



# TSWTools

Toolkit for Trainsim World

Users guide

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Version 0.1 alpha



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# Preface

## ***Introduction***

The last years I created a number of manuals and tools for DTG TrainSimulator. Mike Simpson, the author of the world famous RWTools has been an important source of inspiration to me. I never tried to copy his work, but I found some niches specifically for scenario authors that are not covered by RWTools. Mike announced he will not create such a toolkit for TSW. So I decided I could claim the TSWTools name with a lot of respect and thankfulness to Mike. I cannot but admire his perseverance in reverse engineering undocumented features without any support from DTG.

Here it is, the very first edition of TSWTools. It's not doing much yet, but the start is there.

## ***Acknowledgements***

All anonymous members of the TSW community for sharing their experience and helpfulness.

The creators of [Inno setup](#) for providing a free installer.

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## ***Disclaimer***

This guide is provided "as is". The author is not liable for the consequences of the use of this guide or the LuaCreator application. The contents is the sole responsibility of the author.

## ***Contact***

Comments are welcome at [trainsimulator@hollandhiking.nl](mailto:trainsimulator@hollandhiking.nl).

But please be aware that I cannot provide you help with you scenario creating problems. If you have any questions, please use one of the regular community forums.

## ***Front page image***

One of my own screenshots made at the Sandpatch route. It still has a "wow" effect on me seeing all the details.

Rudolf Heijink

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# 1 Introduction

## 1.1 New in this version

### 1.1.1 Version 0.1

This is the first version. It does some basic stuff:

- You can easily unpack the game .pak files.
- You can view the files at the game location as well as the unpacked files
- There is a simple screenshot manager
- You can view the input mappings (but not edit them)
- You can view and edit the game settings outside the game.





## 2 Installation

### 2.1 Installation procedure

The game comes with an installer. Installing it is straight forward.

It has been tested using Windows 10, but likely will work in other environments as well. TSW Tools is written in C# and requires the latest .NET version to run.

You need to install the Unreal game engine.

In order to read the manual, you need a pdf reader (by reading this it is clear to me you have that).

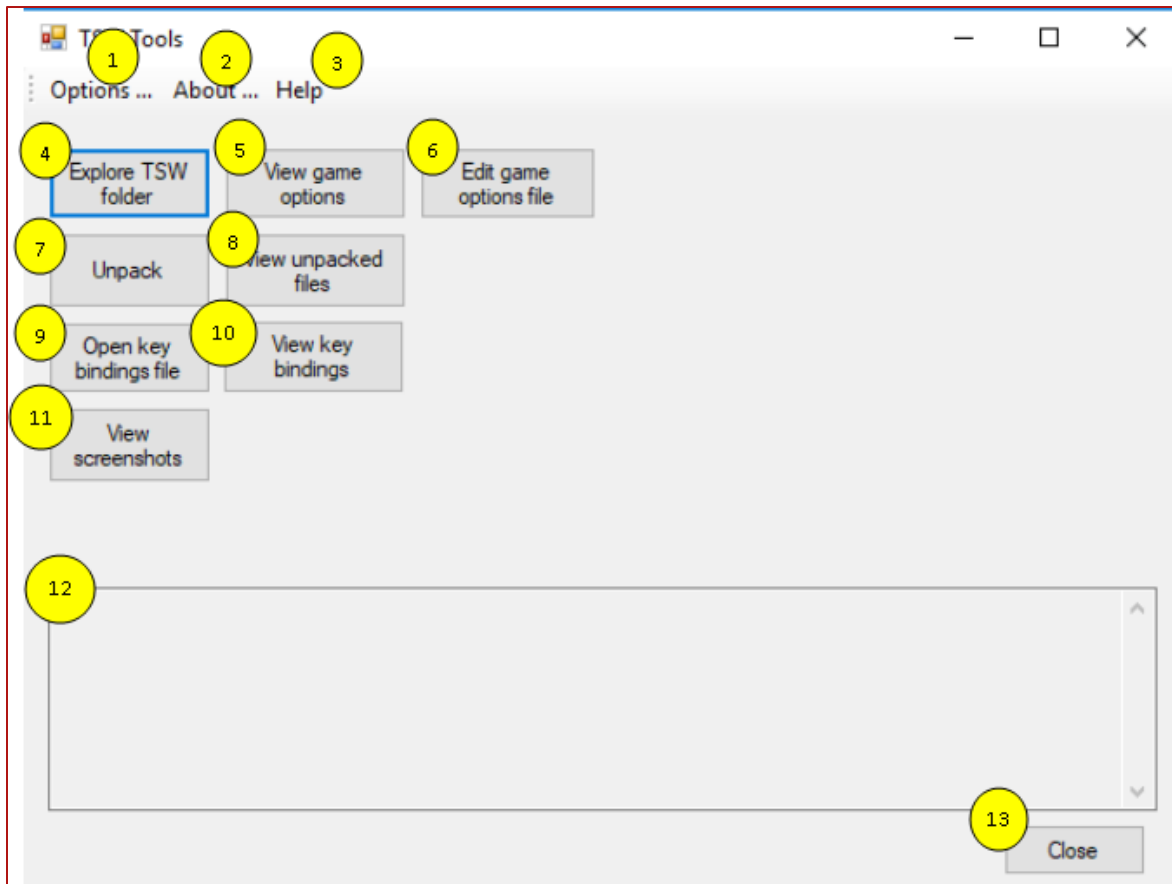
It is recommended to install a good text editor as well. Notepad++ is a good solution.

Check out [www.hollandhiking/trainsimulator](http://www.hollandhiking/trainsimulator) for download links.

## 3 Main screen

### 3.1 Overview

In Figure 1 the TSWTools main screen is depicted. Each function will be introduced in the subsequent sections.



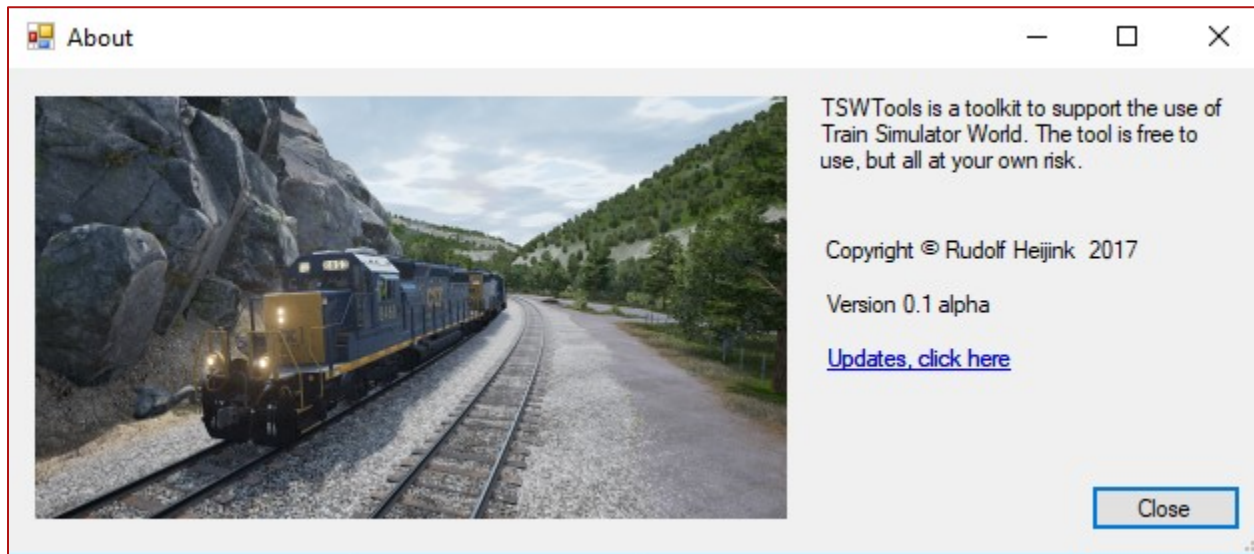
**Figure 1** TSW Tools Main Screen

1. Options, tool options. You need to set the options before you can use TSWTools
2. About dialog
3. Opens the manual in a pdf reader
4. Explore the folder where TSW is installed, using explorer
5. View the game options in a table, you cannot yet edit them here.
6. Edit the game options file with a text editor.
7. Unpack the game .pak files using the unreal unpacker (takes a lot of time!)
8. View the unpacked files using explorer
9. Open the key bindings file in a text editor, editing has no effect!
10. View the key bindings in a neat table format
11. The screenshot manager



12. Message box that contains anything TSWTools likes to tell you
13. Close button, terminates TSWTools

### 3.2 About dialog

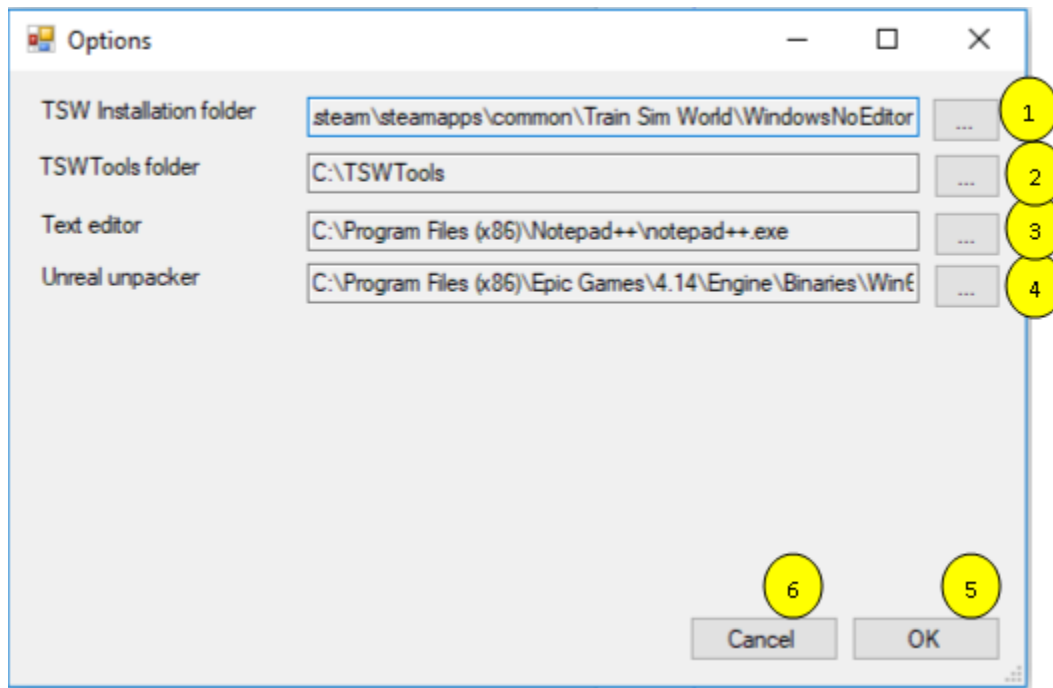


**Figure 2 About Dialog**

The About Dialog informs you about the actual version of TSWTools. Unfortunately the update link is not yet working.

### 3.3 Options Dialog

Before you can use TSWTools you need to set the options. Normally you only need to do this once. Options are stored in the registry.



**Figure 3** Options dialog

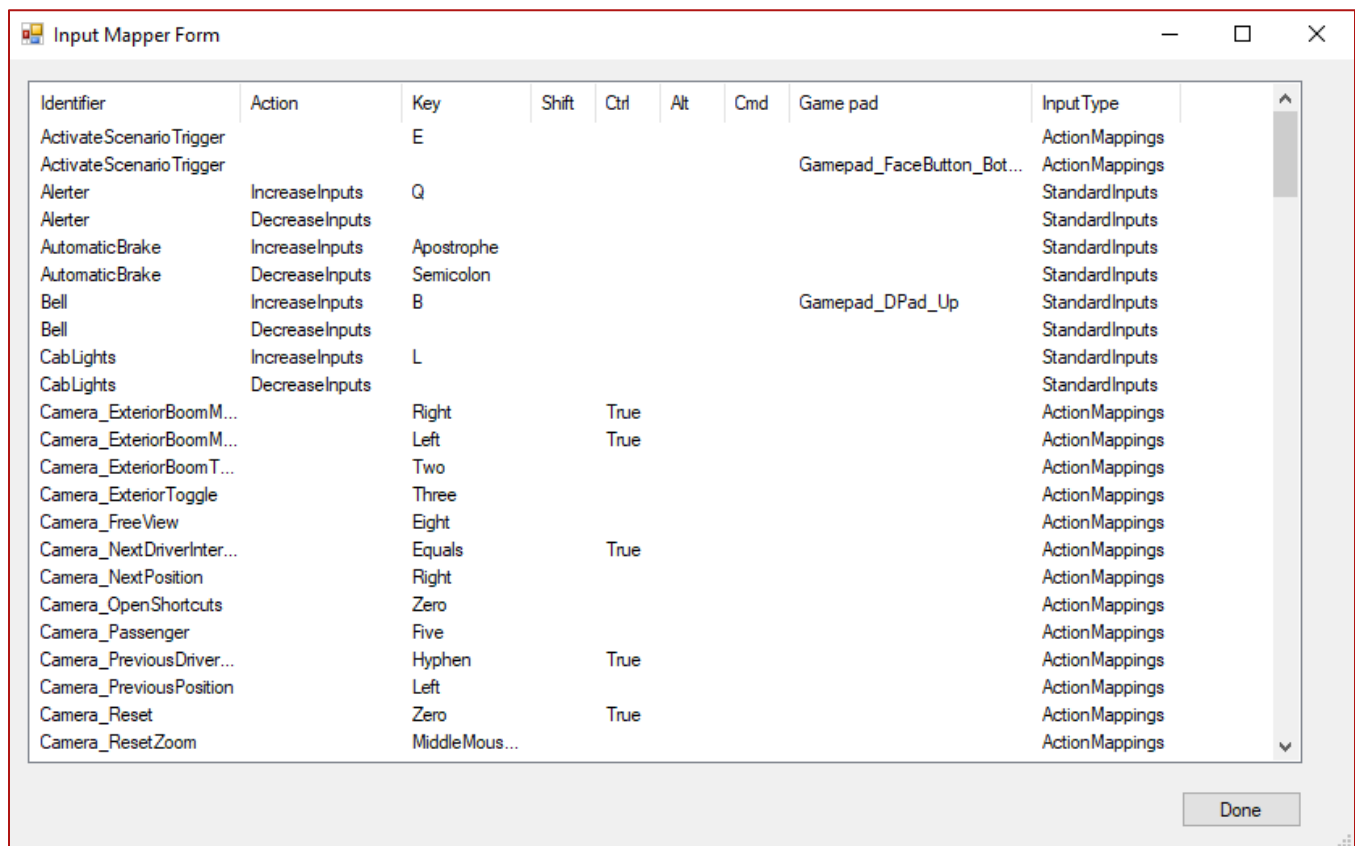
1. **TSW Installation folder.** Click at the three dots to open an Open File Dialog. Make sure your path ends with “WindowsNoEditor” otherwise it will not have the desired effect and some functions of TSWTools will not work.
2. **TSWTools folder** is the folder where TSWTools will install its datafiles, e.g. the unpacked game. So this folder requires a lot of space.
3. **Text editor.** Notepad is used as a default, but I recommend to choose a better option.
4. **Unreal unpacker.** Is the unpacker in the Unreal Engine. If you have the engine installed by using defaults, you probably do not need to do anything.
5. **OK button** saves your changed settings
6. **Cancel** will cancel all updates in settings

### 3.4 Unpack

This function will unpack the game files. It cycles through all .pak files it can find and uses the unreal unpacker to do the job. It may take a lot of time, during which TSWTools appear to hang. Please have a lot of patience.

In future I will implement a better progress indicator or make it run as a background task. But this is a 0.1 alpha version, remember?

### 3.5 View key bindings



Identifier	Action	Key	Shift	Ctrl	Alt	Cmd	Game pad	Input Type
ActivateScenarioTrigger		E						ActionMappings
ActivateScenarioTrigger							Gamepad_FaceButton_Bot...	ActionMappings
Alerter	IncreaseInputs	Q						StandardInputs
Alerter	DecreaseInputs							StandardInputs
AutomaticBrake	IncreaseInputs	Apostrophe						StandardInputs
AutomaticBrake	DecreaseInputs	Semicolon						StandardInputs
Bell	IncreaseInputs	B					Gamepad_DPad_Up	StandardInputs
Bell	DecreaseInputs							StandardInputs
CabLights	IncreaseInputs	L						StandardInputs
CabLights	DecreaseInputs							StandardInputs
Camera_ExteriorBoomM...		Right		True				ActionMappings
Camera_ExteriorBoomM...		Left		True				ActionMappings
Camera_ExteriorBoomT...		Two						ActionMappings
Camera_ExteriorToggle		Three						ActionMappings
Camera_FreeView		Eight						ActionMappings
Camera_NextDriverInter...		Equals		True				ActionMappings
Camera_NextPosition		Right						ActionMappings
Camera_OpenShortcuts		Zero						ActionMappings
Camera_Passenger		Five						ActionMappings
Camera_PreviousDriver...		Hyphen		True				ActionMappings
Camera_PreviousPosition		Left						ActionMappings
Camera_Reset		Zero		True				ActionMappings
Camera_ResetZoom		MiddleMous...						ActionMappings

Done

**Figure 4** Key bindings or input mappings

This is not a tool doing much, but it gives you a nice overview of most input mappings. Anyway, it helped me to discover some undocumented features. The mappings are sorted alphabetically. I will see if I can add other sorting options and maybe a search function.

I

### 3.6 View screenshots

TSW has essentially two screenshot

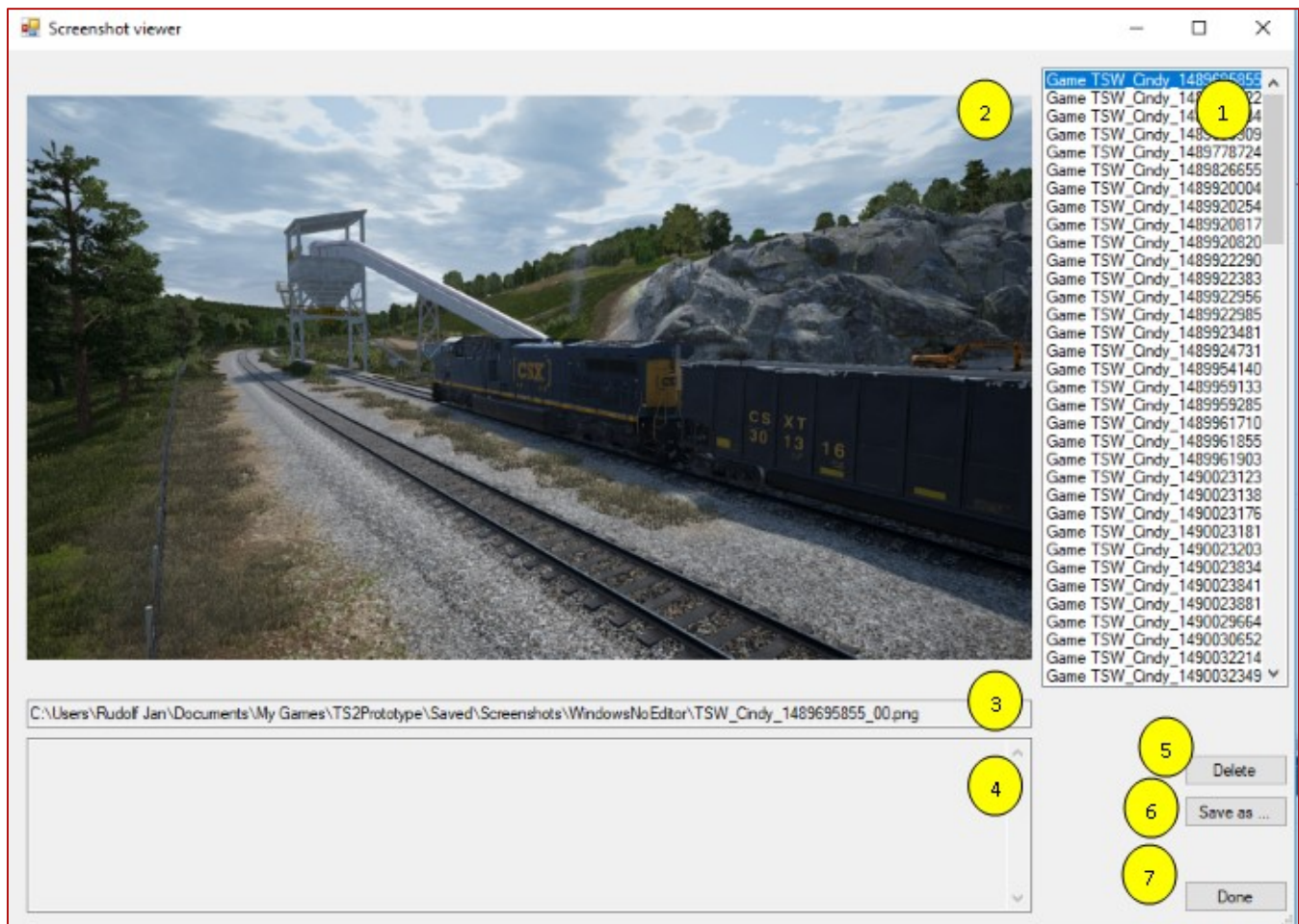
methods:

You can use the F12 key to get a screenshot including the HUD. Essentially this is the steam screenshot facility.

You can use Ctrl+F12 to get a TSW screenshot, without any HUD stuff.

Unfortunately the two types of screenshots are stored at different locations and have different size and file format.

Therefore TSWTools includes a screenshot viewer that brings them all together. You also can delete screenshots here or make a local copy if you like.



**Figure 5** Screenshot viewer

1. The list with all screenshots found. Use the mouse or cursor keys to cycle through the list
2. Shows the actually selected screenshot
3. Shows the path to the selected screenshot
4. Space for messages from TSWTools
5. Deletes the selected screenshot. Warning: it does NOT ask for confirmation!

6. Opens a file dialog and copies the selected screenshot to the desired location, while updating the file name.
7. Closes this dialog





## A. Download locations

All my guides and tools are available here:

Site name	URL's
Holland Hiking (download page for all tools and guides)	<a href="http://www.hollandhiking.nl/trainsimulator/">http://www.hollandhiking.nl/trainsimulator/</a>

At this site you also will find links to all other tools and manuals mentioned in my guides.



## B. Known issues

There are some issues I am aware of, but not yet solved. These are listed here.

Issue nr	Description	Priority
1	Long waiting time for unpack	High
2	Screenshot saver does not remember last save location	Low

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