally left out but were included in 1.02.01:
  - Delayed 42 Guards Mechanized Corps OB to 11/42.
  - Removed 42a Guards Tank Corps OB.
  - Renamed 42b Guards Tank Corps OB to 42 Guards Tank Corps and delayed it to 12/42.
- Leader.dat changes:
  - New Yugoslavian leaders added for future expansion scenario.
  - 72 - Ernst Hell last date extended to 8/44
  - 134 – Ludwig Mueller last date extended to 8/44
  - Created 4 Croatian leaders: 481-484 with German nationality
  - Created a new batch Soviet leaders from 3000 ascending (Romanian,,Bulgarian, Yugoslavian, and British).We now have some leaders in the list twice, and this allows these leaders to be added to the units that are considered Soviet nationality.
- Hex.dat and hexart.dat changes – Added rail line
- New photo – 0226 PZL 23B (RU)
- Changes to map in factory/city/maptext/hex/cityOwner and scenario files as noted below.
- Locations renamed:
  - 343 Nordholtz                    119,162-> Nordholz
  - 0502 Kemijärvi                    172,51 -> partially corrupted name fixed
  - 1005 Sp. Nova Ves                171,195 -> Spisska Nova Ves
  - 1166 Piestany                    160,200 -> Piest'any
  - 2022 Etil                         250,146 -> Ertil
  - 2052 Muchkap                    254,144 -> Zherdevka (Muchkap is on rail line further east)
  - 2057 Ostrozhsk                  247,156 -> Ostrogozhsk
  - 2077 Repeyevka                 245,154 -> Repyovka
  - 2406 Suvorovo                  215,211 -> Sovorove
  - 2439 Shumsk                    186,147 -> Shumskas
  - 2711 Novo Kalltva               253,160 -> Novaya Kalitva
  - 2727 Burluk                     242,165 -> Velykyi Burluk

- 2919 Karmaleva 180,146 -> Karmelava
- 2925 Bely Kolodes 239,165 -> Bilyi Kolodiaz
- 2968 Kikeritsy 190,106 -> Kiorstovo
- Locations renamed + data changed:
  - 2428 Kretinga (old) 167,140 -> Rucava (-1 population/manpower for new Kretinga)
  - 2966 Siversky (old) 194,108 -> Nizovskaya, airfield reduced to 1, capture dates modified
- Location data changed:
  - 0497 Janisjarvi (FIN) 194,86 -> changed to Soviet, ad 1x pop/manp/raily from duplicate
- New locations added:
  - 0514 Immola 187,93 - real location of Immola airfield, old one was Nummela
  - 2667 Kretinga 167,141 - real location of Kretinga, 1x pop/manp/raily, occupation dates from Rucava
  - 2965 Siversky 194,106 - real location of Siversky, with airbase size 2
- Locations removed or slots cleared:
  - 1790 Janisjarvi (SOV), duplicate of 0497
  - 2784 Remontroe, misnamed duplicate of 2158 Remontnoe
  - 2800 Biamak, duplicate of 2300 Baimak
  - 2809 Troizk, misnamed duplicate of 2303 Troitsk
  - 2819 Kungar, misnamed duplicate of 2243 Kungur
  - 2893 Birs, misplaced duplicate of 2295 Birs
- Changes to all scenarios:
  - set player for 3 new locations
  - renamed several airbase units to get in sync with location name
  - add airbases and airbase units to Siversky(new), Izmail, Luga and/or Krasnogvardeysk
  - clear some deleted locations
  - 287 Arab Bn now uses proper German Nebelwerfer
- 1941 Campaign
  - III./JG 52 changed to Bf 109F-4 full
  - III./JG 77 changed to Bf 109F-4 20+15
  - Stab/JG 1 changed to Bf 109F-4 full + remove from invalid airbase
  - I./JG 1 changed to Bf 109F-4 11+15
- RAR 42-43
  - 51/52 GRD rename slot lacking Guards status
  - fixed some improperly motorized airbases
- Operation Typhoon
  - 45/62 RD HHQ set to STAVKA
  - Internal note: some dupe PVO units in Moscow
- Destruction of SW Front
  - fixed an improperly motorized airbase
  - Internal mote: 2x dupe PVO AA
- Road to Minsk
  - fixed some improperly motorized airbases
- Velikie Luki
  - fixed an improperly motorized airbase
  - remove two improper ground elements from German/Soviet pool

#### **v01.02.01 – 28<sup>th</sup> October 2021**

#### **New Features and Rule Changes**

- Added new preference screen items:
  - Show videos – Defaulted on, this allows you to turn off opening and end game videos.
  - Export Battle Details (CSV) – Defaulted off, when on it will generate a report In the /logs folder inside the save directory for the game. The report will contain the high detail level messages from combat.
  - Pre-logistics Auto Save – Defaulted off, when on a save will automatically be created just before the start of each player's logistics phase.
- Lowered the chance of intercepting transports missions that are flying behind friendly lines (further



- from the front the lower the chance of intercepts).
- Rule Clarification – It is possible for vehicles to transport freight from one depot to another depot that is not connected to the rail grid. This is generally rare, but possible.
- Added Living Manual v1.08.pdf file in the \Manuals folder. This is up to date with changes through game version 1.01.15.

### **Bug Fixes and AI Improvements**

- Fighters that are not assigned to a non-ground support AD are no longer auto-intercepting enemy ground support . Fixed.
- Frozen units can be transferred to TBs. Fixed.
- There is a way to transfer aircraft without miles travelled being charged. Fixed.
- It was found that one of the functions that calculates the range between hexes could return invalid ranges. This was found when a unit at the corner of an air superiority box was not properly covered by the air superiority fighters. Fixed.
- The CR/Equipment/Aircraft compare window was not scaling. Fixed.
- Text in the Battle Report Detail/Air Combat tab is smaller than other text. Fixed.
- Under some circumstances, when the Astrakhan to Baku rail is cut, a large portion of the Soviet Caucasus became isolated when it shouldn't. Fixed.
- When clicking on the show combat recon button, the show city recon graphics are shown at the top of the screen (instead of show combat recon). Fixed.
- When pressing shift-t repeatedly, it only toggles between combat and city recon and does not turn off the show recon. Fixed.
- Air unit range circles are not correct. Fixed.
- Airbase receives 2.49 million tons of freight/supplies. Fixed.
- 4 81mm mortars cause 3k kills. Fixed.
- AI – Improved a move to routine used by attacking AI which will make it more likely to attack units in the way.
- AI – Improved filling gaps in the defensive line.
- Ai – Improved Axis AI line forming in first winter (41/42).

### **Data and Scenario Changes**

- Ground.dat changes:
  - Increased the front armor of the Tiger from 105 to 107 and side armor from 73 to 80 as a result of research while developing a rule for implementing Schuerzen (the 73 was definitely an error)
  - Decreased the Reliability of the King Tiger and Jagdtiger from 60 to 55 based on a video on the King Tiger from the British Tank Museum
  - Standardized the MG ammo of the various T-34s (76mm) at 2898 rounds
  - 45mm M37 AT Gun production increased from 250 to 320 per week and scrapping removed
  - 45mm M42 AT Gun production decreased from 78 to 74 per week
  - 57mm ZiS-2 AT Gun production decreased from 85 to 82 per week
  - Fixed name in element 435 (stielgranate)
- Device.dat changes:
  - Adjusted device #15 to reflect Polish aircraft guns were 7.92 caliber
  - Fixed name in device 562 (stielgranate)
- Leader.dat change – renamed 874 Falakeev to Falaleyev
- Added photo - 511 37mm vz.37 AT Gun
- Changes to map (city/maptext/factory/cityowner/hex files):
  - 0501 Immola AF (173,104) -> renamed Nummela AF
  - 1500 Mogilev (205,147) -> Armaments fac relocates to Barnaul in early July, 8 of 12 HI points relocate to Kuybyshev in early July
  - 1558 Mogilev-Podolsky (205,192) -> Armaments fac improperly dated relocation removed
  - 2926 Chaplynka (234,199) -> add Axis capture date September 12, 1941
  - 2966 Siversky (194,108) -> add Axis capture date August 28 1941

- 2978 Brighton and Hove (81,181) -> remove invalid city owner change
- several stray city owner changes removed
- 436 Jesau -> removed trailing space
- 504 Utti -> removed trailing space
- 971 B taszj (166,219) -> corrupted name fixed, special characters did not work
- 975 -> corrupted name fixed, special characters did not work
- 977 -> corrupted name fixed, special characters did not work
- 1162 Milowitz -> remove trailing space
- repairs made to broken/invalid rail links in neutral countries
- Stalingrad to Berlin changes:
  - Roslavl Airbase spelling corrected.
  - 1<sup>st</sup> SS Ital Inf Bde changed from an Italian unit to an Axis Generic unit so it will arrive in the IT TB after the Italian Surrender
  - 24<sup>th</sup> SS Mountain Division changed from an Italian unit to an Axis Generic unit so it will arrive in the BA TB after the Italian Surrender
  - Changed the wording of some events for capitalization and uniformity. i.e. US 9<sup>th</sup> Army was given credit for taking Bavaria not the US 7<sup>th</sup> Army.
- Vistula to Berlin changes - Changed the wording of some events for capitalization and uniformity.
- Ac.dat changes:
  - Bf 109F-4 has droptanks available 6/41
  - 0049 Go 244 - maxload reduced to 2000kg
  - 0377 TB-3 - maxload increased to 5000kg, changes to bombload options internal fuel and endurance reduced, add aux fuel tanks to gain back range for light loads
  - 0378 TB-3G-2 - internal fuel and endurance reduced, add aux fuel tanks to gain back range for light loads
  - 0383 Li-2 - internal fuel and endurance reduced, maxload reduced to 2000kg add aux fuel tanks to gain back range for light loads
  - 0384 Li-2VV - internal fuel and endurance reduced/add aux fuel tanks to gain back range for light loads
  - C-47/Dakota (multiple variants) - internal fuel and endurance reduced, maxload increased to 6500 lbs add aux fuel tanks to gain back range for light loads
  - Ju 52/3m (multiple variants) - internal fuel, endurance and cruise speed reduced, maxload increased to 2200kg add larger aux fuel tanks to gain back range for light loads crew reduced to 3, armor increased to 1 (some crew armor present like armored seat)
  - SM.75/81/82 (multiple variants) - internal fuel and endurance reduced/add aux fuel tanks to gain back range for light loads
  - New - 0226 PZL 23B (RU)

#### **v01.01.15 – 12<sup>th</sup> October 2021**

##### **New Features and Rule Changes**

- For a unit on the map to disband or be sent to a theater box, it must now be more than 8 hexes from enemy units. To be able to send a unit to a TB, it must also be on a connected rail hex. Other limitations/restrictions re disbanding and transferring to a theater box remain unchanged.
- Multiple changes to Assault HQ rules:
  - The command point multipliers for HQs in Assault HQs are now:  
Date Axis Army Axis Corps // Soviet Front Soviet Army&Corps  
1941 1.34 1.17 // no bonus no bonus  
1942 1.34 1.17 // 1.10 1.10  
1943 1.34 1.17 // 1.34 1.25  
1944 1.34 1.17 // 1.67 1.34  
1945 1.34 1.17 // 1.67 1.34
  - Limits on maximum number of Assault HQs are now:  
Date Axis Soviet  
1941 4 2  
1942 3 2  
1943 3 3

1944 2 4

1945 2 4

- Changes made to ground combat. Increased the range at which the opening direct fire shots are fired, while increasing the amount of fire at these longer ranges. Increased the number of rounds of combat between opening range and 50 yard combat. Opening ranges will be longer for clear and less dense terrain. Net effect of combat changes increases overall losses slightly.
- When captured, airbases will have their ground element experience seeded at the level of the owning sides air national morale.
- Now when a corps is created using 2 or 3 guards units, if an appropriate guards OB is not available, the newly formed corps will not be a guards unit. A data change in this version delays the first available Guards Tank Corps to December 1942, and the first available Guards Mechanized Corps to November 1942. So merging guards brigades before these dates will not result in a guards corps.

#### **Bug Fixes and AI Improvements**

- Escorts not flying in ground support (usually when enemy has ground support turned off). Fixed.
- Cavalry units are being allowed to temporarily motorize. Fixed.
- Movement FOW turned on is preventing movement over a ferry hex into an enemy controlled hex with no enemy units. Fixed.
- Some units have their transfer flag set during a scripted withdrawal, and it is never turned off. This causes them to show incorrectly in the CR screen as still being in transfer. Fixed.
- Very weak units being displaced while isolated could shatter or rout out of a pocket instead of surrendering. Fixed.
- AFVs could sometimes return fire at a range greater than their weapon's range. Fixed.
- Units lose lots of ammo and in some cases their ammo on hand goes negative. Fixed.
- Rollover text over Command Efficiency button is wrong. Fixed.
- Stacks with X for CV value have attacker CV value showing instead of MPs. Fixed.
- When creating new Soviet units in the reserve, they could get a name already used by an active unit. Fixed.
- AI controlled city forts are participating in attacks. Fixed.
- Soviet AI puts NKPS units in Rostov city fort. Fixed.
- Axis AI attaches 2 German infantry regiments to Soviet 6th Army. Fixed.
- Axis AI changes human Batumi to export port. Fixed.

#### **Data and Scenario Changes**

- Ob.dat changes:
  - Corrected issue with some tank corps OB tank numbers.
  - Delayed 42 Guards Mechanized Corps OB to 11/42.
  - Removed 42a Guards Tank Corps OB.
  - Renamed 42b Guards Tank Corps OB to 42 Guards Tank Corps and delayed it to 12/42.
  - Corrected issue with Soviet Motorized Brigades by creating their own OB chain number 935 (as it existed in v1.00.00).
- Device.dat - Added the 152mm M1909 L/14 howitzer (0513) and 122mm M1910 L/13 howitzer (0514)
- Ground.dat - Added/changed the following ground elements:
  - (0111) 122mm leFH388(r) howitzer renamed to 122mm sFH396(r) howitzer, imports (captured) of this howitzer reduced from 500 to 100.
  - (0160) 122mm H/38 howitzer imports (captured) reduced from 217 to 41.
  - (0264) 122mm M-30 howitzer renamed to 122mm M1910 howitzer, device changed to 122mm M1910 howitzer.
  - (0305) 122mm M-30 howitzer renamed to 122mm M1910 howitzer, device changed to 122mm M1910 howitzer.
  - (0538) New 122mm leFH388(r) howitzer added (NEED PICTURE), uses device (0514) with 400 imports (captures).
  - (0539) New 122mm H/10-40 howitzer added (NEED PICTURE), uses device (0514) with 176 pieces in 41 campaign pools.
  - (0833) New 122mm M1910 howitzer added (NEED PICTURE)

- (0834) New 152mm M1909 howitzer added (NEED PICTURE)
- Production changes in ground.dat file:
  - (0729) 107mm M38 mortar production increase from 10 to 15 per week
  - (0786) 122mm M-30 howitzer production increased from 60 per week to 75
  - (0787) 37mm 61-K AA gun production decreased from 85 to 75 per week
  - (0809) 152mm M-10 howitzer production period extended to 8/41 and increased from 25 to 55 per week
- Factory.dat changes:
  - 0217 Coburg - Go 244 airframe factory added (Hartwig Sonneberg)
  - 1834 Staritsa (217,122) - not on rail so Railyard removed
  - 2002 Konstantinovsky n (229,105)- added 1x railyard + 10 fuel from Konstantinovsky (263,175)
  - 2055 Konstantinovsky (263,175) - fuel factory moved to Konstantinovsky n (229,105)
  - 2577 Makeevka (250,179) - Armament factory now relocates to proper Sverdlovsk in Urals
  - 2851 Krasnovodsk (341,193) - oil factory removed, was already replaced by larger factory in Nebit-Dag (350,192)
  - 3657 Bayonne (67,237) - size-1 port added
- Ac.dat changes:
  - double production of Me 323 to include the heavily used Me 321 glider (100% production accounted for)
  - quintuple production of Go 244 to include the heavily used DFS 230 and Go 242 gliders (50% production accounted for)
  - He 111 recon versions camera change
  - He 111H transports now import from older H-3 bombers
  - Ju 86C transport remodeled after Ju 86E bomber
  - LeO 451 T (2x variant) - maxload reduced to 1500kg
  - Added new Fw 200C - Stalingrad special transport version
  - Added new He 111H-6 T - transport version of older H-6 bombers, available 1943
- 4 new aircraft symbol art files, and the following new photos:
  - Ground Elem:
    - 511 37mm vz.37 AT Gun
    - 538 122mm leFH388(r) Howitzer
    - 539 122mm H/10-40 Howitzer
    - 773 Reconnaissance Squad 41
    - 833 122mm M1910 Howitzer
    - 834 152mm M1909 Howitzer
  - Aircraft:
    - 068 Ju 86C -> Ju 86E-based transport
    - 429 He 111H-6 T (transport version)
    - 430 Fw 200C (transport version)
    - 438 C.202CB (DE)
    - 439 CR.42 (DE)
    - 495 Do 17P (BU)
    - 496 Do 17K-M (BU)
    - 497 PZL.43 (BU)
    - 498 Fi 156 (BU)
    - 499 Bk-534 Dogan (BU)
    - 500 Ju 87D-5 (BU)
    - 504 B-534 Dogan (BU)
    - 509 Fw 189A (BU)
    - 510 KB-11 Fazan
- Changes made to generic files control/mapregion/city/maptext/hex:
  - CLIMATE (scenarios need to have separate adjustments):
    - 282,281 set to Arid Steppes
    - 363,208-209 set to Arid Desert

- 334,261 and 332,259 set to Temperate Dry
- 300-309:237, 300-310:238, 311:239, 311-312:240 set to Humid Warm
- 360-361:268 set to Arid Steppes
- 21,265 set to Temperate Humid
- 242,198;242,196;243,202;236,202 set to Temperate Humid
- REGION NAME:
  - 0153 Chlakov - renamed to proper Chkalov
- NATION:
  - 140,54 set to Norway
  - Narvik (144,53) set to Norway
  - 166,61 set to Finland
  - 185,44 set to Soviet Union
  - 62,199 set to France
  - 113,172 set to Germany
  - 63,301 set to Algeria
  - 1,338 through 1,333 set to Morocco
  - 316,233 set to Iran
  - 225,196 set to Soviet Union
  - 184,113 set to Soviet Union
  - Kronstadt(192,102) set to Soviet Union
  - 39,249 set to Spain
  - 68,77 set to Britain
  - 219,126 set to Soviet Union
  - 216,217/218 set to Romania
- REGION:
  - 328,154 attached to Kazakstan region
  - 299,183 and 304,183 attached to Daghestan region
  - 352,143 attached to Uzbekistan region
  - 267,152 attached to Stalingrad region
  - 131,162 added to Mecklenburg region
  - 52,1/2/4 attached to Greenland region
  - 324,273 attached to Mesopotamia region
  - 143,35+36 attached to Troms region
  - 233,94 added to Region Yaroslavl
  - 161,279-280 added to Ionian Sea region
  - 176,25 and 178,24 added to Barents Sea region
  - 321,150 through 326,152 added to Caspian Sea region
  - 219,126 set to Smolensk region
  - 216,217/218 set to Dobrugea region
  - 127,84 through 128,81 added to Atlantic Ocean region
  - fixing a bunch of water hexes with wrong or missing sea region
- SEA ZONES changes need to be replicated for scenarios (scenarios need to have separate adjustments):
  - 176,25 and 178,24 added to Barents Sea zone
  - 321,150 through 326,152 added to Caspian Sea zone
  - Bayonne (67,237) added to Atlantic sea zone
  - Gabes (125,321) added to Med sea zone (was linked to Med but not shaded in green?)
  - Chatham (83,177) added to North Sea sea zone (was linked to North Sea but not shaded in green?)
  - Bristol (71,175) added to Atlantic sea zone (was linked to Atlantic but not shaded in green?)
  - Kenmare (43,163) added to Atlantic sea zone (was linked to Atlantic but not shaded in green?)
  - Copenhagen (134,147) added to Skakerrag-Kattegatt sea zone (was linked but not shaded in green?)
  - 127,84 through 128,81 added to Atlantic Ocean zone

- fixing a bunch of water hexes with wrong or missing sea zone
  - CONTROL (scenarios need to have separate adjustments):
    - Damietta (257,317) set to Allied ctrl
    - 348,278 through 350,278 set to allied ctrl
    - Pantelleria + Lampedusa set to Axis ctrl
    - 147-149,122 set to neutral
    - 39,249 set to Neutral
  - MAP TEXT:
    - Malmo (136,147) fixed overlapping map text by slight relocation
    - Zuider Zee renamed IJsselmeer
  - LOCATION (some airbase units may end up with names different from their location):
    - 1649 Msinskaja (194,109) -> Mshinskaya
    - 1804 Soroka (197,61) -> Belomorsk
    - 1849 Spass-Demensk (218,138) -> Spas-Demensk
    - 1904 Sosnizy (192,107) -> Sosnitsy
    - 2123 Novo-annenskaya (262,151) -> Novoanninskaya
    - 2180 Kamennomostenaya (269,201) -> Kamennomostsky
    - 2185 Goergievsk (285,194) -> Georgievsk
    - 2187 Srednaya Achtuba (276,159) -> Srednyaya Akhtuba
    - 2190 Mikoyan-Shakhtar (279,200) -> Mikoyan-Shahar
    - 2523 Novojelnya (187,156)-> Novoyelnya
    - 2532 Volochinsk (197,186)-> Volochysk
    - 2582 Dybaltsevo (251,176) -> Debaltsevo
    - 2600 Sosnogorsk (252,37) -> Sosnogorsk
    - 2660 Snigirevka (229,195) -> Snigirevka
    - 2692 Tarabunary (217,209) -> Tatarbunary
    - 2719 Korolevets (222,161) -> Krolevets
    - 2769 Novgorod Seversky (220,157) -> Novgorod-Seversky
    - 2793 Krasnokelesny (246,147) -> Krasnolesny
    - 2796 Zolotkhino (233,152) -> Zolotukhino
    - 2801 Rokitno (197,171) -> Rokitnoe
    - 2834 Plessezsk (219,68) -> Plesetsk
    - 2844 Kandalakscha (185,43) -> Kandalaksha
    - 2862 Ladozskaya (265,194) -> Ladozhskaya
    - 2872 Dneprodershinsk (235,181) -> Dniprodzerzhinsk
    - 2879 Shpkov (207,189) -> Shpikov
    - 2883 Akadyr (367,76) -> Agadyr
- 41 Campaign scenario files:
  - 122mm M1910 howitzer replaces 122mm M-30 howitzer in most non-motorized units with pool of 122mm M-30 howitzers reduced to 251 from 2300 and new pool of 2041 122mm M1910 howitzers;
  - 152mm M1909 howitzer replaces 152mm M-10 howitzer in all non-artillery units and a few artillery units as well with resultant pool of 108 152mm M-10 howitzers;
  - 76mm M27 infantry gun pool reduced from 4300 guns to 300;
  - 120mm M38 mortar pool reduced from 3140 to 1250;
  - 45mm M37 AT gun pool reduced from 5000 to 4200;
  - 50mm M40/41 mortar pool of 17000 eliminated;
  - 85mm KS-12 AA gun pool increased from 0 to 1250
  - Control:
    - 30,274;39,249; set to Neutral ctrl
    - 348,278 through 350,278; 260.287 set to Allied ctrl
    - 143,35-36 set to Axis ctrl
  - Sea zone:
    - added to Lake Ladoga zone
    - Osinovets,Kobona,Syasstroy
  - added to Baltic Sea zone

- Oranienbaum;Heiligenbeil;170,119;172,120;166+168,145;
- Onega added to White Sea zone
- added to Barents Sea zone: 176,25;178,24
- added to Atlantic zone: several in Norway,Kenmare,Bristol;33,284;
- added to North Sea zone: several in Norway;118,38-39;Chatham
- added to Black Sea zone: Sulina,Kherson,Nikolaev,Yalta,Gelendzhik;236,202;254,202
- added to Azov Sea zone: Temryuk, + some hexes around; 242,198;243,202;254,197+199; 252,201
- added to Caspian Sea: Krasnovodsk,Guriev;321,150 through 326,152
- Climate:
  - 282,281;301,160;360-361:268 set to Arid Steppes
  - 363,208-209 set to Arid Desert
  - 334,261 and 332,259 set to Temperate Dry
  - 300-309:237;300-310:238;311:239;311-312:240; set to Humid Warm
  - 242,198;242,196;243,202;236,202;254,202;254,199;220,209 set to Temperate Humid
- airbases renamed to match new location name: 14036 Debaltsevo
- Corrected unit slot 394 (337<sup>th</sup> VG Division) so it will rename slot 2734 instead of slot 2735.
- Corrected unit slot 1546 (Army Group A rename) so it has an HQ type of 2 instead of 3.
- All 1941 short scenarios - The unit by unit changes made to the artillery in the 1941 campaign scenarios were carried over into the 41 short scenarios and pools adjusted where appropriate.
- Destruction of SW Front:
  - Added to Black Sea zone: Sulina,Kherson,Nikolaev,Yalta,Gelendzhik;236,202;254,202
  - added to Azov Sea zone: Temryuk + some hexes around; 242,198;243,202;254,197+199; 252,201
  - Climate set to Temperate Humid: 242,198;242,196;243,202;236,202;254,199;254,202;220,209
  - airbases renamed to match new location name: 13919 Debaltsevo
- RtlL:
  - added to Lake Ladoga zone: Osinovets,Kobona,Syasstroy
  - added to Baltic Sea zone: Oranienbaum;Heiligenbeil;170,119;172,120;166+168,145;
- Typhoon:
  - Axis -> Soviet ctrl 238,126
- RAR:
  - added to Black Sea zone: Sulina,Kherson,Nikolaev,Yalta,Gelendzhik;236,202;254,202
  - added to Azov Sea zone: Temryuk + some hexes around; 242,198;243,202;254,197+199; 252,201
  - added to Caspian Sea: Guriev;321,150 through 326,152
  - 242,198;242,196;243,202;236,202;254,202;254,199;220,209 set to Temperate Humid
  - airbases renamed to match new location name: 13783 Debaltsevo, 13935 Novoanninskaya
- Stalingrad to Berlin:
  - 943<sup>rd</sup> Rifle Division removed from the Campaign
  - 948<sup>th</sup> Rifle Division Removed from the Campaign
  - 1<sup>st</sup> Gds Tank Bde and 49<sup>th</sup> Tank Bde attached to 3<sup>rd</sup> Mech Corps
  - 40<sup>th</sup> and 229<sup>th</sup> Tank Battalions changed to Tank Regiments
  - 81<sup>st</sup> Guards Mortar Rgt reduced to 100% of TO&E
  - 68<sup>th</sup> Gds, 69<sup>th</sup> Gds, 87<sup>th</sup> Gds, 98<sup>th</sup> Gds, and 99<sup>th</sup> Gds reduced to 100% of TO&E
  - Removed the 25<sup>th</sup>, 31<sup>st</sup>, 93<sup>rd</sup>, and 145<sup>th</sup> Tank Bds from the Campaign and left the 8<sup>th</sup> Tank Corps in the Campaign
  - 78<sup>th</sup> Rifle Division moved from 49<sup>th</sup> Army to 5<sup>th</sup> Army
  - 5<sup>th</sup> Army Mortar/Rocket Rgts reduced to 100% of TO&E
  - Velikie Luki made a Fort 5, 1/83<sup>rd</sup> Infantry Division increased to 100% of TO&E and the 505<sup>th</sup> Pioneer Bn of LIX Korps was added as an attachment.
  - All three of the Regiments of the 3<sup>rd</sup> Mountain Division set to Reserve Status in the Velikie Luki area
  - 468<sup>th</sup>, 501<sup>st</sup>, and 1189<sup>th</sup> AT Regiments removed from the game

- 5<sup>th</sup> Mech Corps TO&E changed to 42 LL Mech Corps
- 16<sup>th</sup> Tank Corps reduced to 120 AFVs with two tank regiments attached
- 4<sup>th</sup> Mech Corps and 13<sup>th</sup> Mech Corps reduced to 146 AFVs
- 3<sup>rd</sup> Mech Corps converts to 8<sup>th</sup> Gds Mech Corps (LL)
- 7<sup>th</sup> Tank Corps converts to 3<sup>rd</sup> Gds Tank Corps (LL)
- Four Italian RSI divisions and five Italian ANR air units will arrive in late 43/45 fighting for the Axis (after Italian surrender). These units are Axis-Generic units.
- Changes made to fix map issues similar to changes in Campaign 1941.
- Vistula to Berlin – Changes made to fix map issues similar to changes in Campaign 1941.

#### **v01.01.10 – 15<sup>th</sup> September 2021**

##### **New Features and Rule Changes**

- Top bar now responds to display scaling setting.
- Blocked FBD/NKPS units from being able to be temporarily motorized.
- Adjusted the way limited freight national supply sources are used in non-campaign scenarios. The net effect will be the NSS's in non-campaign scenarios will be more easily accessed for freight shipments to depots.
- Isolated forts with 'Partisan' in the name will not automatically become depleted when not stacked with a combat unit.
- Rule Clarification – Air Superiority and Naval Patrol missions always fly first, irrespective of priority settings.
- Rule Clarification – The intensity level setting in the AD creation right panel, actually represents the current air doctrine setting. Changing this for an AD, actually changes the air doctrine setting to match for the current air command, and changes all similar ADs. If the player wishes to change one AD only, they should change the strike num setting.

##### **Bug Fixes and AI Improvements**

- Non-isolated support units in HQs are destroyed if they are in a hex where combat takes place and they lose the combat. Fixed.
- In some cases, units in isolated hexes that were able to trace to isolated Kronstadt were displacing out of the pocket, instead of surrendering. Fixed.
- There were cases where Assault HQs, or HQs under Assault HQs could be overloaded or outside of their command range, and the units would still receive bonuses of being under an Assault HQ. Fixed.
- Incorrect/phantom ground losses are reported during air transport of a units. Fixed.
- Temp motorized unit that rallies from rout has 32470 MPs. Fixed.
- Using x from city detail to send unit back to HQ causes it to be effectively destroyed. Fixed
- Clicking on airbase in AOG right panel list causes air unit detail display to be hidden under window. Fixed.

##### **Data and Scenario Changes**

- 1941 Campaign and 1941 Campaign – No Early End event changes:
  - Events 140 and 142 now each yield 150 APs
  - Events 141 and 143-146 now each yield 100 APs
- Stalingrad to Berlin Campaign – Event 145 now yields 100 APs.
- OB.dat update:
  - 42a Guards and non-Guards Tank Corps OBs have been revised for three tank brigades instead of two.
  - Added 44 upgrade path for the Soviet Heavy Anti-Tank Regiment.
- Factory.dat update:
  - 1834 Staritsa (217,122) - not on rail so Railyard removed
  - 2002 Konstantinovsky n (229,105)- added 1x railyard + 10 fuel from Konstantinovsky (263,175)
  - 2055 Konstantinovsky (263,175) - fuel factory moved to Konstantinovsky n (229,105)
  - 2577 Makeevka (250,179) - Armament factory now relocates to proper Sverdlovsk in Urals
  - 2851 Krasnovodsk (341,193) - oil factory removed, was already replaced by larger factory in Nebit-Dag (350,192)



- Ac.dat update:
  - Bf 109E-7/F-2: drop tank option ends in June 1941
  - Data overhaul for French aircraft
  - fuel-related data changes for D.520
  - some changes to Slovakian aircraft like slightly increased Bf 109 imports
  - added several Bulgarian aircraft types
  - data updates for Soviet I-15/-16 series
  - 0511 Seaford - moved to 0530
  - 0512 Hertfordshire - moved to 0537
- Added icons for Bulgarian aircraft. Moved photos for Seaford & Hertfordshire aircraft.
- Ground/device/gtype updates:
  - New ground element 442 - StuG L6 47/32 630(i)
  - Added non-mechanized Soviet Reconnaissance Squad (0773) with no upgrade.
  - Changed the Bicycle ground type to Light Infantry because of file limitations
  - Mechanized reconnaissance squad renamed to Reconnaissance Squad 43 (0776).
  - Made some minor changes to American-made Panzer tanks and upgraded the reliability of the Panzer Ib.
- Added 33 ground element photos for ground elements 442, 505-536,1500.
- Leader.dat additions with photos for Bulgarian leaders:
  - 2501 Aryanov Dimitr V.
  - 2502 Boydev Vasil T.
  - 2503 Hadzhipetkov Nikola N.
  - 2504 Krstev Asen I.
  - 2505 Lukash Konstantin L.
  - 2506 Manchev Gancho I.
  - 2507 Markov Ivan H.
  - 2508 Mihov Nikola M.
  - 2509 Nakov Nikola K.
  - 2510 Nikolov Asen D.
  - 2511 Sirakov Asen N.
  - 2512 Stanchev Kiril N.
  - 2513 Stefanov Atanas A.
  - 2514 Stoyanov Kostantin B.
  - 2515 Stoychev Nikola G.
  - 2516 Popdimitrov Aleksandr
  - 2517 Trifonov Trifon Y.
  - 2518 Urumov Boyan G.
  - 2519 Yanchulev Kiril D.
  - 2520 Stoychev Vladimir D.

#### **v01.01.09 – 27<sup>th</sup> August 2021**

##### **New Features and Rule Changes**

- Reordered some of the ground elements on the left side of the Production screen to make them appear in a more logical order.
- In-game scaling - Scaled air unit load out window and server message window.
- Added Living Manual v1.06.pdf file in the \Manuals folder. This is up to date with changes through game version 1.01.09.

##### **Bug Fixes and AI Improvements**

- Support units are destroyed when non-isolated HQs displace (should only happen for isolated HQs). Fixed.
- Depot in isolated hex inside a pocket delivers freight to non-isolated outside the pocket 3 or less hexes away. Fixed.
- Sometimes fighters could not fly escort for transports if they had any previous miles flown. Fixed, they should now be available to escort and will try to fly if assigned.
- Fighter escorts in ground support and air transport could, in some cases, be charged more miles

- flown, and suffer more op losses than they should have. Fixed.
- Ending the turn of a Multiplayer game when disconnected to the internet could cause a corruption of the game's player turn order if the turn is ended again and successfully uploaded. Fixed. Now, the player will get a message that the upload has unsuccessful, and it will allow the player to try again. If the player is not able to reconnect to the internet and successfully upload the save, the player can exit the game without corrupting the game on the server (but they will lose whatever has been done during the current session). Players with very frequent connectivity issues should consider the benefits of using PBEM instead of MP.
- Adjusting music volume doesn't take immediate effect/impacts mouse click. Fixed.
- Production screen - ground element list on left doesn't scale when show types is turned on. Fixed.
- Airfield detail display - airfield capacity number goes very big negative value. Fixed.
- Y/N confirmation window for applying loadouts can appear behind other windows when at lower resolutions. Fixed.
- Combining 2 brigades on map to make division (via buildup) causes multiple units with same name. Fixed.
- Rocket units always get built named 500th even when there are already units with that name. Fixed.
- Can Merge a unit even when the player has no APs. Fixed.
- Created railyards in depots built in airfield only locations do not show up in city detail screen. Fixed.

#### **v01.01.07 – 17<sup>th</sup> August 2021**

##### **New Features and Rule Changes**

- Changed rules for isolated support/multi-role units inside HQs when the HQ displaces (either through relocate order or forced displacement). Now those units will be destroyed when the HQ displaces. As with surrenders, some small amount of men and equipment can escape to the pool.
- Reduced the number of fighters that are assigned by default to air transport missions.
- Reduced by 50% the chance of pilots being killed when an operational loss is recorded.
- Added Living Manual v1.05.pdf file in the \Manuals folder. This is up to date with changes through game version 1.01.07.

##### **Bug Fixes and AI Improvements**

- Can't access MP games using 1.01.03 version. Fixed.
- Multi-role units can't convert back to be on map units (no 'Convert' showing in their unit detail screen). Fixed.
- CR screen - Location/Storage tab SU column always shows 0. Fixed.
- Export ports not receiving freight. Fixed.
- Units are sometimes surrendering when they should be routing instead. Fixed. Note: You may have to go through a logistics phase for the bug to be fixed in existing games as a unit's data may already be corrupted in a way that would force it to surrender instead of routing.
- Partisans are operating less effectively than they should in non-campaign scenarios, especially in low partisan areas. Fixed.
- Corrected spelling of High (Hight) Water Mark in Multiplayer screen.
- AI assist naval ops setting bad stage base and not including nav patrol aircraft from Romanian Air Command. Improved.
- AI – Improved Axis AI line forming just north of the Sea of Azov in 1943.
- AI – Improved Axis pull back in Baltic States.

#### **v01.01.03 – 9<sup>th</sup> August 2021**

##### **New Features and Rule Changes**

- Added in-game scaling for all right side panels (factory navigation, turn summary, Air Directive creation, right unit bar) and for supply details window. At this point, all parts of the game except for the top bar area are impacted by the display scaling percentage preference item. Note that you will see issues with these right side changes in the editor if you are running at over 100% (best to use the editor at 100%).
- The supply priority of naval units are automatically set to 4 at the start of every logistics phase.

- Reduced the effect the range of the mission has on op losses for naval patrol missions. Should significantly reduce the op losses of naval patrol missions.
- Made automatic rail repair a higher priority during the logistics phase, making it more likely that automatic rail repair units will be able to secure the needed supplies/freight to do their work.
- Improved system for airfield construction so it is more likely that construction will occur if there are available construction units. There is still a supply/freight requirement so it is not guaranteed in low supply areas.
- To be eligible to escort an air transport mission, the fighter unit must now either be within range of the target hex, or if not, be within range of the stage base while the stage base is in range of the target hex.

#### **Bug Fixes and AI Improvements**

- Multiplayer – If disconnected from the internet when attempting to upload a save, game could become unstable and crash. Fixed.
- Bug 9103 - Naval Support Group always appears isolated - never gets resupplied. Fixed.
- Bug 9150 – With TB control on, you cannot clear the withdrawal data on the bottom left of the air unit detail screen, with it off, you can clear the data. Fixed.
- AI Bugs 9152 and 9167 – German AI, especially in late 1942 and in 1943, launches many bad hasty attacks. Fixed.
- AI bug 9170 – The pure AI (not AI assist) was corrupting the ground attack intensity air doctrine for some Luftflottes and Air Armies. Fixed.

#### **Data and Scenario Changes**

- Stalingrad to Berlin Changes:
  - Corrected Soviet AI first turn script
  - XXIII German Corps does not Disband on Turn 117. It does not Disband at all.
  - The correct von Stuelpnagel chosen as Commander of WMBef France. There are two in the game.
  - I./ZG 76 converts to I./JG 76 on Turn 88 and then converts to IV./JG 300 on Turn 98
  - 614th Heavy Panzerjager Company changed from Ferdinand to Elefant Heavy Tank Destroyer
  - II./JG 5 which becomes IV./JG 4 Moves to AR on Turn 114 not the Map
  - XIV SS Corps which becomes X SS Corps moves to Map on Turn 114 not the AR
- Road to Minsk changes:
  - 23 MC set to be a HQ, added leader and attached to Stavka
  - 7<sup>th</sup> MC placed on map, added leader, attached to Stavka
  - 69<sup>th</sup> Rifle Corps added leader and fixed name
  - Fixed control of hex 177,156 (now Soviet)
  - 109<sup>th</sup> Mech Div attached to 5 Mech Corps
  - Zeroed out German pool value in ground element 221
- Velikie Luki changes:
  - Corrected leader in OKH (now Zeitzler)
- Ground.dat and device.dat changes:
  - New Bulgarian ground elements added (slots 505-536 and 1500)

#### **v01.01.02 – 23<sup>rd</sup> July 2021**

**IMPORTANT NOTE:** All save game and scenario files created with this or later versions may only be loaded with this or a later version. Versions prior to 1.01.02 may not load these newer save game or scenario files. Old saves and scenarios may be loaded with this and newer versions.

#### **New Features and Rule Changes**

- Added “Display Scaling Percentage” preference item. This allows players some control over scaling their display in-game. **Note that when this version is first used, the system will automatically reset all preferences to default and attempt to set a scaling percentage that is best given your windows display settings.** Players can change the scaling percentage by hovering over the value in the preference screen and selecting from the dropdown list. The game will only allow the player to select scaling percentages that fit their current display. When you change the scaling percentage, it is necessary to exit the program and restart in order for the new

setting to take effect. At this time, items that appear on the right and top bars are not scaled, but the map and all other windows are impacted by the scaling percentage preference.

- Editor - Unit/Air group transfer TB flags will be automatically cleared when a scenario is loaded into the Editor. These transfer flags display in-game dynamic state and should be clear at the start of any scenario. Loading and saving off a scenario in the editor will now clear this info.
- Added Living Manual v1.03.pdf file in the \Manuals folder. This is up to date with changes through game version 1.01.00.

### **Bug Fixes and AI Improvements**

- Units that detach from city forts disappear (placed in 0,0). Fixed.
- Dismissing leader via leader pic on right bar doesn't dismiss leader but does cost some APs. Fixed.
- Minus Fuel on hand at AB after Air Freight Transport. Fixed. (system will use city fuel or convert freight at stage base into fuel from the pool).
- In rare situations, resources/supplies/fuel/oil stored in a city could go negative. Fixed in 1.01.00 but unreported in the whatsnew.
- CTD when trying to create AD for PVO Air Command in RGOW. Fixed. (Also data change with RGOW scenario).
- CTD from clicking on manpower on left of production screen. Fixed.
- Selecting "Mission" text on air unit detail activates disband unit window instead of fighter/bomber switch. Fixed.
- Units in Oranienbaum and Kronstadt are not isolated when cut off. Fixed.
- Player in the middle of a game is dropped into the editor. Fixed.
- Can attach 11 units to a city fort instead of just 10. Fixed.
- Destroyed Damaged numbers in the Battle Report Detail General Info tab are incorrect. Fixed.
- AP cost and APs available are not immediately updating on Soviet build unit screen. Fixed.
- Can assign combat units and additional support units to FBD/NKPS units (should not be possible). Fixed.
- Event open when Event window opens doesn't immediately reduce unread count. Fixed.
- Axis Allied manpower production is using German production usage percentage instead of using Axis Allied production usage. Fixed.
- Production screen built number for German manpower showed a negative value at the start of some small scenarios. Fixed.
- AI - During AI turn, a human player AOG changes the higher level AOG it is assigned to. Fixed.
- AI - CTD at 38% of Soviet AI in 1943. Fixed.
- AI - Strange Ai attack with only support units and no defender listed. Fixed.

### **Data and Scenario Changes**

- 1941 Campaign and 1941 Campaign - No Early End scenario changes:
  - 6th Panzer Division increased Pz35(t) from 155 to 160
  - Changed a couple of Soviet Tank Divisions that start the game unready to using the 41b Tank Division OB
  - XXXX Mot. Corps HQ now arrives on 10 August 1941 to the map
  - Fixed Soviet Northern Offensive Event so it matches the 110% cv requirement in the manual (had been 115%).
- Stalingrad to Berlin scenario changes:
  - All Assault-Sapper Squads removed from the game in favor of Engineer-Sapper Squads.
  - Felmy Corps changed to LXVIII zbV Corps which Renames to LXVIII Corps
  - 6th SS Mountain Division arrives in WE on Turn 109 not 113. Made SS Elite to match VtB.
  - WMBef Belgium Removed on Turn 96
  - WMBef France Removed on Turn 99
  - WMBef Holland Removed on Turn 104
  - LIV Corps Renames to 25th Army on Turn 104
  - 16th SS PzGr moves to Map on Turn 111 not Turn 113.
  - 269th ID moves to Map on Turn 112 not Turn 117.
  - 712th ID moves to Map on Turn 112 not Turn 115.

- 403rd Volksartilliere Bde moves to Map on Turn 112 not Turn 116.
- 404th Volksartilliere Bde moves to Map on Turn 112 not Turn 116.
- 405th Volksartilliere Bde moves to Map on Turn 116 not Turn 118.
- 406th Volksartilliere Bde moves to Map on Turn 116 not Turn 117.
- 407th Volksartilliere Bde moves to Map on Turn 116.
- 408th Volksartilliere Bde moves to Map on Turn 116.
- 1st SS Werfer Bde has a Delay of 108 and moves to Map on Turn 114.
- WMBef France has von Stuelpnagel added as Commander.
- LXXXI Corps adds Adolf Kuntzen added as Commander.
- XIV/X SS Corps moves to Map on Turn 114.
- IX SS Mountain Corps moves to Map from the Balkans on Turn 109 not Turn 112.
- 911th StuG Bde Disbands on Turn 114 not Turn 107.
- 167th VG Division moves to WE on Turn 109 not Turn 112.
- 711th ID moves to Map on Turn 110 not Turn 108.
- 3rd, 4th, 6th and 7th Fallschirmjager Divisions made LW-Elite from LW.
- XIII Fallschirmjager Corps given E. Meindl as Commander
- XC Corps given E. Petersen as Commander
- XXXIII Corps given E. Engelbrecht as Commander
- XXXVI Mountain Corps given Karl Weisenberger as Commander
- 444th Security Division added to [SG]
- 286th Security Division converts to 286th Infantry Division on Turn 110
- 203rd Security Division converts to 203rd Infantry Division on Turn 101 not Turn 100.
- Vistula to Berlin scenario changes:
  - All Assault-Sapper Squads removed from the game in favor of Engineer-Sapper Squads.
  - 405th Volksartilliere Bde moves to Map on Turn 4 not Turn 5.
  - 406th Volksartilliere Bde moves to Map on Turn 4 not Turn 5.
  - 407th Volksartilliere Bde moves to Map on Turn 4 not Turn 5.
  - 408th Volksartilliere Bde moves to Map on Turn 4 not Turn 5.
  - All Hungarian Ground Elements updated to new equipment after the 1943 Infantry Division TO&E.
  - WMBef Holland removed from the Campaign.
- Red God of War changes:
  - Removed all Assault-Sapper Battalions in favor of the Engineer-Sapper Battalion.
  - Linked the PVO Air Command HQ with its AOG.
  - 1st Guards Tank Brigade was removed as it was a sub-unit of a Mechanized Corps.
  - 1603rd Rifle Division was corrected to the 160th Rifle Division.
- Road to Leningrad change:
  - 6th Panzer Division increased Pz35(t) from 155 to 160
- OB.dat Update:
  - Made Axis Fortified Zones buildable - Limit 40 with a 4 AP Build Cost.
  - Made 42a Ski Brigade buildable
  - Updated 1944 Hungarian and Rumanian OBs
  - Added Soviet Cavalry-Mechanzied Group HQ
  - Added 42 Soviet Motorized Brigade that upgrades from the 41 Motorized Brigade
  - Soviet Mechanized and Motorized Brigade are now combined in the build limits using the same build chain
- Changes to w\_device.dat and w\_gtype.dat files - Made some minor adjustments to things like load cost and production costs of various elements, nothing too significant. Reduced the combat value of engineers back to that of rifle squads (3).
- New Ground elements added to w\_ground.dat file:
  - Rumania:
    - 41 Bicycle Recon Squad - 6/41 - end (Infantry Regimental Recon Platoons)
    - 41 Mot. Recon Squad - 6/41 - end (Armored Division recon units)
    - 43 Armored Recon Squad (Sdkfz 250) - 10/42 - end (Armored Division recon units)
    - 42 SMG Recon Squad - 1/42 - end (Infantry Regimental SMG Company)

- 41 Motorcycle Squad - 6/41 - end (various recon units)
    - 75mm PaK40 - 10/42 - end (Armored Division in 42 and Infantry units in late 44). Limited quantities.
  - Hungary:
    - 41 Recon Squad - 6/41 - end (general recon units)
  - Finland:
    - 7.62mm AAMG - 6/41 - end (Infantry)
    - 75mm Field Gun - 6/41 - end - probably the 75K/17 "Bethlehem" imported from the USA is the most common.
  - Slovakia:
    - Cavalry Squad - 6/41 - end (started as Infantry Regimental Recon and later in Security Divisions)
    - Bicycle Recon Squad - 6/41 - end (standard recon element in most elements)
    - Motorcycle Squad - 6/41 - end (standard recon element in motorized units)
    - Labor Squad - 6/41 - end (standard)
    - 50mm Mortar - 8/43 - end (adopted later by infantry and security units)
    - 88mm Anti-Aircraft Gun - 6/41 - end (limited quantities in mobile and later infantry units)
    - LT-33 - 6/41 - end - Tančik vz. 33 - Wikipedia
  - Italy:
    - Recon Squad - 6/41 - end (standard regimental recon platoon in infantry)
    - Mot. Recon Squad - 6/41 - end (standard recon element in motorized and armored units)
    - 12.7mm AAMG - 6/41 - end (AAMG Battalions)
    - 88mm Anti-Aircraft Gun - 6/41 - end (Heavy AAA Battalions)
- New Photos:
  - Leader: (replacement picture)
    - 859 Dashichev Ivan
  - Ground elem:
    - 484 7.62mm ItKk/31 Twin AAMG
    - 485 75mm K/17 Field Gun
    - 486 Recon Squad
    - 487 Motorized Recon Squad
    - 488 12.7mm Breda AAMG
    - 489 88mm Flak18 AA Gun
    - 490 Bicycle Recon Squad
    - 491 Motor Recon Squad
    - 492 Armored Recon Squad
    - 493 SMG Recon Squad
    - 494 Motorcycle Squad
    - 495 75mm PaK40 AT Gun
    - 496 Recon Squad
    - 497 LT vz.33
    - 498 Cavalry Squad
    - 499 Bicycle Recon Squad
    - 500 Motorcycle Squad
    - 501 Labor Squad
    - 502 50mm GrW 36 Mortar
    - 503 88mm vz.36 AA Gun
- New leader added to Leader.dat file - 650 Cocorascu, Traian
- Corrected RGOW and RAR scenario .txt file descriptions of APs per turn.

#### v01.01.00 – 28<sup>th</sup> June 2021

**IMPORTANT NOTE:** All save game and scenario files created with this or later versions may only be loaded with this or a later version. Versions prior to 1.01.02 may not load these newer save game or scenario files. Old saves and scenarios may be loaded with this and newer versions.

## New Features and Rule Changes

- Far into work on adding an in-game scaling preference option. Since the work is not complete, we have not yet made the preference option visible. Once completed in a future update, the program default will be changed to use application scaling, and players will be able to adjust the scaling using this preference item. As part of this, engine improvements have been made to more fully support ClearType fonts and to improve the placement of certain unit/map elements for better scaling, performance and clarity. Several windows have been redone/improved, as part of getting them to scale. Improvements include: added sorting of additional columns in some windows, information on assignments to HQs now also showing in the HQ detail Elements tab, changed selection of multiple battle reports in the same hex to a drop down list (hover on top left corner of battle report).
- Added a new scenario that is a modified version of the 1941 Campaign (1941 Campaign – No Early End). The only difference between this and the 1941 campaign is that the no early end version does not make checks for Sudden Victory or Sudden Loss. There is still the check at the end of 1944 re the Soviet HWM needing to match the Axis HWM (or Allied control of parts of Germany). This scenario will always contain the latest 1941 campaign changes unless otherwise noted in the scenario update notes (the plan is to keep them totally in sync).
- Rule Errata
  - HQs and attached support units in isolated city forts that are forced to retreat are destroyed. Units will be rebuilt per the normal rules, except in this case HQs will also be rebuilt.
  - When Follow Path is set to 'no' for an Air Directive, each mission created by the AD will automatically set a stage base for the mission when it launches and the aircraft will fly directly to the stage base and then directly to the target. The stage base created is heavily weighted toward the bombers in the mission (so not as useful if you have short range escorts you want to fly in the missions). In this case the player selected stage base is ignored.
  - When tracing distance for freight movement from a depot to a unit, the number of MPs will never be more than 4x the number of hexes.
  - The Command Range Modifier is slightly different than as explained in the manual. When determining the modifier, instead of subtracting 5 from the range before determining the modifier, you subtract the following:
    - Corps HQ – 5
    - Army – 10
    - Army Group/Front – 15
    - High command - 20
  - Manpower multipliers for Finland, Italy, and Slovakia are different from that listed in the manual. They are:
    - 1941,42,43,44,45
    - Finland 10,3,3,3,3
    - Italy 3,3,3,3,3
    - Slovakia 1,1,1,1,1
- Rule Clarification for Leader Dismissal Costs:
- The cost of dismissing a leader is increased by the political rating of the leader being dismissed. If the leader is an Axis Allied leader, the cost is double the political rating of the leader.
- The cost of dismissing a leader is reduced by the political rating of the leader of the Higher HQ for the leader being dismissed (i.e. OKH political rating is subtracted from the cost of dismissing the leader for Army Group North).
- The base cost before items a and b, are as follows All High Command 30, Axis Army Group 30, Axis Army 20, Axis Corps 10, Soviet Front 15, Soviet Army 10, Soviet Corps 5.
- There is a minimum cost of 2.
- Rule change for temporarily motorized units:
  - Soviet units may not be temporarily motorized in 1941.
  - Corps and division sized units have a minimum AP cost of 3 to temp motorize.
  - Temporarily motorized units have to pass an extra admin check when determining their MPs (failure reduces their MPs).

- Soviet motorized units that are brigade size or smaller have a max MP of 35, and this applies to temporarily motorized units.
- Romanian Surrender - Romanian Surrender event no longer triggered by the loss of Constanta, Sulina, Cogealac, or Medgidia. Since this is a data change, it is only in games started with this or a later version of the game.
- Adjusted formula to spread out assignment of ground support over more air units where possible instead of overusing the same units. However, it is still heavily biased towards using air units flying shorter distances.
- Reduced the combat effectiveness of Light Mortar ground type weapons. Increased the combat effectiveness of Mortar ground type weapons.
- Added the ability to cancel an AOGs withdrawal orders on the AOG detail window. Linked any cancellation of withdrawal orders for an Air Command HQ to the withdrawal orders for its associated army level AOG. A cancellation of either, will cancel both.
- Moved Assault Squad category higher on the left side of production screen.
- Changes to logistics:
  - Reduced effectiveness of super depots at reducing rail congestion penalties in 1941-1943, with less effectiveness reduction in 1943 than in 1941/42. Net effect is deliveries to super depots earlier in the war will be lower.
  - Reduced effectiveness of single rail lines when using super depots. Net effect is potential for less shipments to super depots via single rail lines than in the past.
  - Changed the algorithm that selects an NSS as a freight source to make it less likely to pick an NSS that is already heavily utilized.
  - Note: Priority 0 depots have never been more or less likely to be picked as a freight source for a shipment just because it is priority 0. Priority 0 depots simply never receive a freight shipment. If you want to ensure getting rid of the freight at a priority 0 depot, you need to disband the depot.
- Significantly increased the incremental (fractional) experience gain each time a pilot returns from a mission. This will reduce the number of missions flown needed to gain a full experience point.
- Rule change – Units in refit and more than 10 hexes from the nearest enemy unit may now gain morale points even if their morale is over 50 (still must be under NM). The morale gain is now 1-2 points, not 0-2.

#### **Bug Fixes and AI Improvements**

- Assigning Construction Units to HQ on a city hex sometimes costs 1 AP (should be free). Fixed.
- Units in City Forts were not able to receive ammo from a depot in their hex during defensive combat. Fixed.
- Unit in City fort that renames appears in two places. Fixed.
- Losses reported for units not in the battle when Leningrad is captured. Fixed.
- Fixed several isolation issues:
  - Units near Leningrad and Sevastopol were sometimes being counted as isolated when they shouldn't. This was causing a loss of morale. Fixed.
  - Hexes/units on Baltic islands incorrectly isolated. Fixed.
  - Soviet units in the Caucasus become isolated when Axis units cut the Caucasus off from the rest of the Soviet Union. The port connections should be enough to prevent isolation. Fixed.
- Upon scenario load/start, factories in cities that have capture dates earlier than the start date of the scenario, are all being set to 100% damage. They should be calculating damage based on time since capture (there is some randomness to this, so values change each time a scenario is started). Fixed.
- CTD when pressing F9 with summary up in ground phase. Fixed.
- Can't move units to Kherson by sea. Fixed.
- Axis Allied flak are supposed to be limited to only their cities. Fixed.
- Some gun/artillery elements firing too close. Fixed.
- CR/HQ filter for Aslt column has typo. Fixed.
- The Logistics Report 'trucks lost in movement this turn' line was always showing 0 so this line was removed from the report.



- Depleted AA support units automatically sent to the reserve were also showing as being in the last city they were in. Fixed.
- MPs to depot in supply detail screen were sometimes incorrect. Fixed.
- Fixed several minor bugs in air group transfer interface.
- Possible MP exploit. Fixed.
- AD creation screen lists max ADs as 10 (should be 32). Fixed.
- When creating an airbase in a non-location hex, hex number is wrong in pop-up. Fixed.
- Changing mode with AD creation visible replaces 1st AD instead of selected AD. Fixed.
- Removed set individual AB supply priority via right click (since AB supply priority is automatically set, there was no reason to have this as it had no effect).
- Editor – Removed AI Line Forming x, y and Formation role from the displays as these are not intended to be editable values.
- Editor - Can't edit aircraft weapon set Last Date. Fixed.
- AI - AI moves amphibious HQ into city fort. Fixed.
- AI - Amphib moves into swamp hex (from city fort hex). Fixed.
- AI – Soviet AI units warp into Axis hexes inside the Stalingrad pocket. Fixed.
- AI – Soviet AI support units in Theater boxes could be incorrectly attached to on map units (where they could be destroyed) while still showing in the TB. Fixed.
- AI - In Road to Leningrad some Soviet AI airbases ended up under OKL. Fixed.
- AI – The enemy AI moves human player air units to an AI airbase. Fixed.
- AI - Improved Axis defensive AI enemy threat calculations.

#### **Data and Scenario Changes**

- Scenario changes in Campaign 41, Road to Leningrad, Destruction of Southwest Front, and Operation Typhoon:
  - adjusted for changes to 76.2mm Infantry Gun, 107mm Mortar, & 120mm Mortar pools
  - 76.2mm field gun reallocations and pools of field guns, infantry gun, and mortars
  - Corrected spelling errors
- 1941 Campaign:
  - Fixed Frozen 8th Italian Army
  - Fixed 3rd Guards Leningrad Militia Division renaming issue
  - 39th Infantry Division no longer renames to 41st Fortress Division
  - 41st Fortress Division is now built from scratch
  - Removed Flieger Fuehrer Ostsee disband
  - Urals Military District and Air Command are now locked in the Far East TB
  - Event visibility fixes for events 40,41,43,95,108,114,129,133,134,136,170,171,172,173,174
  - Romanian Surrender event is no longer triggered by the loss of Constanta, Sulina, Cogealac, or Medgidia.
  - Various small fixes
  - Added Dobrogea Rum. Air Command AOG
  - Added 101st and 102nd Rum. Naval Recon Sqns
  - Made Osinovets a Port Depot
  - Changed events 82 and 88 so Albania and Montenegro do not become playable map regions when the Soviets take control.
- Destruction of Southwestern Front:
  - Odessa Air Command renames to Southern Air Command on Turn 1
  - Event visibility fix for event 133
  - Added Dobrogea Rum. Air Command AOG
  - Added 101st and 102nd Rum. Naval Recon Sqns
- Stalingrad to Berlin:
  - Changed Syasstroy (201,97) to an export port.
  - Event visibility fixes as in Campaign 41.
  - Romanian Surrender event is no longer triggered by the loss of Constanta, Sulina, Cogealac, or Medgidia.
  - Depending on the date of conversion some Infantry Divisions convert to the 44

- Volksgrenadier Division while a few convert to the 45 Volksgrenadier Division TO&E. Conversions are now triggered by the turn number rather than depleted status.
    - Changed events 82 and 88 so Albania and Montenegro do not become playable map regions when the Soviets take control.
    - Correction(s) made to renaming of V Corps change to the XI SS Panzer Corps.
    - The 344th Static Div. becomes the 344th VG Div.
    - The 353rd ID becomes the 353rd VG Div.
    - The 22nd Airlanding Div. does not convert to VG Status
    - 1st Hun. Cavalry Brigade was added at Budapest. This is an Axis Elite unit. It is Frozen for 75 Turns. On Turn 76 (April 27, 1944) it becomes the 1st Hun. Hussar Division (The Best Unit in the Royal Hungarian Army).
  - Vistula to Berlin changes:
    - All VG Divisions now have the 45 Volksgrenadier Division TO&E which became available in November 1944.
    - Upgraded some Fallschirmjager Divisions to the 44 Fallschirmjager Division and a few to the 45 Fallschirmjager Division.
    - Moved KG(J) 6, KG(J) 27, KG(J) 30, and KG(J) 55 from the Map to the WE TB.
    - Albania and Montenegro now start as Soviet controlled off map regions.
    - The 353rd ID becomes the 353rd VG Division
    - The 251st VG Div. becomes the 251st ID
    - The 48th VG Div. becomes the 48th ID
    - The 56th VG Div. becomes the 56th ID
    - The 95th VG Div. becomes the 95th ID
    - The 257th VG Div. added to WE
    - Adjusted some Hungarian ground units. Hungarian ground units now have Experience and Morale near their National Morale of 50
  - OB Update
    - 41a, 41b and 42a Tank Brigades - added 4 x Zis-30
    - Removed 14.5mm PTRD Anti-Tank Rifles from the 41b Cavalry Division since they are not in production until Dec 41
    - Added 41c Cavalry Division which starts fielding PTRDs in Dec 1941
    - Upgraded various ground elements in several OBs
    - Added OB 1001 - 42a Ski Brigade - Apr 42
    - Added OB 1016 - 42 Airborne Brigade - Apr 42
    - Fixed OB 0883 and OB 0877 - Now use the 41 Rifle Squad instead of 42 Rifle Squad
    - Fixed OB 0880 - Now uses T-34 M1943
  - Leader.dat changes:
    - Ld0215 von Pfeffer-Wildenbruch, Karl changed to Pfeffer-Wildenbruch, Karl
    - Ld0296 Feuerstein, Valentin changed to Feurstein, Valentin
    - Ld0305 von Weikersthal, Walther changed to Fischer von Weikersthal, Walther
    - Various Italian Leader changes regarding promotion date and available date
    - Ld0707 Nemeth, Jozsef changed to Nemeth, Jozsef
    - Ld0712 Ruzskiczay, Imre changed to Ruzskiczay-Ruediger, Imre
    - Ld0718 Vasvary, Jozsef changed to Vasvary, Jozsef
    - Ld1037 Nikitin, Ivan change to Nikitin, Ivan S. // Change "Last Date" to April 1942
    - Ld1062 Pyatykhin, Ivan reduce his rank to 1 and add a promotion Date
  - Leader Photo changes/additions:
    - Ld0529 Sogno, Vittorio
    - Ld0537 Cappa, Umberto
    - Ld0539 Armellini, Quirino
    - Ld0541 Basso, Antonio
    - Ld0561 Forgiero, Arnaldo
    - Ld0592 Morigi, Giorgio
    - Ld0718 Vasvary, Jozsef
    - Ld1199 Konkov, Vasily
- Hexart.dat and hex.dat changes – Blocked naval exit from the Black Sea near Istanbul.

- Changes to ac.dat:
  - re-calculated cruise speed and endurance for many aircraft, very limited changes to overall range unless:
    - cruise speed was reduced from max cruise to eco cruise = range gain
    - cruise speed was raised from max range to eco cruise = range lost
  - drop tanks removed:
    - for all German Bf 109/Fw 190 fighter and fighter-bomber, except Bf 109 E-7/F-2
    - Fw 190F, Fw 190G (DT-only sets)
    - non-German Bf 109 (except recon),
    - Soviet P-39
  - Pe-2/-3, Yer-2'44: gun change from 12.7 mm UBS to UB
  - double max load for certain soviet types from 200 to 400kg to remove extra penalty for using 2x100kg bombs
  - add 2x100kg bombload option for La-5/-7 types
  - LaGG-3: ends 12/41, upgrades to LaGG-3 '11'
  - LaGG-3 '11': delayed to 1/42, ends 6/42, 3 points better in reliability, +1 maneuver
  - LaGG-3 '29': delayed to 7/42, +1 durability
  - LaGG-3 '66': +2 durability, upgrade changed to La-7
  - SM.79 I-II renamed SM.79 (ITA/WI version), some changes to weapon sets
  - SM.79 III renamed SM.79bis, +1 durability, internal bombloads removed, change 20mm gun back to 12.7mm
- Changes to ground.dat:
  - moved the Rumanian Panzer IVg forward to 12/42 (same as Germans)
  - start of PaK40 production to 6/42 with weekly production of 146.
  - contracted PaK97/38 production period to not start until 4/42 and end 3/43 with weekly production of 72
  - moved 120mm GrW378(r) Mortar start date to 1/42
  - set build limit of Soviet 102mm and 180mm Naval Guns to -1 to fix display issue
  - Changed production rate and period of 107mm mortar.
  - Removed the upgrade of the USV gun to ZiS gun and added update of 1902/30 gun to ZiS gun.
- device.dat – Changed slot 49 from 37mm Cannon T9 to 12.7mm UB MG
- gtype.dat – Unspecified minor changes
- 3 revised aircraft tga icon files, A0166, A0170, A0488

## v01.00.12 – 26<sup>th</sup> May 2021

### New Features and Rule Changes

- Rule Errata
  - For a support unit to be committed to battle, the HQ that the support unit is attached to must be within 30 motorized movement points of the attacking unit being supported.
  - (section 27.5.1) – Any surviving Soviet Tank Divisions will convert to Tank Brigades in late January 1942, not March 1942. Surviving Mechanized Divisions will only convert to Rifle Divisions when they go depleted (i.e. they will not automatically convert to Rifle Divisions in March 1942).

### Bug Fixes and AI Improvements

- Fatigue not going down much in reserve box units. Fixed.
- Virtsu location gets name wiped out in data during Soviet logistics phase. Fixed.
- Fliegerkorps out of chain of command causes CTD. Fixed.
- Unit goes to depot 4 hexes away when could go to depot 3 hexes away. Fixed.
- Static units reports getting trucks from depot in supply detail. Fixed.
- AI - Soviet AI units are on front line while entrained. Fixed.
- AI - Bad Ai Assist assignment leads to crash to desktop. Fixed.
- AI - AI assist creates German AD support Soviet Front. Fixed.

### Data and Scenario Changes

- 1941 Campaign

- Updated corps artillery regiments in accordance with the updated OB
- Updated some Soviet Cavalry Divisions to use the proper OB
- Various unit updates
- Red Army Resurgent - Revised tank strength to include the updated KV-1 ground element changes to the OBs
- 1941 Campaign, Road to Leningrad, DSWF - Updated Soviet Coastal Divisions in Odessa/Leningrad to have the correct 180mm Coastal Gun
- Stalingrad to Berlin and Red God of War - KV-1 changes
- OB Update
  - Updated several Soviet OBs dealing with the new KV-1 ground elements update (877, 883, 894, 912, 2101,2105).
  - OB 548 - 42 Hun. Armored Division. Turan's replaced with Panzer IVf
  - OB 2123 - 41d Corps Artillery Regiment - now uses the appropriate version of the 122mm M-30 Howitzer
  - Soviet Coastal Artillery Divisions - replaced 180mm Naval Gun with 180mm Coastal Gun
  - OB 1983 - 44 Army Artillery Brigade - changed to fully motorized
- Ac.dat Update – A Finnish aircraft had invalid first month Bf 110F-2 crew reduced to the correct size of 2.
- Ground and device Update
  - Changed the Hungarian Panzer IVf and the Turan II to CS tanks based on the new TOE and adjusted Hungarian Panzer arrival dates and quantities.
  - Changes to some Romanian gun production (amount and/or dates):
    - 37mm Bofors increased production to 2/week
    - 47mm Breda now ending production in 12/44 instead of theoretical 8/45
    - 100mm howitzer now ending production in 2/44 instead of theoretical 8/45
    - 120mm Resita Morta increased production to 5 mortars per turn
  - Adjustments made to KV-1s:
    - Renamed the KV-1 M1940 to KV-1 M1939;
    - Renamed the KV-1 M1941 to KV-1 M1940 (change armor to same as KV-1 M1939);
    - Added new KV-1 M941 with correct gun (ZiS-5) and armor as original (element #839)
  - Fine-tuned some ground element load costs
- Revised/new photos and icons for KV-1 ground elements 755, 756, 839.
- City /maptxt/hexart file updates - Numerous minor map typo corrections as recommended by players. Added a map warning triangle pointing at hex 188,188 for T1 activation of S Front (hexes east and south of 188,188 inclusive trigger S front)- max zoom for text only.
- Factory/Location Update
  - Bala-Ishem (350,192) renamed Nebit-Dag. Gave it 10 oil at the expense of Sabunchu (-10 current, -5 resize) and Krasnovodsk (removal of 2).
  - Baku port increased to size 3. Guriev and Astrakhan to size 2.
  - Krasnodar - Deleted relocation of fuel refinery.

#### **v01.00.11 – 22<sup>nd</sup> April 2021**

##### **New Features and Rule Changes**

- Reduced the likelihood that ground elements type SP Artillery and Heavy SP Artillery will become involved in direct fire ground combat.
- CV values on map for mountain units in mountain hexes and ski units in heavy snow now reflect their CV modifiers.

##### **Bug Fixes and AI Improvements**

- Creating multiplayer games while the PBEM button was turned on in the main menu causes problems with the MP game. Fixed. This will fix any existing server game when it is downloaded.
- Crash to desktop on loading using 1.00.07, caused by duplicate font loading for some rare system settings. Fixed.
- Crash to desktop at end of logistics, caused by changing the HQ of a unit In Transfer from a TB

- (should not be able to do this). Fixed.
- Non-replacement panzer battalions are incorrectly automatically merging into Panzer Divisions. Fixed.
- Troops cut off in Leningrad area incorrectly considered in supply during German turn and rout over lake. Fixed.
- No ground support is flying during attacks on city forts. Fixed.
- Many duplicate AOGs are appearing for the German player. Fixed.
- Hotkey for soft factors skips combat prep and fatigue. Fixed.
- AI - AI air assist is creating depots (it should not). Fixed.
- AI - Some Soviet AI frozen units are still moving 1 hex. Fixed.
- AI - Made it less likely that AI units will move illegally to escape from a near pocket.
- AI – Soviet AI moves frozen units (on Romanian border on turn 1 and out of Moscow). Fixed.
- AI - Axis AI is illegally taking control of Soviet hexes far in the Soviet rear in StoB and RAR scenarios. Also, sometimes Axis AI units warp into these hexes. Fixed.
- AI - Soviet AI moves into occupied enemy hex in Velikie Luki scenario and forces Axis unit to warp away. Fixed.
- AI - Germans take Osinovets and Soviet still moves unit onto Lake Ladoga. Fixed.
- AI – Improved Soviet AI attacks in Red God of War.
- AI – Improved AI use of reserve and refit modes.
- AI – Improved Soviet defense of Moscow in 42 and made some improvements in Soviet defense of Leningrad in 41/42.
- AI - Improved the system that replays first player AI scripts on the first turn of the game. The script should now more accurately recreate what the designer set up in the script.

#### **Data and Scenario Changes**

- 1941 Campaign
  - Fixed HMGs in German Mountain Divisions
  - Reassigned the four BAKs to the Long Range Air Command
  - Fixed naming issues in a couple of R.A.D. Detachments
  - Marine Flak adjustments
  - Improved German AI first turn script. Thanks to tyronec for the new script.
- Velikie Luki
  - Fixed proper nationality of some anti-tank guns
  - Set Axis and Soviet production to 1%
- Typhoon
  - Kalinin Front's Commander (Eremenko) has been cleared as he already begins the game commanding Bryansk Front. The Player will have to assign a commander.
- Red Army Resurgent
  - Fixed Italian 105mm Skoda Guns showing up in the German equipment pool
- Road to Leningrad
  - Removed KM Baltic Amphibious unit
- Stalingrad to Berlin
  - 559th Panzerjaeger Bn converts to 559th Heavy PzJg Bn on Turn 74 (Marder to Jagdpanther)
  - 357th and 359th Infantry Divisions now have the 44a Infantry Division TO&E
  - 655th Pioneer Bn converts to a Pioneer Bde on Turn 102
  - 655th Panzerjaeger Bn converts from the Nashorn to the Jagdpanther on Turn 95
  - 561st Panzerjager Bn converts from the Marder III to the Hetzer On Turn 116
- Vistula to Berlin
  - 559th Heavy Panzerjaeger Bn moves from the Nashorn to the Jagdpanther and is Unlocked in WE
  - 655th Pioneer Bde replaces the former Bn
  - 655th Panzerjaeger Bn has the Jagdpanther and is Unlocked in WE
  - 561st Panzerjaeger Bn converts from the M III to the Hetzer on Turn 3
- Some corrections to the ground element file for inconsistencies between the various configurations of German and captured Soviet equipment between Germany and her allies.

- Corrected some discrepancies in Axis and Soviet 120mm mortars.
- Thirteen new WitE2Pedia entries:- 1st Tank Division, 198th Mechanized Division, 115th, 171st, 357th-360th, 395th, 411th, 412th, 416th and 421st Rifle Divisions.
- A few minor graphic corrections to the map.
- OB Update
  - OB 819 - 42 Rum. Pioneer Battalion - cleaned up extraneous entry
  - OB 1073 - 42 Motorcycle Regiment - changed T-40 1941 to the T-60 1941
  - OB 194 - 41 Mountain Division - fixed entry for 7.92mm HMG

#### **v01.00.07 – 06<sup>th</sup> April 2021**

##### **New Features and Rule Changes**

- Adjusted scroll speed. Sped up scrolling in zoomed out views, and adjusted scrolling speed with the arrow keys.
- Undocumented rule - Axis units in heavy snow from December 1941 to March 1942 have their defensive CV modified as follows:
  - Dec 1941 - /2
  - Jan 1942 - /1.5
  - Feb 1942 - /1.33

This is reflected in the CV values shown on the map. In addition, once in combat, there are admin and land combat rating checks made. For each failed check, the defense value is modified an additional time. So, a unit in Jan 1942 in heavy snow can have its CV divided by 1.5 up to 3 times if it fails both checks.

##### **Bug Fixes**

- Game does not launch. It was determined that having certain speech recognition software turned on prevented the game from running. Fixed.
- Game crashes when a player assigns a support unit to a level 0 (as yet unbuilt) airbase that is not in a town/city/urban hex. It should not be possible to attempt to assign a support unit to a level 0 airbase, but you can attach a support unit to a city/town/urban hex where an airfield is being constructed. Fixed.
- Soviet AI is moving some fort units that should be immobile (Coastal Artillery Divisions and Fortified Regions). Fixed.
- CR HQ tab "frozen" column rollover text is incorrect. Fixed.
- Disbanding and creating depots from the city detail window in some cases could cause a crash to desktop. Fixed.
- Game crashed on turn 53 in AI phase. Fixed - several causes for possible AI crashes were found and fixed.
- CR HQ Tab - Map filter does not filter out HQs in TBs. Fixed.
- Unable to select PIL (pilot) column on Air / AOG CR tab. Fixed.
- Can't attach flak/construction units to cities (but AP is charged). (this was only an issue in the beta updates) Fixed.
- OB screen number of ready guns is wrong (always equal to total guns). Fixed.
- Black tiles appear in some coastal hexes when game is saved with weather setting different from show air/ground. Fixed.
- OKL leader listed with German a/c on Soviet side of combat results window. Fixed.

#### **v01.00.00 – 25<sup>th</sup> March 2021**

- Initial Release