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**STEEL BEASTS**  
Professional

**PE 4.379 Release Notes**

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## ***SB Pro PE 4.379 (Web Installer) Version History and Release Notes***

Changes in this document since version 4.377 are highlighted like this. It contains, however, all changes since version 4.268.

eSim Games offers a full installer for this version of SB Pro PE; the bundle installer may also detect the option to apply a smaller patch. We recommend uninstalling any older Steel Beasts Pro PE versions than 4.377. Map Packages can remain untouched.

**Installation instructions can be found from page 3 of this document.**

We recommend reading this document with a dedicated PDF viewer capable of showing the embedded table of content.

**Note: This *Steel Beasts* version requires an existing license for *SB Pro PE 4.3!***

**Upgrade Licenses** may be purchased from the eSim Games web store (for details, see below): [https://www.esimgames.com/?page\\_id=3165](https://www.esimgames.com/?page_id=3165)

Customers with time-limited licenses may continue to use their existing licenses.

This is a preliminary document to complement the version 4.3 User's Manual.

This document summarizes changes since version **4.377 (February 2023)**; Previous Release Notes can be found on the eSim Games Downloads page: [www.eSimGames.com/Downloads.htm](http://www.eSimGames.com/Downloads.htm)

## Hardware recommendations

...are largely unchanged from versions 4.0, 4.1, 4.2:

SB Pro PE 4.3 requires a 64 bit Windows version, starting with Windows 10 or higher.

Downloading, unpacking the self-extracting archive and immediate installation requires up to approximately **38GByte harddisk space temporarily**. Of these, *Steel Beasts* will claim about **17 GByte free harddisk space permanently**; the rest may be freed up through deletion and/or copying the installation files to a USB stick. However, in order to edit maps, **100 GByte free disk space** will be required **per unpublished map** for the uncompressed map data, which will be largely freed up on publishing. Usually, it is therefore better to work on only one map at a time, and to prefer Delta maps over Base map packages as they usually consume less disk space.

We recommend a 3.0GHz multi-core CPU (faster is better, and the latest generations are considerably faster than old CPUs of nominally the same clock speed), **8GByte RAM** (16...64 recommended for high resolution map conversions), **2GByte video RAM** (more is better; much more is much better), and generally a **DirectX 9.0c** graphics card supporting **Shader Model 3.0** (which includes pretty much everything that **has been commercially available for the last 15 years**).

Mouse, keyboard, and monitor are mandatory. A sound card and internet connection are strongly recommended. Joysticks and selected control handle replicas are supported.

DirectX 9.0c is included; it is however possible to download a separate installer: <https://www.microsoft.com/en-us/download/details.aspx?id=34429>

**Anti-Virus software** has in the past been a **source of trouble** for some. If an installation fails on the first try, the next step should be to disable the AV program during the installation, or to create an exemption for the Steel Beasts installer program. Note that some AV programs only pretend to shut down, but a service (or the executable itself) remains listed as active in the task or in the services list.



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### Installation

For all customers with or without an already existing installation of SB Pro PE: If applicable, **uninstall** prior installations of SB Pro PE (keep the map packages). Then run the **Bundle Installer** 4.357 (SBProPEBundleInstaller\_4357.exe).

For customers accustomed to Steel Beasts 4.0 (or older):

With version 4.2, eSim Games introduced a web installer that will download the necessary files as you install. There's also an option to keep downloaded installer files if you are on slow or metered connections. This web installer is generally easier, and you simply run the same installer in the future; it will then automatically check for the latest version.

(Only) for those who like to retain more control at the expense of convenience:

Since version 4.1 there are now **multiple installers**. We recommend applying the **Map Package Installer** first. The *Steel Beasts Pro PE* installer will recognize your prior choice for the map package folder's location. This is important insofar as the map packages consume more than 70% of the storage space that Steel Beasts needs, and will keep growing as you may download additional map packages in the future.

1. Download **all** parts of the self-extracting archive installers into a common directory, e.g. C:\Temp or a "*Steel Beasts*" folder on your desktop – the **Maps Installer**, the **SB Map Transfer Tools**, and the **SB Pro PE 4.357 full installer**. The **Legacy Maps Installer** is only required under very specific circumstances (please visit the user forum at [SteelBeasts.com](http://SteelBeasts.com)) and can be installed at any later point if necessary.
2. Uninstall previous versions of *Steel Beasts*. Note that you can keep previously installed Map packages!
3. When done, run the **SBMapPackageInstaller.exe** program **first** to transfer the map data to your harddisk (unless you kept it from an earlier version; in that case skip this step). You are free to pick the target

directory; the full installation may take **up to 16 GByte of disk space**, and future in-game downloads may further increase that demand for storage space in that specific location.

The Map Package Installer will store its location in the Windows registry, so subsequent installations of *Steel Beasts* will know where to find the map data automatically.

After the first installer program is finished, it's time to install *Steel Beasts Pro PE* itself. Start `SBProPE4_357.part1.exe` for the installation (this assumes that you uninstalled the previous version of *SB Pro PE* per step 2 above). Installing *Steel Beasts* will consume about **six GByte harddisk space**.

4. If you haven't purchased your **license for SB PE 4.3** already, now would be the time to visit the eSim Games web shop:

[https://www.esimgames.com/?page\\_id=3165](https://www.esimgames.com/?page_id=3165)

(if you did, skip forward to point 6)

You have different options there, as summarized in this YouTube video:

<https://www.youtube.com/watch?v=HPi-MA94yFO>

5. Once that your purchase has been made, the eSim Games web shop will send you **two** emails — the order confirmation and a second one with the **license ticket** (a complicated URL leading to the WebDepot). Visit the link, and activate the ticket there to generate the license.
6. Install the Map Transfer Tools (V55)
7. Play
8. Highly optionally (and typically unnecessary), download and install the *Steel Beasts Legacy Maps*
9. Play more

*Steel Beasts* uses an installer which can change the Windows Group Policies (access privileges) of the folder containing all the map data of SB Pro. If you do not want other users on your computer to use the Map Editor you may want to restrict access to that folder again. Note that the map data are now being installed from a separate installer, and that they can be stored in pretty much any local folder that you like.

This installer includes the **CodeMeter runtime version 7.60**.



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### **3<sup>rd</sup> Party Libraries**

The following software libraries are used with this Steel Beasts installation:

- adl 15.0
- apr 1.7.0
- apr-util 1.6.1
- curl v7.85.0
- Eigen 3.3.9
- expat 2.3.0
- GeographicLib 1.51
- gtest 1.10.0
- jpeg-turbo 2.1.0
- libjasper 2.0.32
- log4cxx 0.12.1
- lz4 1.9.3
- OpenSSL v1.1.0
- PolyPartition 2021.01
- RakNet 2021.05
- shapelib-1.5.0
- sqlite 3.35.5
- TinyXML2 8.0.0
- Uriparser 0.9.5
- xxHash 0.8.0
- zlib 1.2.12

### **Time-limited licenses**

eSim Games offers a software rental option. This option is primarily aimed at users who do not already own a CodeMeter USB stick (or to residents of countries to where a CM stick cannot be shipped). Time-limited licenses are issued for one, four, and twelve months respectively:

- Licenses are bound to the computer on which they are installed.
- They do not work with virtual machines (!)
- There is **no automatic renewal of licenses**; it is not a subscription fee that requires termination. Instead, a warning will appear on program start if the license is about to expire (or if it already has expired).
- Licenses that have been purchased need not necessarily be activated immediately. You may buy five licenses but activate only one at a time if you wish. You probably should save the email with the ticket URL for future reference.



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## PE 4.379 Release Notes

### Online Support & Documentation

Experienced users of *Steel Beasts* Pro PE may already visit the official fan page [www.SteelBeasts.com](http://www.SteelBeasts.com) with regularity. If you are reading this, and haven't been there yet, we strongly recommend that you do so. Whether you like discussion boards or not, its integrated search function may yield valuable information.

An important part of the site, though less immediately visible, is the collective effort to maintain an online documentation, the *Steel Beasts* Wiki:

[http://www.steelbeasts.com/sbwiki/index.php/Main\\_Page](http://www.steelbeasts.com/sbwiki/index.php/Main_Page)

Don't like to read?

Less information, but still some, can be found in the tutorials on

<https://www.YouTube.com/c/eSimGamesDtl>

Even without access to the internet there is a **serious amount of documentation included with *Steel Beasts* itself**. This additional information can be found in a subdirectory of the *Steel Beasts* program group of the Windows Start Menu, incidentally named "Documents"; apparently, it's still one of the best kept open secrets since about August 2000. It contains a PDF of the *User's Manual* and other ancillary information, e.g., the NATO Stanag 2019 App. 6c about tactical signs and military map symbology as used in *Steel Beasts*.

A *User's Manual* may be available for a limited time in printed form from the eSim Games web shop, and is supplied as a PDF with the software installation.

News about *Steel Beasts* will usually be published first in the forum of the fan site, and also on eSim Games' homepage [www.eSimGames.com](http://www.eSimGames.com) which you may want to check out occasionally.

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- Updated the *User's Manual* (English, German)
- Added a prior version of these **Release Notes**
- Added AZERTY keyboard chart



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## PE 4.379 Release Notes

### CodeMeter

- Updated CodeMeter encryption so that virtual CM containers are less likely to lock themselves under Windows 11. **Customers, to which this happened since last year, are kindly asked to contact eSim Games for reinstating their licenses**
- Updated the CodeMeter runtime software to **version 7.60** (which, like prior version 7.51, **no longer supports WINDOWS 7**)
- **SHADOWPC**: As this application creates a **virtual machine**, the CodeMeter runtime blocks access to time-based licenses. Permanent licenses on Code-Meter stick are not affected by this.
- **AVAST Anti-Virus** has repeatedly been reported to block CodeMeter runtime components. If you're using this product, please set the appropriate permission.

### New Maps

- Copy the following map UIDs from this document into the SB Map Package Transfer Tool (**V55(!)**) to download the following new map packages. Note that these map packages have been optimized for a reduced loading speed, so
  - These are the same maps as before, but have of course new map IDs
  - You should definitely delete the old versions from your Map Packages directory first, just so there will be no misunderstanding when you try to load a scenario with the old, slow map. In this case, open such a scenario in the Mission Editor, and choose to replace the old map with the new ones
  - Mission Designers are urgently advised to update their scenarios and purge traces of old version where you can find them
  - Kiev East aab94a0c-2a87-45c7-a518-940a3e2c92b3
  - Kiev West bb104aa2-be76-4587-87ed-2c4cd3bca5a9
  - Kramatorsk 5045eb19-688a-4266-90e6-5ad4e58b3e76
  - Mykolaiev-Cherson ad7d4d96-016b-4bed-8a86-4d7def2500c4
  - "Oksbøl Training Area" 7e0e7e2e-27c9-4aad-9a85-8974d8496cd5
  - Severodonetsk 952710e5-3a55-4ae7-9fbc-634f2e841bd1

## User Interface Changes

In the Controls dialog (Alt+C), the wording for the “Automatic Transmission” checkbox was adjusted to be more descriptive.

Improved Steel Beasts’ error logging, for some situations.

## Localization

- Updated English (US) strings
- Updated Russian strings

## Simulation Rules

### Ballistics

#### New/Updated Munitions

- Added the 40mm M384 grenade round to the AH-1 Cobra
  - Adjusted its AI engagement range limit
- Adjusted proximity fuze ranges for various surface-to-air missiles and their corresponding warhead properties
- Added 70mm SAM FIM-92J Stinger
- Adjustments of 120mm
  - DM-63 APFSDS-T
  - DM-63A1 APFSDS-T
  - DM-73 APFSDS-T

#### Other adjustments

- Adjusted helicopter survivability in response to SAM parameters changes (see above) to maintain or improve realism of results; not every SAM will hit (countermeasures), not every missile that hits will kill the helicopters (but most will).

## Sound

- Improved 27 sounds, concentrating on mid-perspective artillery impacts, grenades, all explosions and various weapons. Also replaced the near perspective 25mm autocannon sound, and "3rd person" burst sounds (the 3 to 5 round bursts used when delaying sound over distance)
- Added new impact sounds to particle effects
- Improved the randomized small arms impact sounds for particle effects

- Improved and replaced all maingun mid-range sounds, and the catastrophic explosion sound so they do not sound out of place with all the other new mid-range sounds
- Increased volume of some "splash" sounds, from rounds impacting on targets
- Replaced one more mid-range artillery sound
- Adjusted several other mid-range artillery sounds
- Adjusted one internal hit sound, and variations of it
- Fixed an issue with the sound of the SB600 missile tube being destroyed

## Known Issues

...here are the main issues that we know about, no need to report them again:

- ~~Infantry in trenches currently float in the air; fixing this was considered dangerous to the release date, so it's postponed to a post-release patch~~
- ~~Likewise, it totally sucks to take 1<sup>st</sup> person control of MG teams in trenches when trying to shoot in any direction other than straight forward. Shall be fixed ASAP, but the fix is somewhat risky to break other things, so it needs extensive testing~~
- Some crew-served weapons may currently not deploy in trenches; a future update shall add heavy weapon emplacements
- ~~SB-600 (and other man-portable UAVs) has currently zero setup delay. That shall change with the first patch; the actual system seems to require a quite-substantial 10-minute prep delay which has obvious tactical implications~~
- Changing the content of 12m obstacle containers (placed in the Mission Editor, then changed from air-filled to something else) may mutate them back into 6m variants
- ~~Helicopters still miss when firing guns, if at high altitude, flying fast~~
- 40mm DM12 MZ/HEDP for Mk 19 AGL is currently underperforming against armored targets (Bug 8607)
- Local time zone settings may be off for legacy scenarios; mission designers will need to fix this where it's still an issue
- Legacy scenarios involving the generic cal .50 Remote Weapon Station will have it replaced by the M151 Protector on most vehicles. However, on all MAN KAT series trucks the GNR's position will no longer be available (Bug 8920). On the Pandur, it can be manually replaced by the Arrows RWS (new)

## Weapon-system specific changes

### Main Battle Tanks

#### Challenger 2

- Fixed bug #11506 with the focus adjustment of the thermal imager

#### Leopard 1

- Fixed bug #11506 with the focus adjustment of the thermal imager

#### Leopard 1A5

- Reverted an erroneous change to set the GPS reticule to “laser projected” type, which it isn’t
- Fixed bug #11525 - adjusted the GPS and GAS reticule illumination; by default, they will not appear lit (=black), hotkey R toggles the reddish light

#### Leopard 2

- Reverted an erroneous change to set the GPS reticule to “laser projected” type, which it isn’t
- Fixed bug #11525 - adjusted the GPS and GAS reticule illumination; by default, they will not appear lit (=black), hotkey R toggles the red or yellowish light
- Fixed bug #11506 with the focus adjustment of the thermal imager

#### Leopard 2A5, 2A6 (all)

- Minor revision of turret side and frontal armor protection
- Improvement of crew survivability in case of armor perforation

#### Leopard 2A6M A2

- Turret texture adjustments for Woodland, Winter, Desert themes
- Added texture sets for OPFOR, UA

#### Leopardo 2E

- Minor adjustment to the reverse speed
- Turret texture adjustments for Woodland, Winter, Desert themes
- Added texture set for OPFOR

#### Strv 122

- Minor adjustment to the reverse speed

#### M1 Abrams

- Fixed bug #11506 with the focus adjustment of the thermal imager

## Infantry Fighting Vehicles

### CV90/30-FI

- Fixed bug #11506 with the focus adjustment of the thermal imager

### CV90/35

- Fixed bug #11506 with the focus adjustment of the thermal imager

### M2/M3A2 Bradley

- Fixed bug #11506 with the focus adjustment of the thermal imager

## Armored Personnel Carriers

### M113G3-DK (and variants)

- Thermal texture adjustment

## Reconnaissance Vehicles

### Centauro

- Human GNRs may adjust the TIS brightness and contrast properties again
- Fixed bug #11506 with the focus adjustment of the thermal imager

### SpPz Luchs A1/A2

- Removed the smoke generator it wasn't supposed to have in the first place

## Artillery Systems

### Piranha V AAMS

- Fixed bug #11555; replaced the gunfire sound file while you are in external view

## Aircraft

### Helicopters (all)

- Helicopters may explode or catch fire again, if hit in the fuel tank.

## Air defense

### Fennek SWP (Stinger)

- Added option to load FIM-92J

## Bugfixes without Bugzilla entry

- Eliminated a bug that caused stuttering view pan or magnification changes with certain elevated **Terrain Detail** settings

## Resolved Bugzilla entries

- Fixed bug #9174; **Piranha V AAMS**: Crew no longer remain seated while firing
- Fixed bug #11010; "Vehicle UAV" icons no longer disappear at map zoom levels < 1.2
- Fixed bug #11248; infantry trenches no longer contract in length when saving a scenario
- Fixed bug #11262; while downloading a map package with the (in-game) **Map Package Download Wizard**, clicking **Query Package** will no longer crash Steel Beasts
- Fixed bug #11295; human **M60A3** CDRs operating the **Range Feed** button no longer cancel the lead for AI GNRs. These will now skip lasing if the target range and yaw rate don't change much. Follow-up: The range feed by human CDR cancels lead for AI GNR *even less*
- Fixed bug #11327; **Group by callsign** is now always selected in the **Planning Phase** if, in the Mission Editor, **Tactical icon aggregation** was selected. In addition, the **Mission Editor's Options** menu offers more icon aggregation options
- Fixed bug #11448; computer-owned units no longer fail to execute their script (follow routes etc.) if their ownership status changes
- Fixed bug #11493; **UAV(R) Munin** will now maintain flight height settings while owner teleports elsewhere  
This now also applies to the **SB600**
- Fixed bug #11494; adjusted proximity fuze distances for various surface-to-air missiles
- Fixed bug #11503; if PNG is chosen as the preferred screenshot file format, Steel Beasts no longer saves them as JPG. While at it, unskewed the automatic **Assembly Hall** screenshot, too
- Fixed bug #11504; the blur effect of the loading screen no longer has that weird offset that shouldn't be
- Fixed bug #11505; for the **M1A2 Abrams**, the range no longer flashes with lased ranges between 4000 and 5000m
- Fixed that bug #11506 with the **focus adjustment of the thermal imagers** of Centauro, Challenger2, M1, Leopard 1, Leopard 2, Bradley and CV90 families of vehicles
- Fixed bug #11507; adjusted the near-horizon sky temperature in the thermal view for more contrast in cold and temperate weather, less contrast with hot ambient temperatures
- Fixed bug #11508; for the **AH-1 Cobra**, the 40mm AGL ammo count is no longer zero when loading legacy scenarios
- Fixed bug #11514; adjusted properties of **Libelle**, **SMARt** and other EFP forming artillery exploding on the ground (or not, if they found a vehicle target)
- Fixed bug #11515; thermal imagers with the **easy focus** toggle button now stop their automatic adjustments if the user gives manual focus commands (**Alt+Mouse Wheel**, or **Numpad \*** key)
- Fixed bug #11517; lane markings breached by infantry are now removed if scraped by mineplow/dozer shield



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- Fixed bug #11519; Engineer infantry now cuts the warning sign wire on marked minefields, if breaching
- Fixed bug #11525; for Leopard 1A5 and all Leo 2 family, the GPS and GAS reticule will now appear black by default, will illuminate with R key
- Fixed bug #11531; scrapemarks may now be observed from any angle
- Fixed bug #11536; in drivers' positions, "N" (neutral) will no longer appears at all times next to the speedometer value
- Fixed bug #11545; T-55A m.1970 have a functioning binocular view for the CDR again
- Fixed bug #11546; in the M60A3, when tapping Z quickly and multiple times while unbuttoned as CDR, the world now remains visible
- Fixed bug #11549; for Join in Progress cases, the Host will now reliably transfer scenarios to connected clients again
- Fixed bug #11552; for the T-62 and DF90, ejected shell casings are visible again
- Fixed bug #11556; it's no longer possible in the Mission Editor to bypass the password protection if missing the map package, and then crashing Steel Beasts after retrieving it from a map server and entering test mode

4.377 (official release – February, 2023)

4.268 (official release – December, 2021)