TechDoc Unofficial PGII Version 2.2

PGII Version 2 (v2-Patch) is mainly created to give PG2 designers more opportunities with campaigns, scenario and equipment design at hand. These additional possibilities will hopefully affect future Efile versions, campaigns and scenarios, so the players will also experience the game in a new way. Not immediately, but gradually more and more.

The Patch Team!
B.M.M.L.C.
05/2005 - Updated 09/2007

Bug Corrections

Version 1.02G

1) Air Defense units can no more fire at naval targets.

2) Aircraft units can no more fire at naval targets from adjacent hexes.

3) The Right-click while a Recon (or a recon leader unit) unit is moving, to get unlimited movement, this is fix by disabling the mouse button whilst any unit is moving.

4) The Air transporter counter is now working proper. You cannot gain more transporters by the undo bug.

5) The sea transporter counter is now working proper. You cannot gain more transporters by the undo bug.

6) The Flag for the first scenario in the scenario select list, now display proper.

7) The 4th transporter field in "Requisition Unit" is now fully workable. It will display both name and icon.

8) Ground conditions should be working fully correct.

9) If a tank attacks immediately (without moving) after an overrun, it no more regains all its movement points. (Do not confuse this with the Beach-overrun-bug, as it is still there)

10) If a recon unit moves without spotting hidden units and then attacks, the undo is no more available.

Version 1.02H

11) You can no longer pick up used units to the deployment window. With one exception, the game ignores lost movement points of recon class or recon leader units.

12) The disembark a unit in last VH crash is fixed. This applies to units dropped from an air transport and units exiting from sea transport.

Version 2

13) The 5th minor country bug is fixed. The "Attack Stance" byte of a player will be no more interpreted as 5th minor country in scenarios.

Version 2.01

14) v2.00 Bug: The embark; disembark function for units from countries 27-31 works now correct. Units from countries without sea or air transport units get the transport from country 10 (USA) as Allies and from country 8 (Germany) as Axis.

Version 2.02

15) v2.01 Bug: If a ground unit without appearance settings reinforcing on ocean hexes, then the unit receives again a sea transport.

Version 2.1

16) Corrected Random Leader Award table. The rules to award a Leader has been changed for following Leader types. See also **Random Leader Award Table** in Appendix.

a. Alpine Training
   i. Units without Movement Method $03=Leg can no more get a Alpine Training leader.

b. Reconnaissance Movement
   i. Units with Recon movement option can no more get a Reconnaissance Movement leader.
   ii. Units with movement < 2 can no more get a Reconnaissance Movement leader.

c. Combat support

i. Units with combat support option can no more get a Combat support leader.

Game improvements

Global game changes

Version 1.02G

1) Aircrafts cannot be boxed in anymore. So you cannot trap enemy aircrafts with your own. Aircrafts are no more affected by zone of control. Aircraft leaders altered so they cannot get 'Superior Man.' leader. - Follows on from previous ZOC alteration.

2) The game now recognizes all the campaigns you want. The scroll bar does NOT work, however the [up] and [down] arrows does.

Version 1.02H

3) The deployment window opens now only in the first turn automatically. After turn one you must open the deployment window manually.

Version 2

4) Cost calculation to upgrade and reassign units works now with current unit strength. See also **Unit Prestige Cost calculation** in Appendix.

5) The game now supports read only files. You no longer need to "de-select" the read only file attributes from your files.

6) Infantry class units can now be awarded as prototypes.

Version 2.01

7) Reinforcement that arrived at ocean hexes doesn't change the given appearance to sea transport anymore.

Version 2.02

8) Multiple AI attacks on enemy ground units perform a little smarter. The unit class attack order has been changed. Now Recon, Anti-tank and Infantry class unit's attack before Tank class units. See also **AI Unit Class Attack Order Table** in Appendix.

Version 2.1

9) The Zone Of Control (2 hex) is removed from carrier class.

10) Without transport classes all unit classes are now visible in HQ screen and overstrengthable.

11) Air Defence units can attack ground and naval units by default.

Scenario file changes

Version 1.02H

12) You can buy experienced units. The scenario designer can set different default experience values for all players in a scenario. You can set values between 0 and 65,535. But at 65,536 the experience will run over to zero. The unit will have one bar per 100 experience, with a max of five. Use the player prestige of turn 40 for the default experience value. The settings affects all new units in a scenario, also prototypes. Activate this feature only if your scenario less then 40 turns long!

13) The current strength of a unit will now load from the scenario file, meaning that current strength works correctly now.

14) The current fuel value of a unit will now load from the scenario file, meaning that current fuel value works for all units except for core units in the first scenario of a campaign.

15) The current ammo value of a unit will now load from the scenario file, meaning that current ammo value works correctly now.

16) The scenario designer can now choose to not allow paratroop deploying over ocean hexes in a scenario. This feature did not fix the ocean-deployment bug! This bug is still in the game.

Version 2

17) The scenario designer can choose to not allow prototypes in a scenario.

18) You can now set what music you want the game to play in a scenario. You can save two music file names in the scenario file. They will play in a loop during the scenario. But you do not have to use two files. One file will also play in a loop. The music must be *.MUS format (PCM RAW format - 16bit 22,050 stereo) and be in your Panzer2\SOUND folder.

19) It is possible to set a default basic strength for bought/prototype units. The scenario designer can set different strength values for all players in a scenario. Valid values range between 1 and 15. The prestige cost calculation for units now works with a "current unit strength" factor. Thus the player pays/gets the correct prestige when buying/upgrading units or reassigning over-/under strength units. Also the core calculation against the cap in campaigns works with current unit strength.

20) The unit strength icons from 16-20 work correctly now. You must change the UNITINFO.SHP file in your DAT file with the attached UNITINFO.SHP file to enable the feature. The v2-Patch is compatible with the original UNITINFO.SHP file.

21) Campaign designers can now define a custom timeframe for prototypes in scenarios.

Version 2.2

21) Leaders for FlaK, LB and Ship class units.
All ships get marksman default leader (like artillery), LB get skilled assault leader (like TB) and flak get tank killer (like AT)

22) Different victory types for VHs.
You can now intend for which kind of victory (BV, V, TV) a VHs are necessary. If a VH is conquered the game now examines no more all VHs, but only the VHs set for the current kind of victory. This examination works however at present only after the conquest of a VH. The after turn victory examination works as had. To activate the feature the ScenarioFile\ScenarioData \PatchOptions\bit10 (**Section Offset 02 bit2 on table**) must be activated, then setting each VH to desired type should be done at ScenarioFile\Hex Map Data (**see Table**).
See **Samples Apendix**

Campaign file changes

Version 1.02G

22) The flag in front of a campaign is selected via the second last bit in the *.cam file. Just enter the normal country code, like 08h=Germany, 0Fh=Norway etc...

Version 1.02H

23) The campaign "Brilliant Victory"-Smack works now for non-main countries. For US, UK, German and Russian campaigns the game uses the default BV Smack files.

Map file changes

Version 1.02G

24) Map numbers up to 32767 is now fully workable. The reason some user maps crashes the game should also be fixed. The reason has to do with the internal Bridge table, and is also why bridges cannot be blown on user maps.

Equipment file changes

Version 1.02G

25) The Equipment file limited of 1000 units and 400 Icons (they then turn invisible), has been raised to 2000/2000

26) The expire date is now working.

27) An Expire Month has been added to the game, by used of an unused byte in the Equipment spec. That is the offset 19h byte, right before the Month Available.

Version 2

28) The Equipment file limited of 2,000 units and 2,000 icons (1.02G), has been raised to 4000/4000.

29) More countries available. Nations 27, 28, 29, 30 and 31 can now be used in equipment files. Their flags must be inserted into the FLAGS1.SHP file in the same order as the flags of the previous 26 nations and their names added after the last line in the GUI97.TXT. This feature is active if the game finds 124 or more icons in the flags1.shp file.

30) Recon Movement Option. It is possible to give non-recon class units recon movement availability.

31) Custom Leader and Generals pictures. This feature opens up a new field for equipment designers. This feature is active if the game finds 156 or more icons in the FLAGS1.SHP file. The NAMES.TXT file containing the Leader/General names has a size limit of 32Kb (32,767 bytes).

32) The expiry date for transports works now.

Version 2.02

33) Disembark Option. It is possible to give towed units a disembark, if attacked availability like Infantry class units.

34) Ground Transport Class Option. Equipment designers can now define the transport unit selection for units.

35) The EQUIP97.TXT file size limit of 32Kb has been raised to 64 Kb (65,535 bytes).

36) Reverse Fire Support Option. It is possible to remove/give the fire support availability to ground and naval units.

Version 2.1

37) Air Deploy/Supply Option. Players can deploy and supply air units over Ground or Naval units with this option. Work the same as airfields.

38) Air and Sea Transport Class Option. Air or Naval transportable Ground units can be assigned over this option a special air transport as well as a naval transport unit.

39) Air Transportable with Transport Option. Air transportable units with this option keep their transport, if they embarking in air transport. However the transport unit which should be embarked too must also own this option.

40) AA Attack Option. Ground and Naval units with this option can attack air units, as long as they did not have moved.

41) Combat Support Option. Units with this option give adjacent units combat support. The option functions like the Combat support Leader.

42) No Prototype Option. Units with this option are not assigned as prototypes in campaigns.

43) Additional Purchasable Option. Units of non-buyable classes can with this option be made visible in the PURCHASE UNIT screen and bought by the player. Each not available unit class is assigned to an available class. See also **Additional Purchasable Option** in Appendix.

44) Reverse Disembark Option. Non Infantry class towed units with transport and this option, leaves their transport if they are attacked. Infantry class units with transport and this option, don't leave their transport if attacked.

45) Carrier Deploy Option. Tactical bomber and Fighter class units with this option can be deployed on carrier class units of the same player.

Compatibility

The v2-Patch is fully compatible with original scenarios, campaigns, equipment, DAT, SHP and Text files.

How to Install

Text based on Unofficial Patch v1.02g Read me file by Lasse Jensen 2001.

This is the Unofficial Patch v2.02 PG2UK202.exe that has been modified. Like all Patches based the v2.1 on the former Patch version. The fist Patch, v1.02g based on the UK v1.02 Panzer2.exe, the last official executable for UK v1.02 Panzer General II. Following the PGII Patch history.

All based on PGII UK	**File**	**Released**	**by**
v1.02	Panzer2.exe	01/98	SSI
Unofficial PGII Releases			
v1.02g	PG2UK102G.exe	06/01	Builders Paradise
v1.02h	PG2UK102H.exe	03/04	Patch Team!
v2	PG2UK200.exe	05/04	Patch Team!
v2.01	PG2UK201.exe	09/04	Patch Team!
v2.02	PG2UK202.exe	01/05	Patch Team!
v2.1	PG2UK210.exe	05/05	Patch Team!
V2.2	PG2UK220.exe	09/07	Patch Team!

If you are the owner of the German or French version, this execute file will not work for you. There is the obvious name difference. The German execute file is named "Panzer3D.exe" and the French "Opanzer.exe", however this is unimportant. The main difference is that the German and French do not use .TXT files, but rather .DEU and .FRA text files. This new execute file does not recognize those. If you have the French or German version you need to modify all your .FRA and .DEU files to .TXT by using Carl Johan Ankerstjerne's DEU/FRA text converter. You can get the converter at Steve's Campaign page:

http://www.wargamer.com/pg2campaigns/steve/pg2.htm

You will notice that this file is named PG2UK210.exe, and therefore does not replace your original v1.02 Panzer2.exe file or former Patch files. Simply unzip this file into your main Panzer2 directory and you are ready. But Scenarios and Campaigns, equipment files and the PANZER2.DAT-file must support the most features of the v2-Patch. The download includes two additional ZIP files:

DATfile2.zip – Includes four SHP files. UNITINFO and VIEWUNIT are necessary in the PANZER2.dat file to activate new graphical features. Replace these two files in your PANZER2.dat file.
FLAGS1 and DOSSIER supports the attached Efile and can also be used as format templates. If you play with the attached Efile you should use the FLAGS1 and DOSSIER file in your PANZER2.dat file.
Follow the link below for detailed instructions for adding the UNITINFO and VIEWUNIT SHP files into your Panzer2.dat file.

http://p090.ezboard.com/fjpspanzersfrm4.showMessage?topicID=511.topic

Efile2.zip – Includes a stock SSI 1.02 compatible Efile that supports all new graphical extensions. Use the FLAGS1.SHP and DOSSIER.SHP file in DATfile2.zip in combination with this Efile. Thus you can play all stock SSI campaigns and scenarios with a new appearance.

You will retain your original v1.02 Panzer2.exe file and can start either of them to play. If you want to play with the changes you would start the game by PG2UK202.exe, if not, you start it by your original Panzer2.exe.
Now remember this is a version 1.02 Panzer2.exe file. Please make sure the rest of your game files are also from this version! So do not use this execute file on a v1.00 or v1.01 version of the game, or you will get errors.

Known limitations/bugs

Text based on Unofficial Patch v1.02g Read me file by Lasse Jensen 2001.

If you do not have the correct v1.02 files, you can get several different *.DLL file errors. As stated this is a modified UK v1.02 Panzer2.exe file, so therefore for it to work correctly all other files in your Panzer2 directory must also be from v1.02.

Appendix

The following is a technical description of v2-Patch changes on game basics and file formats. It is mainly interesting for PGII Tool makers, scenario/campaign and equipment designers.

Global Game changes

Unit Prestige Cost calculation
To enable the "default unit strength" feature, it was necessary to change the Unit cost calculation. The new formulas work on a current/basic strength factor.

Buy*	Original formula	12xA
	Extended formula	INT (12xAxD/10)
Upgrade	Original formula (no longer used)	IF C>12 THEN CxB ELSE 12xB
	New formula	INT (12xBxC/10)
Reassign/Cap	Original formula (no longer used)	12xA
	New formula	INT (12xAxC/10)

A: Prestige Cost for unit from equipment file
B: Upgrade Prestige Cost factor for unit
C: Current strength for unit
D: Default Basis strength for new units

* Extended formula for buying units is only in use, if the “use default strength” feature is active.

AI Unit Class Attack Order Table
The AI plan attacks on units. If a unit is attacked several times by different AI units, then the unit class of the attacking units determines the order of the attacks.

1st Wave	2nd Wave	3rd Wave	4th Wave	5th Wave	Don't Attack
FlaK	Fortification	Recon	Infantry	Tank	None
Artillery	Tactical Bomber	Anti-Tank	Destroyer	Ground Transport	Air Transport
Air Defense	Level Bomber	Fighter		Carrier	Naval Transport
Submarine	Battleship	Cruiser			
	Battle Cruiser	Light Cruiser			

Random Leader Award Table
This is what Random leaders that can be assigned to what unit class, by the game.

Leader	Code	INF	TK	RCN	AT	FlaK	ATY	AD	FTR	TB	LB	Additional Exclusion if unit have... (**bold** is new)
Aggressive Attack	9	x	x	x	x		x	x	x	x		
Determined Defense	10	x	x	x	x		x	x	x	x		
Battlefield Intelligence	11	x	x	x	x				x			
First Strike	12	x	x	x	x				x			
Resilience	13	x	x	x	x		x	x	x	x		
Influence	14	x	x	x	x		x	x	x	x		
Fire Discipline	15	x	x	x	x		x	x	x	x		
Liberator	16	x	x	x	x							

Alpine Training	17	x									Mountain Movement Option or **Movement not Leg**
All Weather Combat	18							x	x		
Forest Camouflage	19										
Combat Support	20	x	x	x	x	x	x	x	x		**Combat Support Option**
Infiltration Tactics	21	x	x	x	x	x	x				Engineer Option
Aggressive Maneuver	22	x	x	x	x	x	x	x	x		
Skilled Reconnaissance	23	x	x	x	x	x	x	x	x		
Reconnaissance Movement	23	x	x		x	x	x	x	x		**Recon Movement Option or Movement <= 2**
Skilled Ground Attack	25							x	x		
Street Fighter	26		x	x	x	x	x				Engineer Option
Overwhelming Attack	27	x	x	x	x	x					
Superior Maneuver	28	x	x	x	x						
Extended Front	29										
Ferocious Defender	30	x			x		x				
Overwatch	31		x								
Devastating Fire	32	x	x	x	x	x	x	x	x		
Bridging	33	x	x	x	x	x	x				
Shock Tactics	34	x	x	x	x	x	x	x			

Special Option Class Table
The table gives information about which special option to can be used for which units classes.

Special Option	INF	TK	RCN	AT	Flak	Fort	TP	ATY	AD	FTR	TB	LB	ATP	SS	DD	BB	CV	NTP	BC	CR	LC
Can Not Buy	x	x	x	x	x	x		x	x	x	x	x		x	x	x	x			x	
No AI Buy	x	x	x	x				x	x												
Mountain	x	x	x	x	x	x	x	x	x												
Recon Skill	x	x		x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x
Dismount	x			x	x			x	x												
Support Fire	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Air Support	x	x	x	x	x	x	x	x	x					x	x	x		x	x	x	x
Air Transportable	x			x	x		x	x	x												
Air Attack	x	x	x	x	x	x	x	x						x	x	x	x	x	x	x	x
Combat Support	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
No Prototype	x	x	x	x				x	x	x	x										
Show Purchase					x	x						x		x	x	x	x			x	
Carrier Deployment										x	x										
Capture Flags					x	x	x	x	x					x	x	x	x	x	x	x	x

Additional Purchasable Option
Units with the "Additional Purchasable option" appear in the PURCHASE screen under the following classes.

Class in PURCHASE screen	Assigned Non-purchasable Class
Air Defence	FlaK
Anti-Tank	Fortification
Artillery	Submarine
Infantry	Destroyer
Recon	Cruiser
Tank	Battleship
Fighter	Carrier
Tactical Bomber	Level Bomber

File format changes
It is necessary to modify game files to enable most of the v2-Patch features. The following is a list of all file formats that can be modified to enable v2-Patch features. The v2-Patch is compatible to all original game file formats and G-Patch extensions.

Scenario file (*.SCN)

Section	Section Offset	Number of bytes	Read as	Useable values	Explanation
Scenario data	01h	1	Bit selecting byte (0=off/1=on)	Bit1	Use default experience values
				Bit2	Use current strength
				Bit3	Use current fuel
				Bit4	Use current ammo
				Bit5	No paratroop ocean deploying
				Bit6	No prototype
				Bit7	Play custom music
				Bit8	Use default strength values
	02h	1	Bit selecting byte (0=off/1=on)	Bit1	Use custom timeframe for prototypes
				Bit2	Different victory types for VHs
Player Data	Player x48h +46h (Prestige for turn #40 player0..3)	4x2	Word	Any value	Default unit experience for player0..3. Do not use this option if your scenario has 40 turns.
General map data	29h	20	Null terminated string	Char	Scenario music #1 file name PCM RAW format - 16bit 22,050 stereo
	3Dh	20	Null terminated string	Char	Scenario music #2 file name PCM RAW format - 16bit 22,050 stereo
	51h-54h (Player0..3)	4x1	Byte	1-20	Default unit strength for player0..3
	55h	1	Byte	1-12	Custom prototype time frame in range between 1 and 12 months.
Unit data	26h (Current strength)	1	Byte	1-20	Current strength value can now assigned to unit. Usable range has been raised to 20.
	28h (Remaining Fuel)	1	Byte	Any value	Remaining Fuel value can now assigned to unit.
	29h (Doublet ammunition count)	1	Byte	Any value	Doublet ammunition count value can now assigned to unit.
	35h (Original strength)	1	Byte	1-20	Usable range has been raised from 15 to 20.
Hex Map Data	03h (each record)	1	Byte	Bit1	no effect
				Bit2	Axis Brilliant Victory
				Bit3	Axis Victory
				Bit4	Axis Tactical Victory
				Bit5	Allied Brilliant Victory
				Bit6	Allied Victory
				Bit7	Axis Tactical Victory
				Bit8	no effect

Campaign file (*.CAM)

Section	Section Offset	Number of bytes	Read as	Useable values	Explanation
File header	04h (Winning the campaign SMK filename)	20	Null terminated string	Char	Campaign "Brilliant Victory"-Smack file name. Gives campaign designers the possibility to use an individual after Brilliant Victory Smack for campaigns. The Smack file will play during the campaign after all scenarios winning with BV. This feature works only for Minor-countries. For Germany, US, Russia and UK the game use the original Smack files xxPLAY1-2.MUS. This is necessary for the compatibility to original and released custom made campaigns.

Equipment file (EQUIP97.EQP)

Section	Section Offset	Number of bytes	Read as	Useable values	Explanation
File header	00h	2	Word	0..3,999	Number of units in file has been raised to 4,000 units.
Unit data	19h	1	Byte	1..12	Month expire now works for transport class units.
	1Ch	1	Byte	Any value	Year Expired now works for transport class units.
	23h (Unit special)	4	Bit selecting Dword (0=off/1=on)	Bit9	Unit not buyable for AI.
				Bit10	Mountain movement.
				Bit11	Recon movement. Do not use this option for following Movement Methods or Unit classes: 03h: Leg 04h: Towed 0Bh: All Terrain (Leg) / 07h: Ground Transport
				Bit12	Disembark, if attacked reverse availability. Use this option only for following Movement Methods: 03h: Leg 04h: Towed 0Bh: All Terrain (Leg)
				Bit13	Turn on/off support fire availability. Do not use this option for following Unit classes: 09h: Air Defense 0Ah: Fighter 0Bh: Tactical Bomber 0Ch: Level Bomber 0Dh: Air Transport
				Bit14	Air units supply option. Use this option only for non-air units without transport.
				Bit15	Air transportable with transport option. Use this option only for following Movement Methods: 03h: Leg 04h: Towed 0Bh: All Terrain (Leg)
				Bit16	AA attack option. Use this option only for non-air units.
				Bit17	Combat support option
				Bit18	No prototype option. Use this option for following Unit classes: 09h: Air Defense 04h: Anti-Tank 08h: Artillery 01h: Infantry 03h: Recon 02h: Tank
				Bit19	Additional purchasable option. Use this option for following Unit classes:

				05h: FlaK 06h: Fortification 0Eh: Submarine 0Fh: Destroyer 14h: Cruiser 10h: Battleship 11h: Carrier 0Ch: Level Bomber
			Bit20	Carrier Deploy Option. Use this option for following Unit classes: 0Ah: Fighter 0Bh: Tactical Bomber
31h (Unit country)	4	Dword	*See country table in equipment spec.	Designers can now use all 31 country slots in equipment files. But the Efile need a supporting FLAG1.SHP file with >=124 flag pictures to enable the feature. Also the GUI97.TXT file must support this feature.
34h	1	Bit selecting byte	Any value	Ground transport class byte. Use this option only for following Movement Methods or Unit classes: 03h: Leg 04h: Towed 0Bh: All Terrain (Leg) / 07h: Ground Transport I: A ground transport is selectable for a unit in the buy/upgrade screen, if an AND-operation between the Transport class byte of the selected unit and the Transport class byte of the transport returns <> 0. II: If the transport class byte of a unit equals 0, then all national ground transport units are selectable for this unit. III: If the transport class byte of a transport unit equals 0 then the transport unit is selectable for all national units.
35h	1	Bit selecting byte	Any value	Air and Sea transport class byte. This option changes the rules of embarking units in Air or Naval Transports. I: The first Air or Sea transport found in equipment file will assigned as embark transport, if an AND-operation between the AS-Transport class byte of the selected unit and the AS-Transport class byte of the transport returns not Zero. II: If the AS-transport class byte of a unit equals Zero, then the first Air or Sea transport found in equipment file will assign as embark transport. III: If the AS-transport class byte of a transport unit equals 0 then the transport unit is assignable as embark transport for all units.

Equipment file (GUI97.TXT)
If an equipment file uses the +5 countries extension, the game needs 5 additional country names. Add the 5 country names at the end of the GUI97.TXT file (line 441-45). If the game finds >= 124 pictures in FLAGS1.SHP file the new country names will be used. To show the correct unit class name in the INSPECT UNIT and HQ screen, change also line 139 and 146.

Original format	440 items
Extended format	445 items 139: replace “Panzer General II" with "FlaK" 146: replace “Panzer General II" with "Level Bomber" 441: name of country #27 ... 445: name of country #31

Equipment file (NAMES.TXT)
The NAMES.TXT file contains country specific names for Generals and unit Leaders. The v2-Patch supports an extended format of the file for the General/Leader extension. The extended file format includes 32 sections, one for non-nation names and 31 for each country in the supported Efile. Each section can contain 31 specific names for a country. The NAMES.TXT file must match with the Efile country order and should be part of the Efile download. If the game finds >= 220 pictures in FLAGS1.SHP file, the extended file format is active. The Generals and Leader names will be assigned by the main scenario country. Unfortunately, the leader names will not be assigned by the unit country!

Original format	4x100 names, 400 items
Extended format	32x31 names, 992 items 1-31: non-country names 32-62: names for country #1 ... 962-992: names for country #31

PANZER2.DAT file (FLAGS1.SHP)
The FLAGS1.SHP file is part of the PANZER2.DAT file and contains the flag pictures. To enable the +5 countries and the country dependant Leader extension for equipment files, the v2-Patch supports an extended file format with additional Flags/Leader Roundel icons/Leader pictures and Battle Honor icons in a new order.

Original format	26xA/26xB/25xC/26xD, 103 pictures
Extended format	31xA/31xB/31xC/31xD/32xE/32xF/32xG, 220 pictures A: Flags part #1 B: Flags part #2 C: Flags part #3 D: Flags part #4 E: Leader roundel icon F: Leader picture G: Battle Honor icon

Number of Icons	Actions
< 124	Game works with 26 countries order
>= 124	+5 countries extension is active
>= 156	Country Leader roundels extension is active, Game use Leader roundels from FLAGS1.SHP file
>= 220	Country Leader picture and Battle Honor icon extension is active: Game use Leader pictures and Battle Honor icons from FLAGS1.SHP file General and unit Leader names from NAMES.TXT file will assigned by main scenario country. The NAMES.TXT file must support this feature (992 name items).

PANZER2.DAT file (DOSSIER.SHP)
The DOSSIER.SHP file is part of the PANZER2.DAT file and contains all pictures for the DOSSIER screen. To enable the country dependant General/Medal extension for equipment files, the v2-Patch supports an extended file format with additional General/Medal pictures and a new picture order.

Original format	1xA/4xB/4xC/1xD, 18 pictures
Extended format	1xA/32xB/32xC, 129 pictures A: Main Dossier dialog picture B: General picture C: 3 Medal pictures in TV/V/BV order D: unused German medal picture (removed)

Number of Icons	Actions
< 129	Game use original General/Medal pictures
>= 129	Game use country depending General/Medal pictures

PANZER2.DAT file (UNITINFO.SHP)
The UNITINFO.SHP file is part of the PANZER2.DAT file and contains unit strength and Leader roundel icons. The game supports theoretical unit strength up to 255. Surely the game owns only correct pictures to support a unit strength of 15. But the attached UNITINFO.SHP file in combination with the v2-Patch raises the supported unit strength up to 20. The v2-Patch is compatible with the original UNITINFO.SHP by supporting the original max strength of 15.

Original format	281 pictures
Extended format	348 pictures

PANZER2.DAT file (VIEWUNIT.SHP)
The VIEWUNIT.SHP file includes the unit class pictures and some other stuff. In the original version of this file unfortunately there exist no pictures for the unit classes: FlaK, Ground Transport, Air Transport and Level Bomber. The v2-Patch supports an extended file format and also the original VIEWUNIT.SHP file. The extended format displays two new class pictures for Ground Transports and Level Bomber. Air Transport class receive Level Bomber and FlaK class receive the Air Defense class picture. Don't forget to change the GUI97.TXT file for

correct unit class names.

Original format	22 pictures
Extended format	25 pictures

Text file (*.TXT)
The size of text files used by the game is limited. A text file can contain 64Kb or to be exact, 65,535 bytes. If the file size is bigger the game will not start. But there also exists a text line limit for files. The game can only address a maximum number of text items per file. With more lines then allowed, the game loads the lines up to the 64Kb limit, but this will overwrite used memory space and the game crashes or works incorrectly.

File	Maximum text lines	Maximum text line size (byte)	Maximum file size (byte)
Equip97.txt	4,000	255	65,535
Gui97.txt	1,000	255	65,535
Names.txt	1,000	255	65,535
Misc.txt	1,000	255	65,535
[Scenario].txt	1,000	255	32,767

Different victory types for VHs * Samples

Sample 1: You scenario own 3 VHs with the following settings.

SIDE	Type of Victory hex	VH1	VH2	VH3
Axis	BV	X		
	V	X	X	
	TV	X	X	X
Allied	BV	X	X	X
	V	X	X	
	TV	X		
Then you get the following Results		BV for Axis: Player need VH1.		
		V for Axis: Player need VH1 and VH2.		
		TV for Axis: Player need all VHs		
		BV for Allies: Player need all VHs		
		V for Allies: Player need VH1 and VH2		
		TV for Allies: Player need VH1		

Sample 2: You scenario own 3 VHs with the following settings. VH1 is hidden at position 0,0.

SIDE	Type of Victory hex	VH1	VH2	VH3
Axis	BV	X		
	V	X		
	TV		X	X
Allied	BV	X		
	V	X	X	
	TV			
Then you get the		BV for Axis: impossible, Player need VH1, but VH1 is hidden.		
		V for Axis: impossible, Player need VH1, but VH1 is hidden.		

following Results	TV for Axis Player need VH2 and VH3.
	BV for Allies: Player need VH2.
	V for Allies: Player need VH2 and VH3.
	TV for Allies: Player need no VHs. Player wins if a allied unit get the next axis owned hex.

Remember that the game checks for these conditions only when a flagged hex changes hands.