

# **SoundTrack eXporter User's Guide**

**For PlayStation®3**

**SDK 4.750**

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# About This Document

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## Purpose of this Document

This document describes the SoundTrack eXporter (STX) and its associated Windows tool, the SoundTrack eXporter Editor (STX Editor).

## Audience

The intended audience of this document is games producers who need to know how to submit a game to QA.

## Graphics

All screenshots in this guide are taken from the STX or the STX Editor tool.

## Conventions

The typographical conventions used in this guide are explained in this section.

### Hints

A GUI shortcut or other useful tip for gaining maximum use from the software is presented as a 'hint' surrounded by a box. For example:

<b>Hint:</b> This hint provides a shortcut or tip.
--

### Notes

Additional advice or related information is presented as a 'note' surrounded by a box. For example:

<b>Note:</b> This note provides additional information.
---

### Text

- Names of keyboard functions or keys are formatted in a bold serif font. For example, **Ctrl**, **Delete**, **F9**.
- File names, source code and command-line text are formatted in a fixed-width font. For example:

```
bin\packageTmpPS3\USRDIR
```

### Errata

Any updates or amendments to this guide can be found in the release notes that accompany the release.

# 1 Introduction

This chapter introduces the SoundTrack eXporter application and the SoundTrack eXporter Editor.

## SoundTrack eXporter

The SoundTrack eXporter (STX) is the application used by PlayStation®3 users when they download game soundtracks from the PlayStation®Store. Users are prompted to install the application before it can be run. STX provides a wizard that guides the user through the exporting process.

## SoundTrack eXporter Editor

The SoundTrack eXporter Editor (STX Editor) is a Windows® tool that enables games producers to gather all the information needed to create STX applications. Producers can reference thumbnail, splash screen and in-app images, list and edit all tracks to be included, and access the PlayStation®3 system file through an external System File Utility. When the producer has finished editing, the information is saved in a *SoundTrack eXporter project*. Producers may then create packages to be distributed on the PlayStation®Store, or patches to update existing STX applications.

## The STX Editor Tool Files and Folders

Table 1 lists the folders and files that are contained in the STX Editor tool package sent to game producers.

**Table 1 STX Editor Package Folders and Files**

Folder	File	Description
bin\	FreeImage.dll	Tool dependency file.
	FreeImageNET.dll	Tool dependency file.
	make_full_packagePS3.bat	Scripts that call Publishing Tools to build a package.
	make_full_packageVita.bat	
	make_full_packagePS4.bat	
	Newtonsoft.json.dll	Tool dependency file.
	STXEditor.exe	The STX Editor Tool.
	TagLib.dll	Tool dependency file.
bin\ja\	STXEditor.resources.dll	Resource file.
bin\packageTmpVita\		Template directory for PlayStation®Vita. For more details, refer to the <i>SoundTrack eXporter User's Guide for PlayStation®Vita</i> .
bin\packageTmpPS4\		Template directory for PlayStation®4. For more details, refer to the <i>SoundTrack eXporter User's Guide for PlayStation®4</i> .
bin\packageTmpPS3\	param.sfx	Default template .sfx file.
	SubmissionMaterials.zip	Submission Materials
bin\packageTmpPS3\USRDIR\	EBOOT.BIN	The PlayStation®3 STX Application.
	dictionary.json	Localized dialog messages for the STX application.

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Folder	File	Description
bin\packageTmpPS3\USRDIR\images\	PS3ProgBarBg01_L2.png PS3ProgBarBg01_L2Fill.png	Default images used in the application.
docs\PS3\	SoundTrack_eXporter-Users_Guide_e.pdf	This user guide (English).
	SoundTrack_eXporter-Users_Guide_j.pdf	This user guide (Japanese).
docs\PSVita\	SoundTrack_eXporter-Users_Guide_e.pdf	The <i>SoundTrack eXporter User's Guide for PlayStation®Vita</i> (English).
	SoundTrack_eXporter-Users_Guide_j.pdf	The <i>SoundTrack eXporter User's Guide for PlayStation®Vita</i> (Japanese).
docs\PS4\	SoundTrack_eXporter-Users_Guide_e.pdf	The <i>SoundTrack eXporter User's Guide for PlayStation®4</i> (English).
	SoundTrack_eXporter-Users_Guide_j.pdf	The <i>SoundTrack eXporter User's Guide for PlayStation®4</i> (Japanese).
license\	STX_license_e.txt STX_license_j.txt	Licenses for the STX Editor Tool.
license\others\	Newtonsoft_Json_Net.txt	License for the STX Editor Tool.
SampleProject\	SampleProject.json changeinfo.xml	The STX Editor project settings. Patch update information file.
SampleProject\music\	riff01.mp3-riff04.mp3	Sample music files.
SampleProject\PS3\	param_ps3.sfo param_ps3Patch.sfo	PlayStation®3 system files.
SampleProject\PS3\images\	icon.png icon2.png inAppBackground.png contentInfoBackground.png musicCover.jpg	Sample image files.
SampleProject\PSVita\		Sample project asset files for the PlayStation®Vita version. For more details, refer to the <i>SoundTrack eXporter User's Guide for PlayStation®Vita</i> .
SampleProject\PS4\		Sample project asset files for the PlayStation®4 version. For more details, refer to the <i>SoundTrack eXporter User's Guide for PlayStation®4</i> .

Document serial number: 000009952198

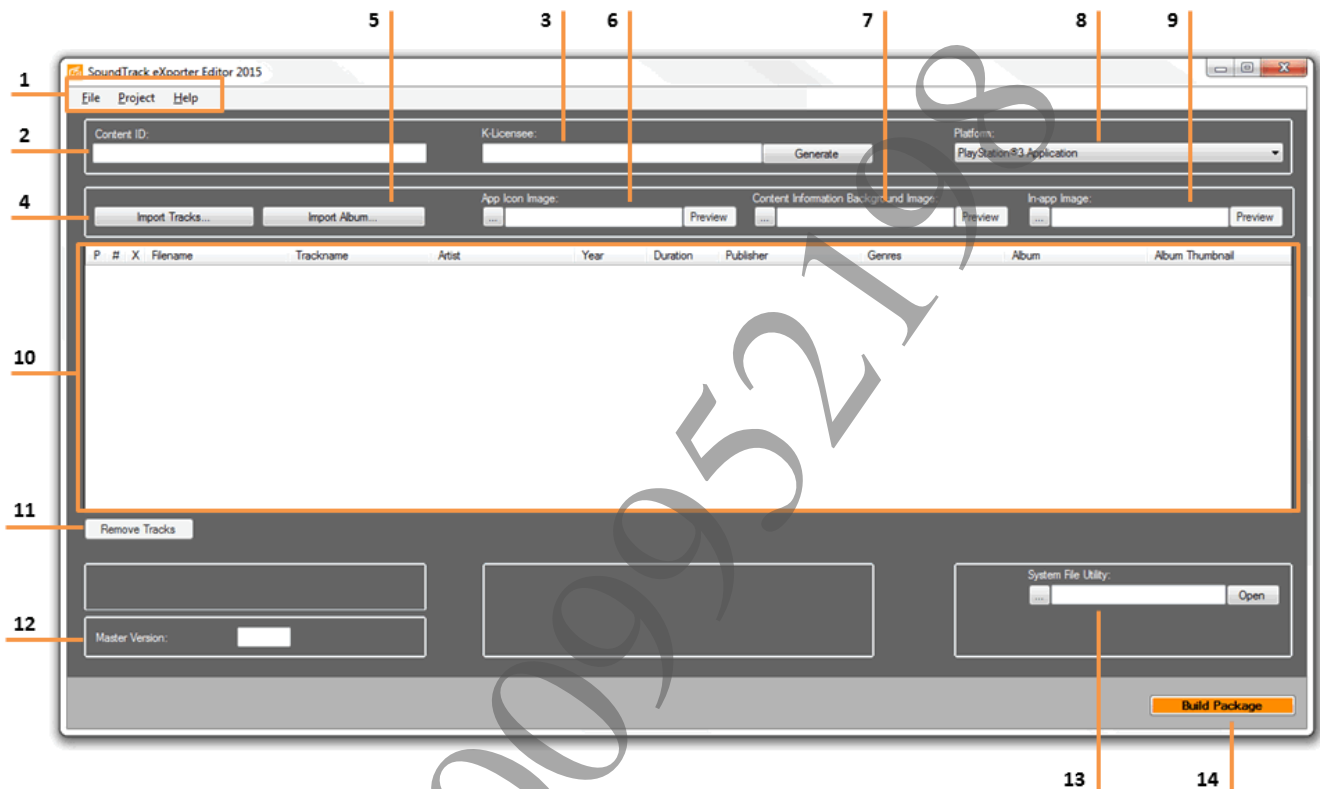
## 2 SoundTrack eXporter Editor

This chapter describes the main components of the SoundTrack eXporter Editor (STX Editor) UI and their functionality.

### The STX Editor UI Components

Figure 1 shows the STX Editor user interface.

Figure 1 SoundTrack eXporter Editor



The components of the STX Editor UI are described in the following sections. The sections are numbered to correspond to the numbered highlights in Figure 1.

#### 1. Main Menu Bar

The main menu consists of the following sub-menus:

- The **File** menu has options to **Open**, **Save/Save As**, **Close** and create **New** projects, and **Exit** the tool.

**Hint:** When saving a project, you are advised to create a directory for the project to be saved in. This directory can also be used for system files and the final package folder, gathering all the necessary files into one place.

**Note:** Avoid using space characters in file and directory paths. Some processes and applications, for example the System File Editor, do not support directory names that contain space characters.

- The **Project** menu has options that match the tool GUI, such as options to import tracks, albums, and images, and edit the system file, if defined.
- The **Help** menu consists of the **About** option, which displays information about the tool, and the **Help** command, which displays this *SoundTrack eXporter User's Guide*.

## 2. Content ID

The Content ID is an alphanumeric string that identifies the application once it is installed on the PlayStation®3. The 8<sup>th</sup>-16<sup>th</sup> characters in this field must match the Title ID provided to the system file (`param_ps3.sfo`).

For more information about Content IDs, refer to the *Generator Tools User's Guide* provided with the PlayStation®3 SDK.

## 3. K-licensee

The k-licensee is an alpha-numerical string of 34 characters that starts with "0x". It is used to prevent other programs that the user started up from freely accessing the application.

For more information about how to set this value, see [Provide the Content ID and K-licensee](#) in [Chapter 4, Tutorial: How to Create an STX App Using the STX Editor](#).

## 4. Import Tracks...

The **Import Tracks...** button launches an .mp3 file browser from which you may choose one or multiple tracks to be imported to the SoundTrack table. If there are duplicate files in a single directory, only one instance of the file is imported.

## 5. Import Album...

This button launches a folder browser, from which you may choose a folder. All .mp3 files inside the chosen folder and its subfolders are imported to the SoundTrack table. If there are duplicate files in a single directory, only one instance of the file is imported.

## 6. App Icon Image

This is the thumbnail image that represents the STX application on the PlayStation®3 console's **Game** system menu.

For more information, see [Select Images](#) in [Chapter 4, Tutorial: How to Create an STX App Using the STX Editor](#).

## 7. Content Information Background Image

This is a full-screen image that appears when the focus moves to the content. It can be used as a theme image.

For more information, see [Select Images](#) in [Chapter 4, Tutorial: How to Create an STX App Using the STX Editor](#).

## 8. Platform

This dropdown list allows you to choose a platform on which to run the SoundTrack eXporter.

## 9. In-app Image

This is a full-screen background image that is used in the STX application on the PlayStation®3. The STX installer renders the dialogs to the user on top of this image.

For more information, see [Select Images](#) in [Chapter 4, Tutorial: How to Create an STX App Using the STX Editor](#).

## 10. The SoundTrack Table

The SoundTrack table shows all the tracks to be packaged and distributed in the PlayStation®Store through the STX application. Each row represents a track.

For more information, see [Import Tracks and Albums](#) and [Edit Track Information](#) in [Chapter 4, Tutorial: How to Create an STX App Using the STX Editor](#).

#### 11. Remove Tracks

This button removes all the tracks that have a ticked checkbox from the SoundTrack table.

#### 12. Master Version

This field is for specifying the master version of the application. The version number consists of a two-digit integer and two digits after the decimal point.

#### 13. System File Utility

This field allows you to create or select and then edit the `.sfo` system file that is used by the PlayStation®3 to set the application information.

For more information, see [Select and Edit the System File](#) in [Chapter 4, Tutorial: How to Create an STX App Using the STX Editor](#).

#### 14. Build Package

This button represents the final step in the process of building a package for distribution. It builds the `.pkg`, `.log` and `.zip` files according to the information provided in the tool.

For more information, see [Build the Package](#) in [Chapter 4, Tutorial: How to Create an STX App Using the STX Editor](#).



## 3 STX Editor Project Structure

This chapter describes the structure of a project created in the SoundTrack eXporter Editor (STX Editor).

### Overview

The data that you enter in the STX Editor is saved in a SoundTrack *project*. A SoundTrack project is composed of several files and directories. These are created when you save the project and during package building.

### Project File (.json)

The project file contains all the data, if any, that you have entered into the editor. The project file is saved in a human-readable JSON (text) format but should not be edited outside of the STX Editor.

### System File (.sfo)

The system file specifies the system data used by the PlayStation®3 STX application, such as the application title. You may choose the file path when saving a project or when referring to an existing file. An external tool, the **System File Utility** (usually provided with the PlayStation®3 SDK and also downloadable through the SDK Manager) enables you to edit the file. It is important to save the changes in this tool, as they will not be saved in the project file.

### Application Package File (.pkg)

When in patch mode, the original distributable application package file (.pkg) needs to be specified, so that the patch build can identify the application to update.

### Change Info File (.xml)

When in patch mode, a change info file needs to be created and specified. It can be modified with an update message that will be shown in the Update History option for the application on the PS3™ system.

### Project Directory

This directory contains the project and system files, as listed in Table 1.

### Output Directory

This is the directory where the final package directory will be placed. The package directory is called FullPackagePS3 if an application is built, or PatchPackagePS3 if a patch is built. Both contain the .pkg and SubmissionMaterials.zip files.

## 4 Tutorial: How to Create an STX App Using the STX Editor

This chapter consists of a tutorial that explains the process of creating a SoundTrack eXporter project from scratch and building a package.

**Note:** Some processes and applications do not support directory names that contain space characters; therefore you should ensure that no filename or directory path contains spaces.

### Launch the Tool

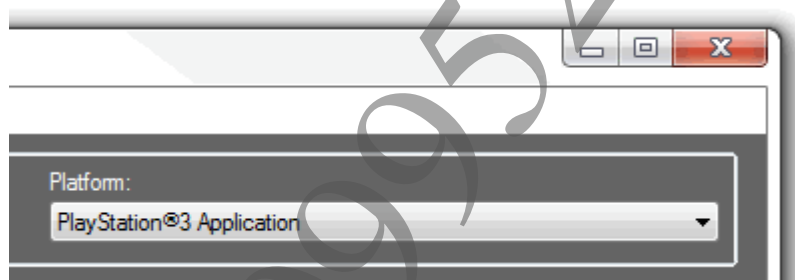
To launch the tool, double-click on the file `STXEditor.exe`. The editor opens, ready for you to create a new project. You can now provide the data as described in the following sections. However, no project files or directories are created at this stage.

Clicking **File > New** or **File > Close** will also present an empty UI ready for you to create a new project.

### Choose a Platform

Select 'PlayStation®3 Application' from the **Platform** dropdown list.

**Figure 2 Platform Dropdown List**

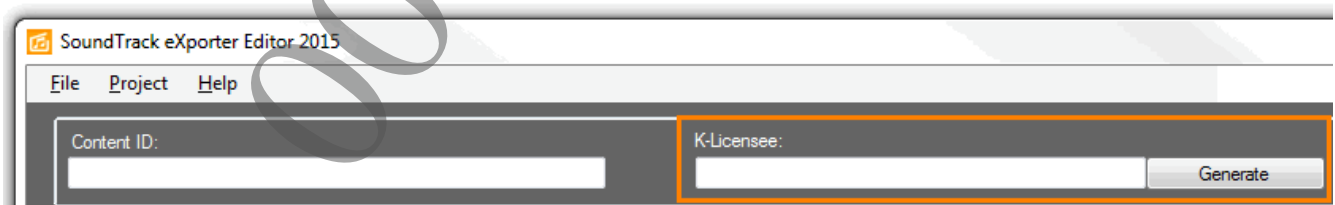


### Provide the Content ID and K-licensee


The **Content ID** can be decided by a set of rules. For details, refer to the *Disc Image Generator for PlayStation®3 User's Manual* that is provided with the PlayStation®3 SDK.

To generate the passcode, click the **Generate** button next to the **K-licensee** text field.

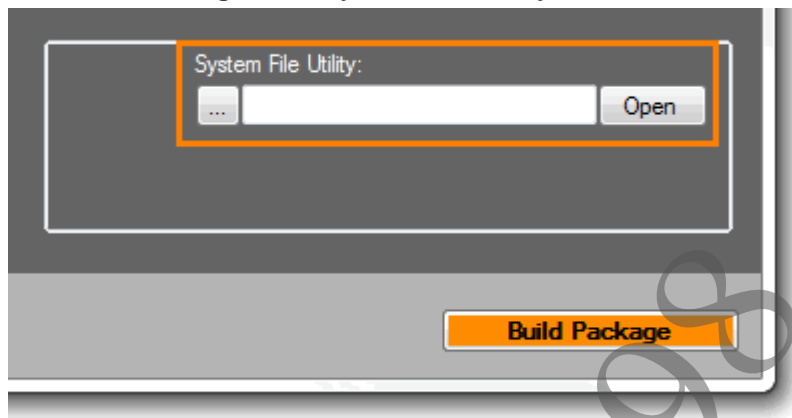
**Figure 3 K-licensee Text Field**



## Select and Edit the System File

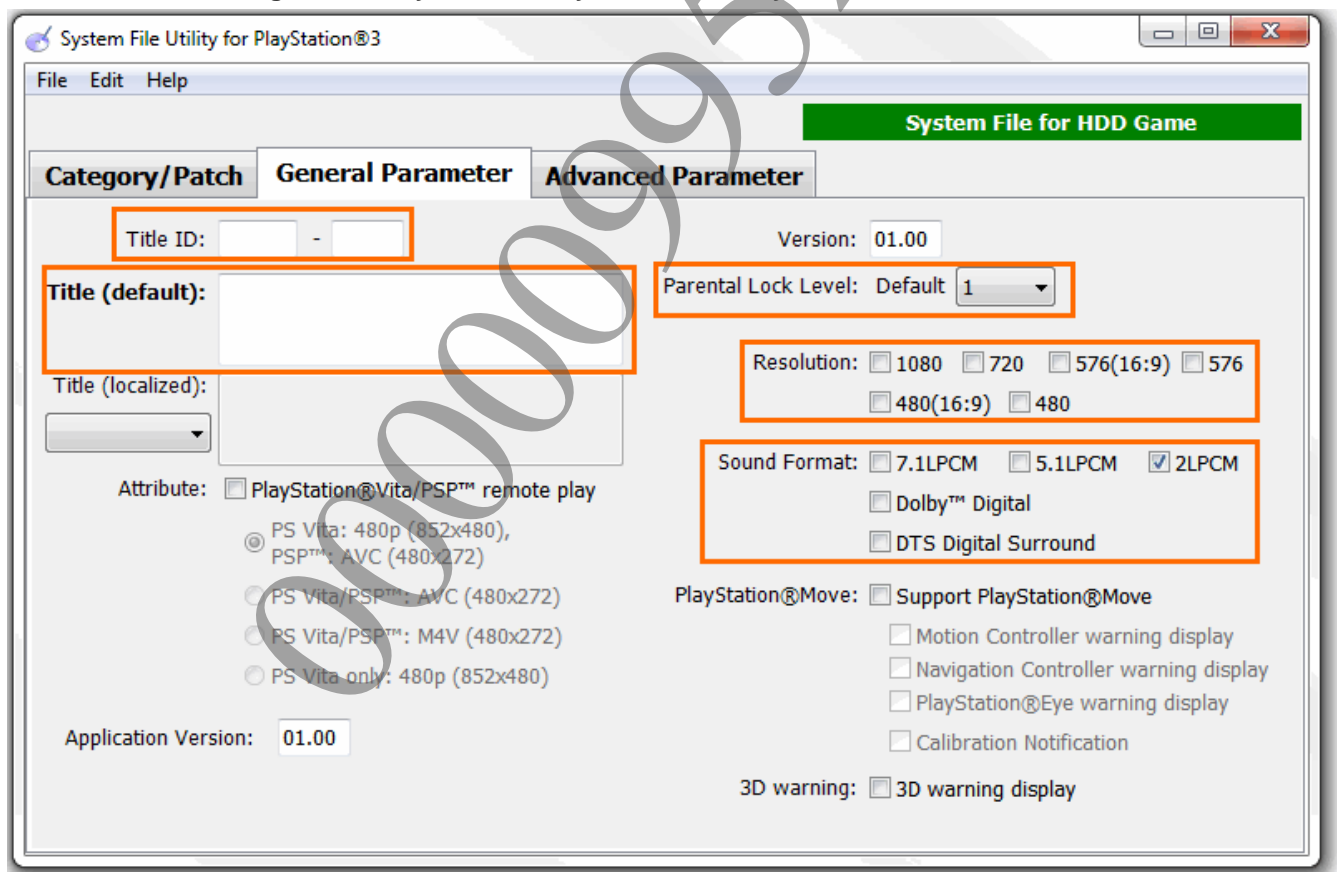
- (1) If you already have a PlayStation®3 .sfo file, select the file by clicking the search button  next to the **System File Utility** text field, and then click **Open**. Otherwise, skip to step 2.

**Figure 4 System File Utility Field**



- (2) Click the **Open** button. Click **Yes** when asked to create a system file; if the project has not been saved, you will be prompted to save it, before a system file is generated in the project directory. The system file launches in the external **System File Utility for PlayStation®3**.
- (3) Open the **General Parameter** tab, shown in Figure 5, and set the data as described below:

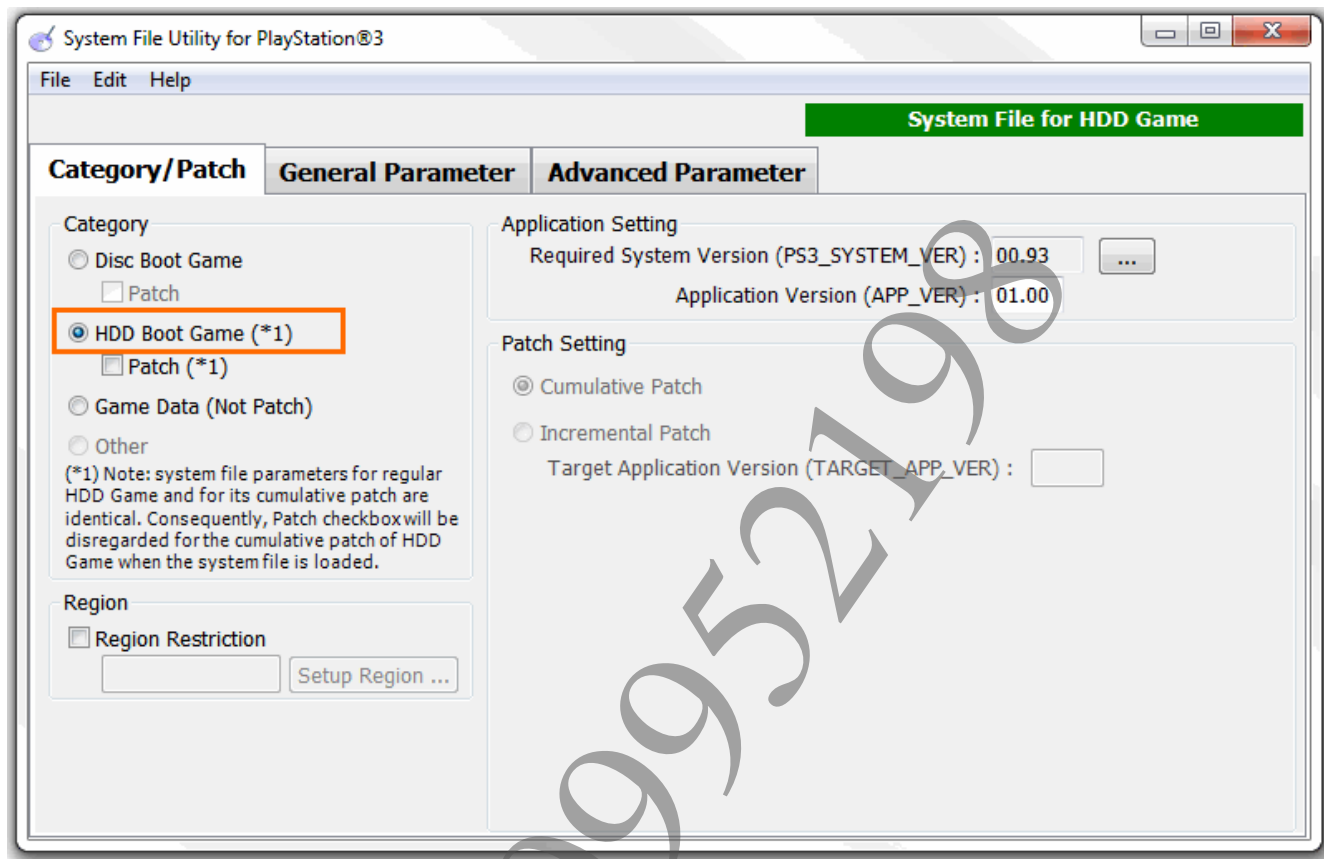
**Figure 5 PlayStation®3 System File Utility - General Parameter Tab**



- **Title ID:** Ensure this is the same as in the STX application.
- **Title (default):** Set the STX **App Title**.
- Ensure the **Parental Lock Level** is the same as for the related game.

- **Resolution:** If a High Definition resolution is chosen, a Standard Definition resolution of choice must also be supported.
  - **Sound Format:** Choose the appropriate sound format.
- (4) Open the **Category/Patch** tab, shown in Figure 6, and ensure the **Category** is set to **HDD Boot Game**.

**Figure 6 PlayStation®3 System File Utility - Category/Patch Tab**



- (5) Set any other data as required.

## Select Images

Three images must be selected for the STX application to work:

- **App Icon Image:** a 320x176px .png file (experienced PlayStation®3 developers will recognize this image as the ICON0.png). Use 32-bit or 24-bit PNG. Do not use the interlaced or indexed color format.
- **Content Information Background Image:** a 1920x1080px .png image file (experienced PlayStation®3 developers will recognize this image as the PIC1.png). Use 24-bit PNG. Do not use the interlaced or indexed color format.
- **In-app Image:** a 1920x1080px .png file.

To select an image, click the search button  next to the image path's (initially empty) text fields.

**Figure 7 STX Application Image Fields**

The images may be the wrong size. To preview an image in its original state, click the **Preview** button next to the image text field. In the final package-building stage, you can choose to let the application resize images to the right size.

## Import Tracks and Albums

To import tracks into the SoundTrack table:

- (1) Click the **Import Tracks...** button. An .mp3 file browser is opened.
- (2) Choose one or multiple .mp3 files to import.

Alternatively, click the **Import Album...** button and import all the .mp3 files from any chosen directory and its subdirectories.

## Edit Track Information

You can now edit the track information by clicking on a cell on the targeted track's row in the SoundTrack table. Editing the track's information does not affect the actual music file; instead, your changes are saved in the new copy of the music file that is created when you build the project.

**Figure 8 Columns in the SoundTrack Table**

P	#	X	Filename	Trackname	Artist	Year	Duration	Publisher	Genres	Album	Album Thumbnail
<input type="checkbox"/>	1	<input type="checkbox"/>	C:\PlayStation\applied_image...	Green	Hula	2011	00:00:07	SCEE	Game	STXESample	Add Thumbnail

Editable columns:

- **P** (Checkbox): [When in Patch mode] Include all tracks that are already in previous builds, and tick this checkbox so they won't be re-imported.
- **#** : A numerical field that determines the track order when the package is installed on the PlayStation®3. To order tracks as you wish them to be presented in the **Music** folder on the PlayStation®3, enter ascending numbers, starting with 1, in this column.

**Note:** The lowest number must be 1; this sets the track in question as the first track in the album.

- **X** (Checkbox): To remove a track, select the checkbox and then click the **Remove Tracks** button.
- **Trackname:** The track's title.
- **Artist:** The artist(s) performing the track. Separate multiple values with ';'.
- **Year:** The year the track was/will be published.
- **Publisher:** The track's publisher.
- **Genres:** The track's genre(s). Separate multiple values with ';'.
- **Album:** The album that the track belongs to. You can define different albums for the tracks.
- **Album Thumbnail:** A button that launches a browser for .jpg files, from which you can choose one image to represent the track's album thumbnail.

The columns **Filename**, which shows the path to the track file, and **Duration**, which shows how long the track is, are not editable.

## Provide the Master Version

The master version can be decided by a set of rules. For details, refer to the *Disc Image Generator for PlayStation®3 User's Manual* that is provided with the PlayStation®3 SDK. Set the number according to "Master version" described in the *Technical Requirements Checklist for PlayStation®3 Software (TRC)* provided with the PlayStation®3 SDK.

## Build the Package

This is the final step in building the package.

To start the package-building process, click the **Build Package** button. When the process finishes, a message shows the result, and the output directory is opened.

If the process fails, the message shows the errors that need to be fixed. The output directory does not contain the files and directories described in [Chapter 3, STX Editor Project Structure](#).

If the process is successful, a success message is displayed and the output directory is shown. The .pkg file found there can now be distributed.

## 5 Tutorial: How to Create an STX Patch Using the STX Editor

This chapter consists of a tutorial that builds upon [Chapter 4, Tutorial: How to Create an STX App Using the STX Editor](#), but explains the process of building a patch package instead of an application package. Follow the tutorial in [Chapter 4](#) in order to learn how to build an STX project from scratch and what the different settings are for. In this tutorial, only the differences between an application package and a patch package are explained.

### Choose a Platform

Select 'PlayStation®3 Patch' from the **Platform** dropdown list.

Figure 9 Platform Dropdown List



### Reuse the Content ID and K-licensee

The Content ID and K-licensee cannot be edited in this mode. They stay the same as the values entered in the PlayStation®3 Application platform setting.

### Select and Edit the System File

The process of selecting and creating a param file for a patch package is identical to that for an application package. Also, note that the parameters for an STX application and an STX patch are identical. So if you already have a PlayStation®3 .sfo file that you do not wish to modify, select it. Otherwise, create a new system file and update the data as required.

### Update Images

You can select the same images as was selected for the application package, or update the application with new icon and in-app background images. The Content Information Background image cannot be updated.

### Select Tracks and Albums to Patch

To Import all tracks used in the application package and previous patches, so they can be referenced in this patch build, and also add new tracks for the patch package as usual. If you wish to delete tracks that were previously added, simply don't import them, or delete them from the project.

### Edit Track Information

Exclude all existing tracks from being exported again, by ticking the **P** checkbox in each track field.


## Select and Edit the Update Information File

The update information file contains release notes for a patch release and is used for displaying these notes on the device. With the update information, users can view the update content of all installed patches in the **Update History** screen that can be accessed from the home screen.

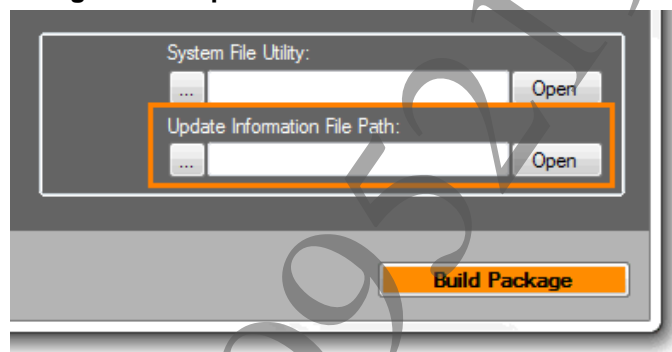
### File Format and Size

- XML format text file
- UTF-8
- No BOM (Byte Order Mark)
- The linefeed code is LF
- Maximum size is 64KiB

### Selecting and Editing the File

- (1) If you already have an update information file, open it for editing by clicking the search button  next to the **Update Information File Path** field, and then clicking the **Open** button. Go to step 3.

**Figure 10 Update Information File Path Field**



If you do not have a change info file, go to step 2.

- (2) Click the **Open** button next to the **Update Information File Path** field. When asked if a new file should be created, select **Yes**. A new file will be created according to a set template. Do not change the structure.  
If you do not wish to include any release notes, close the launched editor without modifying the file, and skip step 3.
- (3) Add the release notes:

**Figure 11 Update Information File**





- (a) In the `<changes app_ver="01.01">` element, make sure the patch version number is correct. This should match the APP\_VER in the patch's `.sfo` file.
- (b) In the `CDATA[...]` section, add any change information. If you wish, you can use the empty list provided in the template.
- (c) Make sure the linefeed is LF, and then save and exit the program.

## Application Package File

Reference the original application `.pkg` file here by clicking the search button  next to the **Application Package File Path** field.

## Application Version

Increase the application version number to a value where the first digit is not 0, for example '01.01'. This value overrides the Application Version parameter in the `.sfo` system file, so there is no need to set it there.

## Build the Package

This is the final step in building the patch package. As in the application-building process, click the **Build Package** button. When the process finishes, a message shows the result, and the output directory is opened. The distributable `.pkg` file can be found in a folder called `PatchPackagePS3`.

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## 6 PlayStation® TRC Requirements

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- The Parental Lock Level must match the level for the related game.
- A waiver request must be created on the PlayStation®3 Developer Network for the following issue:
  - Application uses a save file to determine if the content has previously been installed.

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