Thief 3 Sneaky Upgrade version 1.1.11

Introduction

The Thief 3 Sneaky Upgrade is an unofficial patch for Thief 3. It aims to improve the gaming experience on modern systems and facilitate setting up fan missions and game mods:

- All resolutions reported by the system, plus an optional custom display mode, are available from the options screen. The aspect ratio is shown as well
- The horizontal view is extended with wider aspect ratio (i.e. 'hor+'), instead of cropping off the top and bottom
- The field-of-view can be specified by the user. The setting will work with both the original game and fan missions, with existing savegames and with missions which use scripted FOV changes (*the Cradle*). The in-game stores work correctly, regardless of the FOV setting
- The HUD, menus, movies and loading screens are shown correctly, regardless of resolution and aspect ratio. In 3-monitor modes, the HUD can be constricted to the center monitor
- No issues with 16:9 modes
- Run the game on a non-primary monitor
- Less dependency on registry values (ignores ION_ROOT by default, SaveGamePath optionally)
- If the "Thief Deadly Shadows" folder in the user's Documents folder is not used for savegames, then it can be deleted and will not be recreated when the game is launched
- Some speed-up of level loading, especially with vsync on
- Proper screenshot functionality
- Fix for the desktop being visible during level loads on Vista, Windows 7 and Windows 10
- Fix for an original bug, which would cause missions to always start on Normal difficulty (or even Easy, when restarting a mission)
- Fix for an original bug, which caused the City sections to always be played on Normal difficulty
- Fix for an original bug, which would make the mouse cursor frozen or invisible when using large font sizes in Windows
- Fix for broken lockpicking etc when playing with vsync off or in windowed mode
- Fix for crashes when binding an analogue controller through the key binds screen
- Gamepad improvements: Mouse and escape key emulation. Fix for controller half-axes sometimes being set up reverted, support for XBox360-type controllers (triggers act as buttons), modifiers make all 16 gamepad buttons supported by the game available
- Fixes Alt-Tab, brightness and multisampling for the GOG version of the game. Also works with the Steam version, even the overlay, with a work-around
- Fix for the mouse cursor not being captured on Windows 10
- Fix for objectives and restrictions such as "do not get caught" not being shown during the briefing. (Only relevant for the Minimalist Project and Fms)
- All values for the multisampling option are available (and the valid ones are marked...)

As an FM loader, the features are:

- Easy to set up besides this patch there is nothing to install or configure
- The contents of your game installation folder are never changed. (GarrettLoader has a habit of messing up your installation)
- Works even if the game is installed in Program Files
- Automatically installs custom conversations. (Used in the FM All the World's a Stage)
- Expanded 'property storage' allows you to play certain large FMs without having the game crash when you save
- Fix for certain FMs crashing on exit
- Fix (sort of) for the mechanical eye zoom not working in FMs
- Fix for an issue where loot of the same type but with different values would be handled correctly by the Stats total, but in the loot lists (Gear screen, fence) all items would be assigned the value of the first item picked up
- Supports more than four locales in a single FM archive
- Includes support for the FMSel selector from the NewDark patch for Thief 2, and similar loaders. Can even be used without FMSel with a (very primitive) built-in FM selector

Mod support is inspired by NewDark:

- A stack of mod folders can be set up to override game and FM resources
- Block file resources can (with some limitations) be overridden by external files without patching the block files
- Replacement fonts can be rendered in higher resolution without having to adjust the scaling in existing font mappings
- Mods can provide overrides for Sneaky Upgrade options
- The Full Edition of the Sneaky Upgrade bundles the mods *Thief 3 Gold, the Minimalist Project, the Collective Texture Pack, Garrett Animation Tweaks, Briefing Videos* and *Improved Fonts*.

Some tweaking options have been incorporated:

- Mirror and/or scale down the main HUD. (Scale to zero for unobstructed screenshots)
- Improved loading screen text: Scale it down, improve formatting. Pause loading by holding down Ctrl
- Minor HUD and menu tweaks: Remove "Nothing" texts, remove junk item flashing, hide the lockpicking HUD, remove the loot percentage when picking up loot, remove purple fog, remove 'bouncing arrows', remove loading screen tips, hide the main menu version text, remove the mechanical eye zoom overlay
- Turn the short intro movies off, or replace them with the game's trailer
- Improved formatting of loading screen quotations
- Always show the health bar
- Various alternative background modes for maps/readables and the pause screen
- Better mouse response and removed motion blur, adjust mouse sensitivity
- More realistic physics, gravity multiplier
- Scale the difficulty up or down. (Can be scaled to zero for a 'notarget' cheat)
- Disable auto-raising of the blackjack and dagger
- Reduce or remove headbobbing. (Not working well, see "known issues" below)
- Disable Garrett's breathing animation (when idle)
- No switch to third person view in death...
- Classic speed. (Walk by default, run qualifier)
- Decrease or increase the ambient fog, ambient light, run speed and gravity in any level
- Bright mouse cursor
- Turn down the volume of cutscenes and other videos
- Borderless windowed mode
- Auto-equip the blackjack (instead of the dagger) when clicking Attack with no current weapon
- End a mission by pressing Shift+Ctrl+Alt+End (see "known issues" below for caveats)

Savegame options:

- Automatically cycle through multiple quick saves (or keep *all* quick saves). By default two quick saves are used for new installs of 1.1.11
- Quick load the most recent save, even if not a quick save
- Human-readable savegame folder names. (Enabled by default for new installs of 1.1.11)

Additionally, some troubleshooting/advanced options are provided, such as:

- Allow the attempted load of damaged save games
- Run the game in single-core mode

The patched exe uses a configuration file named SneakyOptions.ini for setting up the tweaks and features. Most users should use the supplied SneakyTweaker tool instead of applying changes manually. See below for more information.

Installation

It is not necessary to install the official 1.1 patch first before installing the Sneaky Upgrade. Also, do not try to use the original installers for *the Minimalist Project, the Collective Texture Pack* or the *Garrett Animation Tweaks* – install the Full Edition of the Sneaky Upgrade instead.

As of version 1.1.6 the main original exe files are no longer modified – patched and renamed replacement files are copied in. But it is still advisable to turn off your virus checker until installation is complete. Rebooting before installation is also recommended.

The installer will do a check on start-up and refuse to continue if it appears that the game has not been properly installed. Steam users should run the game once before installation to prevent this. If there is a current version of the Sneaky Upgrade installed, the installer will detect this and offer to uninstall it before installation proper can start.

The configuration options are:

- The location of the game. Should be identified automatically
- Select the game language: Select one of the four official game languages. (Text and subtitles). The current language is pre-selected if recognized, otherwise "No change" is preselected
- Select the GUI language for FMSel: The language for the fan mission selector defaults to the game's locale, if a translation is available
- Which mods should be installed (Full Edition only): By default all mods are installed but only *Thief 3 Gold, Garrett Animation Tweaks, Briefing* Videos and *Improved Fonts* are enabled.
- Set the game root to the chosen path: If your chosen path and the game's registry value disagree, the installer can update the registry. The ION_ROOT registry value is now ignored by the patched game, so this only becomes important if you uninstall the Sneaky Upgrade
- Customize the paths for savegames, fan missions or mods: This enables a subsequent page where the paths below can be changed. Note that when a path is changed, any contents in the old location will not be copied or moved, except for the options files (Options.ini and SneakyOptions.ini).
 - Path to savegames, screenshots and options: This will change the game's SaveGamePath registry value
 - Fan mission archive files location: The path to downloaded FM .zip or .7z files. Note that if no current path is set up for FMSel, then a default path in the user's Documents folder will be set up. It can be changed from FMSel later
 - Fan mission installation path: The default path is chosen to make the installer easy to use. If you want your FMs installed to a specific location, change it here
 - Mod installation path (Full Edition only): As for the FMs, a custom path for the mods can be specified
- Additional desktop icons: A new icon for the game is always installed. The installer provides options for matching icons for easy access to the FM selector and tweak tool. A community-provided high resolution icon with a transparent background is used. There is also an option to have desktop icons for the main readme files

By default, for a first-time Sneaky Upgrade installation, the game will be set up to use a special custom display mode (0 x 0), which will force use of the current desktop resolution. A fixed resolution can be chosen on the game's Options screen. Contrary to the unpatched game, resolution changes take effect only on the next restart or reload.

The installer keeps its files (e.g. backups and documentation), in a subfolder of the game install, named "SneakyUpgrade". By default, fan missions and mods are installed in a folder called "Thief 3 Sneaky Upgrade", which is located in the common 'AppData' folder (typically C:\ProgramData). This is also where the log file is written.

Do not apply any compatibility modes, or "run as administrator", to any of the Thief 3 exe files. Those modes are not necessary and will often have weird effects, like brightness adjustment not working or the game opening in a window instead of full-screen.

It is possible to run the original, unpatched game with the Sneaky Upgrade installed, which can be handy when investigating an issue. There is a shortcut in the start menu group for this.

Note that uninstalling the Sneaky Upgrade will not delete installed FMs or any configuration files, so it can be uninstalled and reinstalled or upgraded later. Uninstalling the mods bundled with the Full Edition is optional: If the mods are unchanged in a new version, then the Update Edition can be used for the upgrade.

If you want to uninstall Thief 3, first uninstall the Sneaky Upgrade (and any other community add-ons). During uninstallation you will be asked whether to remove mods and options files. If you have no intention of reinstalling, then remove both. Note that installed FMs will not be removed, so to uninstall cleanly these must be removed manually. (The uninstaller will inform you of this.)

Steam, GOG and Wine

Steam users should disable updates for the game and refrain from doing game cache validation. Be sure to run the game once prior to installation, otherwise the game's registry values may not be set. To get the overlay working it is necessary to add the game a second time as a non-Steam game. (Browse to the Steam install and select the Thief3.exe file.)

As of version 1.1.6 the GOG version needs no special attention. Before patching, the game will run in Windows XP compatibility mode, which seems to break more than it fixes for this game. The patch also enables pressing Alt-Tab in full-screen mode, to access the desktop.

When using Wine on Linux/Mac it is recommended to use Wine version 1.8 or newer, which has a fix for a bug preventing Garrett from turning freely.

Options

Previously the patched game would use the unpatched game's options file location – which would differ depending on the locale and whether an FM was active. As of version 1.1.3 a private set of options files is used. They are in a folder always named "Options", located in the same location as the savegames for the original game – that is, next to (not inside) the "SaveGames" folder. FMs will use these files as well.

The SU installer will copy the options for the game's current locale into the private folder. If the SU is uninstalled the game will revert to the original options file.

The new options provided by the patch in the SneakyOptions.ini file must be changed through the SneakyTweaker tool or (for advanced options) by manually editing the file. A shortcut in the start menu provides access to the Options folder. If the SneakyOptions.ini file is missing on start-up a full set of default values will be written out.

Every mod (and any FM, which is basically a special mod) can provide overrides for the SneakyOptions.ini file in the form of a file named SneakyOptions_diff.ini, located in the root of the mod folder. Settings from all SneakyOptions_diff.ini files found in the mod stack will be merged with the settings from SneakyOptions.ini, so that in case of conflicts the setting specified by the mod with the higher priority will be used. In general only settings from the [Screen] and [Tweaks] sections should be overridden by users.

For descriptions of the options, please see the pages of the Sneaky Upgrade group in the SneakyTweaker tool. Some options not found there are for testing and/or FM author use. Those are described in the readme for the Editor Edition of the patch.

As of 1.1.11, a second options file, Sneaky.ini can be placed in the System folder in the game install, containing the following:

[Install] IgnoreSaveGamePath=True

This will make the game ignore also the SaveGamePath registry value and instead expect to find the Options, SaveGames* and ScreenShots* folders in the root of the game install. Installed mods and FMs can be moved here too, by changing two lines in SneakyOptions.ini to "InstallPath=..\Installed FMs" and "InstallPath=..\Installed Mods" respectively. This makes the install portable.

To also move FM archives into the install, Place them in a subfolder, e.g. "FanMissions" and replace a line in fmsel.ini in the Installed FMs folder with "ArchiveRoot=..\FanMissions"

Fan missions

The installer will offer to take you to a web site where you can download fan missions. You can find alternative download sites in the <u>Thief FM thread</u> on TTLG. Make sure the files you download are for Thief 3... It is best to make a new folder for storing the FM archive files. Do not put them in the same folder where the FMs are installed (or a subfolder of it), FMSel will complain. By default a path in the user's Documents folder is used.

To play a fan mission, launch the game using the cyan coloured glyph icon on the desktop. (If you de-selected the icons during installation, launch through the Start menu, or copy an existing Thief 3 shortcut and edit the Target field to end in "Thief3.exe -fm".)

If you did not choose to customize any paths during installation, FMSel will ask for a path the first time it is launched. Browse to the folder containing downloaded FMs, and select any file. FMSel will then scan the folder and the window will update to show all your FMs. To get information about an FM, right click on an entry, then select View Info File. If there are several readme files in the archive you might get the wrong one, e.g. in the wrong language. If that happens, select View Summary and chose the right file from there.

For further information about playing FMs with FMSel, please see the documentation for FMSel.

The FMSel supplied with the Sneaky Upgrade has a number of small improvements:

- No 30-character limit on folder names for Thief 3
- Support for readme files in GLML format. (Preferred if present)
- Automatically reads the FM title if a GLML file is found
- Pheonix's clean-up and name format features

Alternatively, use <u>NewDarkLoader</u>, which aims to combine the best from DarkLoader and FMSel, or <u>AngelLoader</u>, a comprehensive stand-alone loader for all three Thief games.

The SU is no longer tested with legacy loaders (GarrettLoader, ModernLoader, TFMM), but they may work – try installing the SU after setting up the loader. Do not use FMSel in parallel.

Mods

Most users should enable and configure the mods included with the Full Edition through the SneakyTweaker tool. If very specific configuration of a mod is desired, then the tweak tool should not be used for that mod anymore. It is best to then rename the root mod folder both on disk and in SneakyOptions.ini – that way it will not be recognized by the tweak tool anymore.

Mods are set up using the ModPaths and UberModPaths options in SneakyOptions.ini – this is basically copied from Thief 1-2 using NewDark. Path entries that occur first in each list take priority. Empty or invalid entries are ignored. Mod names can be any valid folder name and may include spaces.

A mod must use the same directory structure as the game itself, i.e. have System and/or Content folders. Most of the override files will be in Content\T3*\DynamicallyLoaded folders. The SneakyOptions_diff.ini override file must be in the root. How to prepare a mod is described in more detail in the readme for the Editor Edition of the Sneaky Upgrade.

The mods installed by the Full Edition are described in detail in separate readme files, which are available through the Start Menu, and on the SneakyTweaker top level pages. Here are the highlights:

- Thief 3 Gold: All the proper missions have been merged, i.e. no loading zone portals to go through. The City sections have not been merged but have seen some improvements as well. The Inn mission has all difficulty settings available and tutorial elements are removed on difficulties other than Easy
- Minimalist Project: Provides a more classic Thief experience and defines new playstyles. In the SU
 version the GUI and gameplay elements have been separated to the extent possible and a few
 configuration options have been added. The originally very high difficulty settings have been
 reduced somewhat, and the 'classic' HUD is the default
- Collective Texture Pack. A set of high-res textures and alternative loading screens and main menu video. By default the full set of textures is made active.
 This mod is installed on two levels: Menu and loading screens in ModPaths and textures in UberModPath. This allows FMs with custom a custom menu or loading screen to take priority while still benefiting from the high-res textures
- Garrett Animation Tweaks: Provides improved animations, especially for leaning, which work with the other mods and FMs
- Briefing Videos: A set of briefing videos in a style inspired by Thief 2, which will replace the audio/text briefings in both Thief 3 Gold and the original game
- Improved Fonts. A small mod containing improved font textures for both the original game and the Minimalist Project

Bug reports

Please submit Sneaky Upgrade bug reports and feedback by posting in the <u>Sneaky Upgrade release thread</u> on TTLG, or by PM to snobel on the TTLG or Dark Mod forums, or on Mod DB. For bug reports, please include the contents of the current Sneaky.log, which can be found through the *Thief 3 Sneaky Upgrade* program group in the start menu.

Feedback regarding the bundled mods should be directed at the mod authors. (Relevant TTLG links below.)

Known issues

- In widescreen modes the mechanical eye zoom will 'jump' to a zoomed-in position on first use
- In ultrawide modes, subtitles for NPCs are sometimes shown on the right side
- When lockpicking with the scaling tweak active, the right-to-left movement of the right pick is not scaled
- ReadingScreenMode issues: In mode 4 (mouselook) it is not possible to switch map page if there are more than two. In modes 3 and 4 the readable screen sound should be turned off. In modes 3 and 4 the readable may be blocked by a pop-up window with a misplaced and inaccessible OK button. Hit Escape to return to the readable
- The headbobbing tweak slows Garrett's animations, including the footsteps down
- MaxFrameRate: If you experience weirdness in the form of slowed-down animations then (if vsync is on) set this option to 0 or (if vsync is off) restore the default of 90
- On old graphics cards requiring power-of-2 sized textures, the movies from the Briefing Videos mod are not shown correctly
- Various minor issues with GUI elements not looking quite right, especially in ultrawide and portrait modes
- Pressing Shift+Ctrl+Alt+End to skip a level will work only in the proper missions (and FMs), not in City sections, which must be played through normally. Updated scripts have been included with the Thief 3 Gold mod to allow skipping through all the missions, this is not the case for the original maps, where ending the Pagan and Kurshok Citadel maps can leave you with unfulfilled objectives

Known issues which happen also with the unpatched exe

- If Garrett gets stuck in the floor and is 'skating', briefly draw your bow. In most cases this will get you released. If you draw it briefly enough, no arrow will be fired. Otherwise hit jump or escape to cancel the shot
- Windows 10 issues: Multisampling settings above 1 may make the game crash or open in a window
- In rare cases the game will receive game controller input even though no gamepad or joystick is connected. This will result in constant left/forward movement and list views that keep scrolling to the top. Can be fixed by setting the IgnoreAllInput option in the Gamepad section of SneakyOptions.ini to True

Thanks

- A big thank you to the testers: Estel Randir, Adsk1, Acleacius, Abysmal, fortuni, Maruchin, Linda, noblehelm, Cigam, mensch, AluminumHaste, Depili, Kerrle, decayedmatter, DJ Riff, lowenz, Lolwutman, Corsair, bikerdude, Beleg Cúthalion, Child Of Karras, gnartsch, chrish, Pheonix, PsymH, Hiatus, tolsen64, Xarg, Zaratul, voodoo47, Lord Soth, scavvenjahh, scarcow and TreyM
- Warm thanks to mensch, Beleg Cúthalion, New Horizon and John P for permission to include their mods
- Huge thanks to 'le Corbeau' for including FMSel source code in NewDark
- Many thanks to clearing, Esme and Lord Soth for file mirrors
- Special thanks to Beleg Cúthalion for the FOV and high-FPS test maps

Acknowledgements:

- massimilianogoi figured out how to edit the game's resolution table to provide <u>custom resolutions</u>
- tolsen64 thought of <u>querying the system</u> for supported resolutions
- Hadley provided a <u>fix for 16:9</u> aspect ratio

- NotCarolKaye figured out the <u>FOV calculation</u> for widescreen
- daremo made an <u>FOV patcher</u> for the original game
- On the <u>widescreengamingforum</u> someone (who?) discovered that HUD stretching could be fixed by changing the parameter AssumedUIScreenWidth, and that doing so would also fix the 16:9 crash
- Xiaopang identified the issue with periods in the installation path
- Installer "Thief III" logo from the <u>Minimalist Project</u> by New Horizon
- Quite a few of the tweaks were found in the <u>Thief 3 Tweak Guide</u>
- The FMSel frontend was borrowed from the <u>NewDark</u> patch for Thief 2
- FMSel <u>improvements</u> by Pheonix
- FMSel <u>translations</u> by gnartsch (German), Briareos H (French), raven4444 (Polish), DonSleza4e and Glypher (Russian)
- <u>High-res Thief 3 icon</u> by Kerrle
- Lolwutman discovered the influence of vsync on loading times
- swaaye discovered how to activate a fallback mouse cursor, which would work with large fonts
- UCyborg found a fix for the <u>broken vsync/brightness</u> in Windows 10
- SneakyTweaker Face-eating warning borrowed from Voodoo47's TFix

Third-party mods bundled by the Full Edition:

- The Minimalist Project by New Horizon
- The Collective Texture Pack by John P
- <u>Garrett Animation Tweaks</u> by ascottk
- <u>Thief 3 Gold</u> by Beleg Cúthalion
- <u>Briefing Videos</u> by mensch originally a Thief 3 Gold subproject

Tools used:

- The <u>NASM</u> assembler
- The OllyDbg debugger
- Visual Studio 2022 (Community)
- The <u>Qt</u> framework and Qt Creator (Community)
- The <u>UnitTest++</u> testing framework
- <u>TortoiseGit</u> version control
- The PE file editor <u>CFF Explorer</u>
- The Inno Setup installer compiler
- LibreOffice for conversion to PDF

Third-party software:

• The <u>libjpeg-turbo</u> turbojpeg library for screenshots

"This software is based in part on the work of the Independent JPEG Group. " "Copyright (C)<YEAR> <AUTHOR>. All Rights Reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the libjpeg-turbo Project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS", AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT,

INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE."

• The <u>FFmpeg</u> libraries for non-Bink video playback

"This software uses libraries from the FFmpeg project under the LGPLv2.1"

The Crosire / <u>d3d8to9</u> wrapper DLL

"Copyright (C) 2015 Patrick Mours. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE."