

Train Simulator Manager

User Manual

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1. General

1.1 Requirements

To use the Train Simulator Manager, hereafter referred to as TS Manager, the following prerequisites must be met:

- Microsoft Windows operating system
 - tested on Windows 7 und Windows 10
 - it should work fine on Windows XP and Windows 8
- a legal installation of the Train Simulator

1.2 Usage

With the help of the TS Manager you can manage the content of the Train Simulator. The following advantages arise:

- Starting the Train Simulator is significantly shortened
- Program crashes caused by too much concurrently installed content are avoided
- the routes and scenarios lists are kept short and clear
- while creating your own train sets, the loading time of the rolling stock is shortened considerably or crashes are prevented and the subsequent list for the rolling stock is short and clear
- all providers and products lists in the editor are limited to the desired and required material, which makes the selection considerably easier
- the integrated database functions allow all content to be conveniently managed and linked to personal data/notes, which offers many additional options for managing the TS add-ons

Not all application possibilities of the TS Manager functions are explained in this manual. See the tool as a kind of "framework" that allows you to combine and customize the individual functions according to your desired tasks.

1.3 Important notes

There are a few things you should be aware of when using the TS Manager:

- The TS Manager requires full read and write access. Therefore, it is best to start it as administrator if user account control is enabled.
- Deactivation of successfully completed scenarios will reset them the next time you start the Train Simulator.
- The TS Manager creates a "screenshot" of the TS content during the startup process in order to manage it effectively. Changes to the Assets or Content folder while the TS Manager is active may result in errors.

- Never use multiple instances of TS Manager at the same time.
- If you want to make changes to installed content, all addons involved must be activated beforehand. Alternatively, the "Maintenance Mode" can be used.

1.4 Installation

Unpack the archive with the TS Manager in a directory of your choice. It is strongly recommended to leave the tool with all files in the existing separate subfolder!

Then create a shortcut from the TS Manager on the desktop and drag the Railworks.exe (not a shortcut!) to this TS Manager-shortcut. The tool launches and automatically detects the Train Simulator directory.

Alternatively, you can drag the Railworks.exe directly to the TS-Manager.exe.

To create a shortcut from the TS Manager, open the directory of the TS Manager in a file explorer, drag the TS-Manager.exe onto a free area on the desktop with the right mouse button held down and select "create shortcut" from the context menu.

In the future, start the TS Manager via the created desktop shortcut or directly by double-clicking the TS-Manager.exe.

After starting the tool, you can adjust the TS Manager to your needs in the **"Settings"** menu. Probably the most important adaptation is the choice of Asset Manager mode. With the "simple mode" only the individual providers are handled together with all associated products, but with the "extended mode" each product can be managed individually. For more details read the chapter [2.2 Settings](#).

Please note that after the first change from "simple mode" to "extended mode" the TS Manager must be restarted!

1.5 Functionality

The operation of the TS Manager is quite simple. Disabling TS content will move its subfolders to an alternate folder that Train Simulator will not use. The deactivated assets and routes are therefore not visible to the TS as if they were not installed. The advantage over an uninstall, however, is that this content can be quickly and conveniently re-enabled.

No files are changed or deleted. Only when deleting the Blueprint Cache Files the specified PAK files are removed from the respective product folder, but these are temporary cache files which do not contain any important addon data in the true sense and will be recreated by the TS on the next access.

1.6 Start options

The TS Manager can be started in different ways. The classic method of starting via the desktop shortcut or the TS-Manager.exe is probably the most frequently used solution to work quickly with the tool.

Other options include the Drag & Drop function and batch script mode. Both offer advantages over the classic start, in that the user can assign specific tasks to the tool at startup.

Chapter [1.4 Installation](#) has already described how to create a desktop shortcut to start the TS Manager faster. This shortcut can be used as an alternative to the TS-Manager.exe to allow the TS Manager to drag-and-drop a file at startup, giving the tool specific instructions. More information in the next chapter [1.6.1 Drag and Drop functions](#).

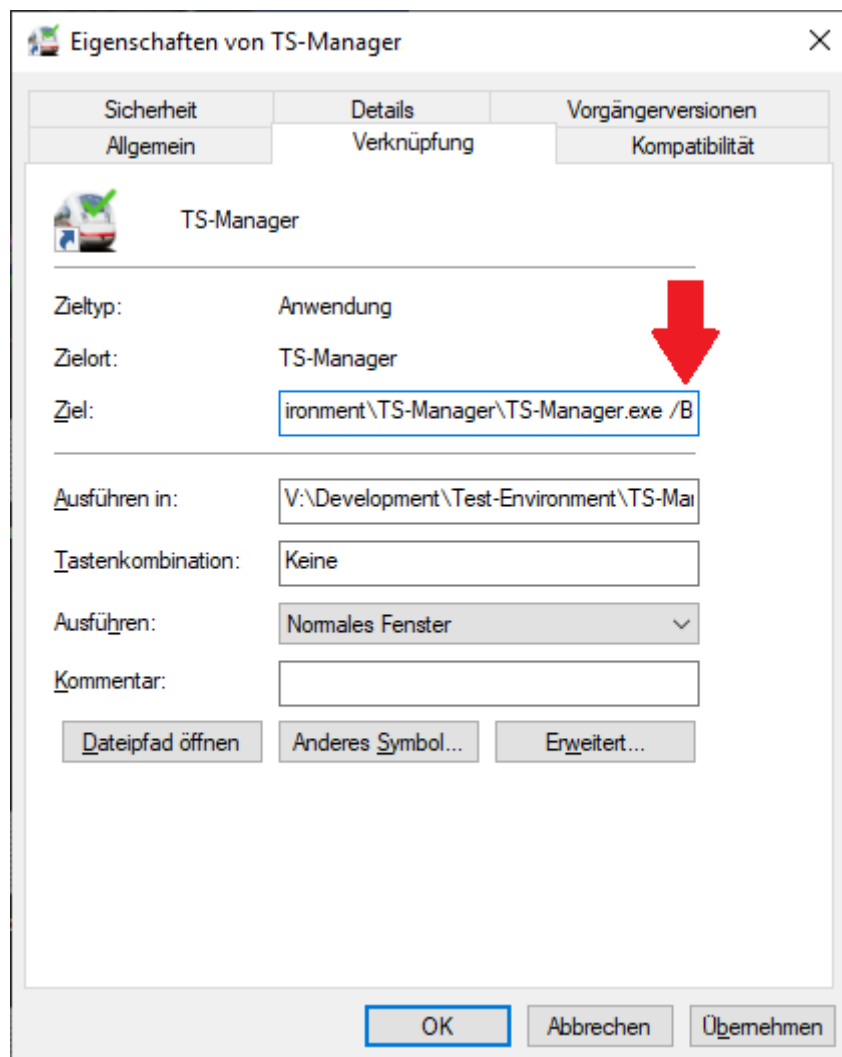


Figure 1

You can modify the desktop shortcut and, if desired, add additional shortcuts that perform additional functions directly at startup.

Right-click the desktop shortcut and select the context menu item "Properties" to modify a

shortcut. You now have the option to specify a parameter behind the command line. Please note the space in front of the parameter. In **Figure 1**, this is illustrated by the example of option **/B**. Instead of the parameter **/B**, you can also use another valid parameter or combine several parameters, for example: "**/B /C**". Then enter a new name for the link. In this case, "TS Manager - Delete Blueprint Cache" would be appropriate.

valid parameters are:

- /B** - deletes Blueprint Cache Files of all activated products
- /C** - loads a drag-and-drop specified preset file cumulatively instead of absolutely
- /M** - activates the Maintenance Mode
- /S** - after executing the desired action, the TS Manager is quit

Note that the option **/S** is already included in the options **/B** and **/M** and does not necessarily have to be specified additionally.

The option **/C** is only used for a file specified by drag-and-drop, but not for other modules later in the program session.

Starting with the option **/S** deactivates a possibly activated Maintenance Mode. Use this option to ensure that the Maintenance Mode is not active, if desired, before starting the Train Simulator or using a batch script.

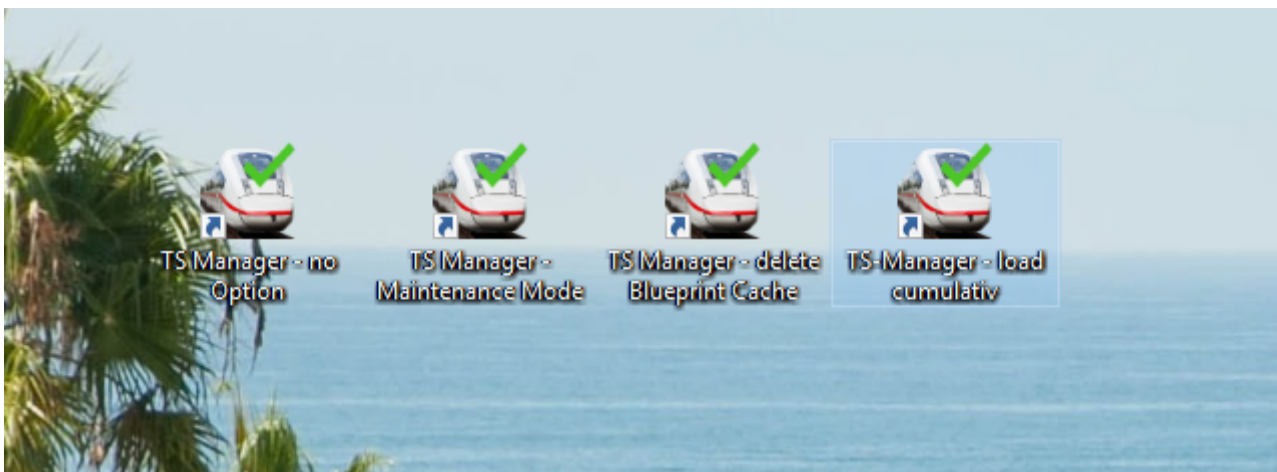


Figure 2: Example of multiple custom desktop shortcuts

1.6.1 Drag and Drop functions

The drag and drop function allows you to assign a task to TS Manager at startup.

The following files can be used:

- ✓ Railworks.exe - sets the Train Simulator folder
- ✓ RouteProperties.xml - selects the route and creates lists for needed assets
- ✓ ScenarioProperties.xml - selects the scenario and the corresponding route
- creates lists for the required assets for route and scenario
- ✓ Preset File - activates the content from the preset

Keep in mind that you can also use parameter-modified shortcuts for the drag-and-drop feature to take advantage of additional features.

If, for example, you drag a preset file to a shortcut modified with the **/BC** parameter, the preset is loaded cumulatively, the blueprint cache is deleted, and then the TS manager is automatically terminated.

1.6.2 Use in batch script

Another option is to start from the command prompt or from a batch script, which allows the TS Manager to be launched multiple times from a single script and automatically perform various tasks. This is useful, for example, if you want to start the Train Simulator with different content compilations and want to realize this by a script with a single double-click. For this purpose, the desired presets must first be created, which can then be activated by the script absolutely or cumulatively.

As parameters or options the already explained parameters and files from the chapters [1.6 Start options](#) and [1.6.1 Drag and Drop functions](#) can be used.

The TS Manager writes the number of errors that occurred during execution to the environment variable **ERRORLEVEL**, which can then be evaluated in the script, in order to alternatively adapt the sequence of the script according to its own needs. For example, after the successful, flawless activation of one or more presets, the TS can be started automatically.

Example script 1:

```
@ECHO OFF
REM
REM NOTE: You have to edit the Command Lines to your purpose!
REM Remove or add Jobs as needed.
REM
SET /A COUNTER=0
REM
REM -----
```

```

REM JOB 1
TS-Manager.exe "(TS-PRESET).Metronom Network.LST" /B
SET /A Counter=%COUNTER%+%ERRORLEVEL%
REM -----
REM JOB 2
TS-Manager.exe "(SCENARIOS-PRESET).Route Hamburg-Hannover - 3DZUG.LST" /C /S
SET /A Counter=%COUNTER%+%ERRORLEVEL%
REM -----
REM JOB 3
TS-Manager.exe "(SCENARIOS-PRESET).Route Hamburg-Bremen - Selection1.LST" /C/S
SET /A Counter=%COUNTER%+%ERRORLEVEL%
REM -----
REM JOB 4
TS-Manager.exe "(SCENARIOS-PRESET).Route Hamburg-Bremen - Selection2.LST" /CS
SET /A Counter=%COUNTER%+%ERRORLEVEL%
REM -----
REM
IF %COUNTER% EQU 0 GOTO 1
ECHO - While Session %COUNTER% Error(s) occured! -
REM     HERE YOU CAN PUT A COMMAND OR CALL A BATCH SCRIPT WHICH WILL BE
REM     EXECUTED AFTER AT LEAST ONE ERROR OCCURED
GOTO 2
:1
ECHO - TS MANAGER successful quited without any Error -
REM     HERE YOU CAN PUT A COMMAND OR CALL A BATCH
REM     CRIPT WHICH WILL BE EXECUTED AFTER A SUCCESSFUL RUN,
REM     E.G.: C:\-TS-PATH-\RailWorks.exe
:2
PAUSE > NUL

```

Example script 2:

```

@ECHO OFF
REM
REM NOTE: Feel free to modify this Script to your purpose.
REM
SET /A COUNTER=0
REM
REM -----
REM JOB 1
TS-Manager.exe %1 %2 %3 %4 %5 %6 %7 %8 %9
SET /A Counter=%COUNTER%+%ERRORLEVEL%
REM -----
REM
IF %COUNTER% EQU 0 GOTO 1
ECHO - While Session %COUNTER% Error(s) occured! -
REM     HERE YOU CAN PUT A COMMAND OR CALL A BATCH SCRIPT WHICH WILL BE
REM     EXECUTED AFTER AT LEAST ONE ERROR OCCURED
GOTO 2
:1
ECHO - TS MANAGER successful quited without any Error -
REM     HERE YOU CAN PUT A COMMAND OR CALL A BATCH

```



```
REM      CRIPT WHICH WILL BE EXECUTED AFTER A SUCCESSFUL RUN,  
REM      E.G.: C:\-TS-PATH-\RailWorks.exe  
:2  
PAUSE > NUL
```

The drag and drop function can be used together with a batch script. To do this, the variable **%1** must be specified as a parameter in the batch script in the command line for executing the TS Manager.

Example: **TS-Manager.exe %1 /C /S**

Further examples with which the TS Manager can be started from a script or directly from a command prompt:

Examples: **TS-Manager /S** (disables the Maintenance Mode if enabled)
or
TS-Manager „(TS-PRESET).Metronom Network.LST" /C /B

1.7 Settings File

In the file **TS-Manager.ini** all important settings of the TS Manager are stored permanently in order to use them without additional user interaction for each program session.

The settings file is divided into individual entries, each entry storing a function setting. An explanation of the syntax is explained in the **TS-Manager.ini** by comment lines. Inexperienced users should have the settings made by TS Manager, as wrong settings can lead to program startup problems. A detailed description of the individual entries and their setting options can be found in chapter [2.2 Settings](#).

If incorrect settings prevent the program from starting or you want to restore the default settings, simply delete the file **TS-Manager.ini** from the TS Manager directory. At the next program start, a new settings file will be created with the default values.

Advanced users can edit the settings file manually and add additional comment lines if necessary, which must be initiated by a "#".

Additional comment lines, for example, allow you to quickly switch between different folders for deactivated content by simply prepending the "#" comment character at the beginning of each line or not. This makes sense for a large number of addons to limit the amount of directories to be managed. This has the same effect as uninstalling the addons, but with this method the content remains on the hard disk and is quickly available again when needed.

If one chooses such a methodology, it must be ensured that one line is active for each entry section and all other lines in the respective section are commented out with a "#" at the beginning of the line.

```

6 # 2nd Entry: Subfolder for deactivated Assets
7 # located in the TS Program Folder besides the Assets-Folder
8 # Default: Assets_DEACTIVATED
9 #Assets_DEACTIVATED
10 #Assets_DEACTIVATED_Payware
11 Assets_DEACTIVATED_Freeware
12 #-----
13 # 3rd Entry: Subfolder for deactivated Routes
14 # located in the TS Program Folder besides the Content-Folder
15 # Default: Content_DEACTIVATED
16 #Content_DEACTIVATED
17 Content_DEACTIVATED-German
18 #Content_DEACTIVATED-American
19 #Content_DEACTIVATED-UK
20 #-----
21 # 4th Entry: Subfolder for deactivated Scenarios

```

Bild 3: - Example of using additional comment lines

Important: Use only an ASCII text editor without text formatting to edit the INI file, otherwise the settings file will become unreadable for the TS Manager.

1.8 Error messages

This chapter is intended to provide information about the errors and possible solutions that can occur when using the TS Manager.

Initialization errors

„Could not open or read the Settings File TS-Manager.ini.“

The file in which the settings of the TS Manager are saved could not be read. Some entries in the file may not be syntaxconform. If the error can not be found, you can delete the settings file TS-Manager.ini from the TS Manager directory to create a new INI file at the next program start.

„Could not create a new Settings File TS-Manager.ini.“

The creation of a new settings file could not be completed successfully. Make sure the TS Manager has write permission in the TS Manager directory.

„Error while Reading Settings from TS-Manager.ini - Train Simulator Folder is not valid.“

„Train Simulator Folder is not valid or Train Simulator Installation not found.“

The specified directory path for the Train Simulator is invalid or does not contain a TS installation. The entry must match the path of an actual TS installation.

The easiest way to set the TS directory is to drag the Railworks.exe from the installation directory to the TS Manager.exe or one of its shortcuts.

„Folder for deactivated Assets in TS-Manager.ini is not valid.“

„Folder for deactivated Routes in TS-Manager.ini is not valid.“

„Folder for deactivated Scenarios in TS-Manager.ini is not valid.“

A directory entry for disabled content is invalid. Make sure the directory name is spelled correctly and contains the name of a single directory using only allowed characters.

„WRITE ACCESS ERROR“

The TS Manager requires full read and write access. If necessary, start it as administrator with activated user account control.

Folder integrity errors

„There exist two Folders of some Content in your Train Simulator Directory Structure.“

This error usually occurs when deactivated content was modified, for example, by an update and now two subfolders exist, one in the activated and another in the deactivated directory. However, there must be only one folder in the entire tree so the TS Manager can classify the content in question as enabled or disabled.

Now you have to merge both folders manually. If necessary decide which files you want to keep.

Further information can be found in the file ! **_TSM-Protocol.txt**, which has been saved in the TS Manager directory.

„There exist two Folders of X Scenarios.“

This error can occur when working with the Scenarios Manager as well as when loading a Scenario Presets and indicates that there exists two subfolders for one or more scenarios, one in the activated and another in the deactivated directory. However, there may be only one folder in the entire tree for TS Manager to classify the scenario as enabled or disabled. Now you have to merge both folders manually. If necessary decide which files you want to keep.

Further information can be found in the file ! **_TSM-Protocol.txt**, which has been saved in the TS Manager directory.

„Folder Integrity Error: Assets Folder did contain X empty Provider Folders“

If this error occurs repeatedly, make sure the folder is not set to read-only. Alternatively, you can manually delete the folder in question.

Database errors

„ERROR: Database not found!“

The database file **TSM-DATABASE.MAIN.DB** was not found. This error also occurs if an error message about a corrupted database was previously displayed. Use one of the options to restore a backup or create a new database. Alternatively, you can manually rename an existing database file to use it.

„ERROR: No Backup of the Database found!“

An attempt was made to restore a backup of the database that does not exist. Have a new database created or change the name of another existing database to **TSM-DATABASE.MAIN.DB** to use it.

„ERROR: Database is corrupt! (Line Y)“ or „ERROR: Database Backup X is corrupt! (Line Y)“

A syntax error was encountered while accessing a database. Try to repair the database in question. The specification of the line number provides information about the location of the erroneous entry.

other errors

„An Error occured while Loading the Preset File.“

A preset could not be loaded successfully. This error usually occurs when the file in question is damaged or has been improperly edited by the user. Try to repair the file manually.

„An Error occured while Disabling the Maintenance Mode.“

Disabling Maintenance Mode did not properly restore the previously created image of the enabled and disabled content. The cause of this error may be due to a modification of the Maintenance Preset file. Check if your desired content is activated / deactivated.

„Error X at Line Y – Module: Z“

A general error has occurred. Use one of the given options to control the further program flow. However, if possible, try to eliminate the cause of the error as you go along, for example, by releasing additional memory for the application in the event of an "out of memory" error. The following options are offered:

- **Retry:** the program will continue at the point where the error occurred
- **Ignore:** the program will continue with the next instruction
ATTENTION: this option may lead to further program errors
- **Abort:** the program will be terminated immediately

Important information: If the TS Manager was started with the **/S** option, error messages may not be displayed, but the number of errors is always logged in the **ERRORLEVEL** environment variable.

1.9 Using the TS Manager database

All providers and their products, as well as all routes with the associated scenarios are stored in the database of the TS Manager. Each time the TS Manager is started, the database is synchronized with the current TS content and new content is automatically added. The use of individual functions of the database by the Database Manager is explained in chapter [2.8 Database Manager](#).

The database is an essential part of performing important functions, such as filtering lists or linking additional information to individual content.

If the database is damaged, TS Manager will detect it and declare it corrupted by renaming it. The new name contains the addition "corrupt" and a timestamp to which an error was detected. Then you have the option of automatic or program-controlled manual repair. Before doing so you must decide whether you want to temporarily create a new database or use a backup of the database because the TS Manager can not start without a properly functioning database. However, after a successful repair, you can change the database. More information can be found in chapter [2.8 Database Manager](#).

Multiple databases can be used for different purposes, with the database currently used by the TS Manager being stored in the **TSM-DATABASE.MAIN.DB** file. Using multiple databases is useful if you want to manage specific content separately. For especially large amount of installed TS addons, this makes sense, because it achieves performance gains.

With an increasing number of installed TS addons and additional information, the size of the database continues to grow. Working with the database requires more and more system resources. Although integrity testing has been successfully completed up to a size of over 1 terabyte, it does not really make sense to run the database without limits.

A database is subject to the following restrictions:

- ✓ maximum 1000 providers
- ✓ maximum 500 products for each provider
- ✓ maximum 1000 routes
- ✓ maximum 500 scenarios for each route

These limits should not be reached too quickly in the reality and therefore do not necessarily represent a disadvantage. However, if these limits should be blown up, the TS Manager provides functions to split the database into multiple databases afterwards.

If a limit of the database is exceeded, certain functions for affected content are not available.

1.9.1 Manual editing of the database

Sometimes it can be beneficial to manually edit individual data entries in the database, for example to rename a previously incorrectly written provider.

To edit the database file, only use an ASCII text editor without text formatting, otherwise the database structure will be destroyed.

The syntax must be adhered to, so that the database can be read in without errors. The various entries must be written in a predetermined order in the database and are each marked with an "Opening Tag" and "ClosingTag".

```

1 <\\TS-MANAGER DATABASE\\>
2 <\\ROUTES\\>
3 <?TAGS\01 Main Line\02 Branch Line\03 Electrical\04 Diesel\05 Steam\06 multi
4 <?TAGS2\default\Payware\Freeware\driven\not driven\successful driven\not atta
5 #R1
6 <KEY\00000039-0000-0000-0000-000000002014\>      Route Entry #R1
7 <NAME\0\Munich to Garmisch\>
8 <TAGS\>
9 <NOTE\\>
10 #R1-1
11 <SKEY\52e5bd76-3267-4f04-80f0-3954cb384592\>
12 <SNAME\Ice on a summers's day\>                Scenario Entry #R1-1
13 <STAGS\>
14 <SNOTE\\>
15 <\\ASSETS\\>
16 <?TAGS\Route\Electric Multiple Unit\Diesel Multiple Unit\Electric Loco\Diesel
17 #P1
18 <PROVIDER\DTG\>                                Provider Entry #P1
19 #P1-1
20 <PRODUCT\Academy\>                             Product Entry #1-1
21 <TAGS\>
22 <NOTE\\>
23 #P2
24 <PROVIDER\CONTRACT\>

```

Figure 4: Structure and syntax of a TS Manager database

Database structure and syntax

1st Line	Database Tag	identifies the TSM database
2nd Line	Routes Tag	indicates area for routes and their scenarios
3rd Line	Routes Tag list	list of all Routes Tags
4th Line	Scenarios Tag list	list of all Scenarios Tags

Subsequently, the data records for all **routes** follow, with the entries for all **scenarios** of a route being placed directly behind the associated route entry.

Directly after all routes and scenario entries follow:

Assets Tag	indicates area for providers and their products
Assets Tag list	list of all Assets Tags

Then all **providers** are listed, with the individual **product** entries placed directly behind their providers.

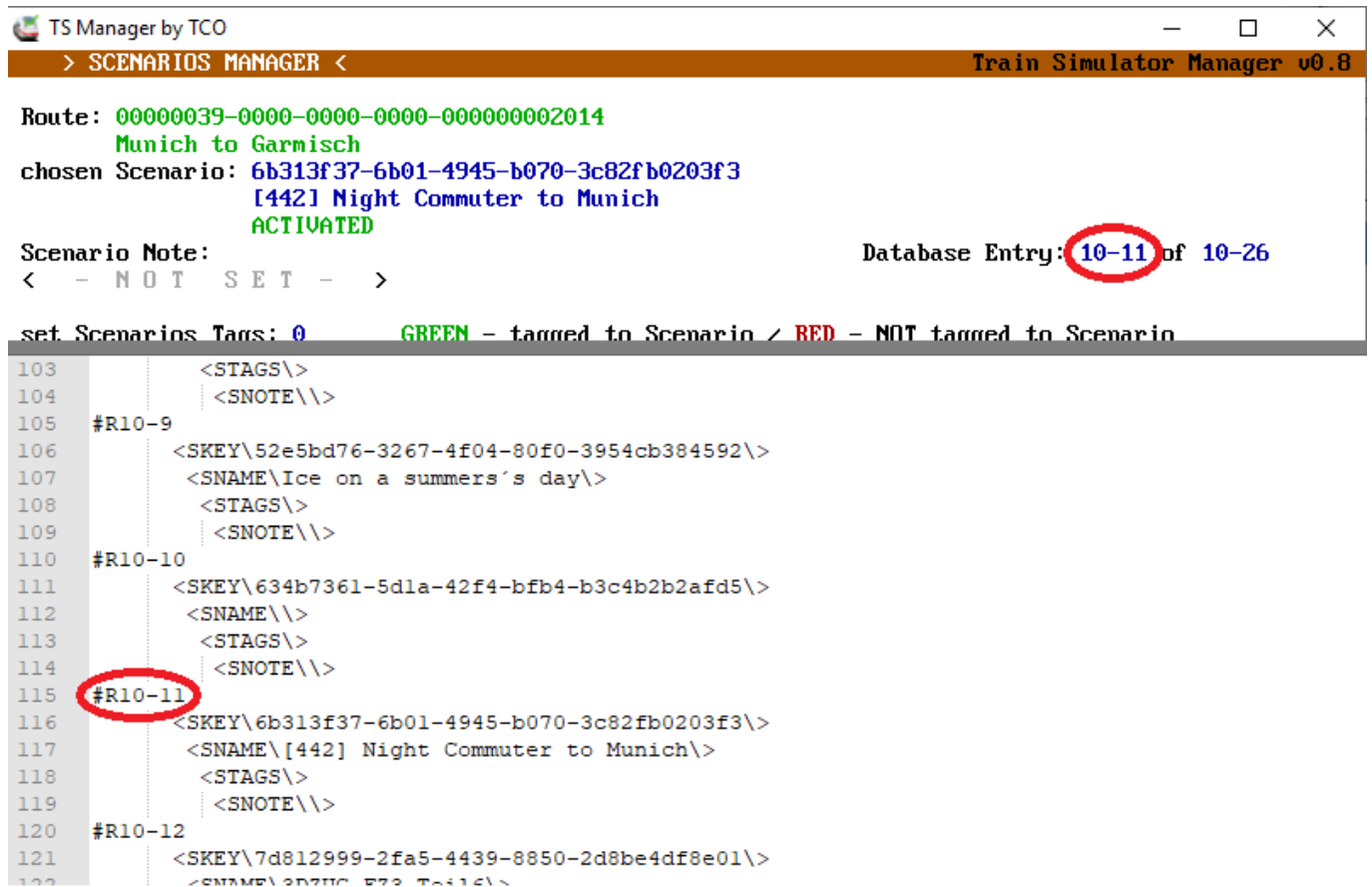


Figure 5: Example of using the record numbers

All database entries start with a comment containing the record number. The same number is used in each TS Manager module to identify a entry and makes it easier to search for a specific data entry when manually editing the database.

If data entries are added or deleted manually, this must always be done with a complete data record. If you forget to delete a line or do not add a complete record, you will receive an error message when loading the database.

2 Program features

2.1 General program functions

The individual functions of the TS Manager are modular, but work together and complement each other to ensure efficient program execution. Each module is optional, allowing the user to freely decide how they want to manage their TS content. For example, it is possible to simply manage the scenarios and/or routes. Another one might want to manage his assets and routes, but not the scenarios.

In the next few chapters some basic functions will be explained to familiarize you with the operation of the TS Manager and thus to be able to use the tool optimally.

2.1.1 Menu structure

The TS Manager is completely controlled by the keyboard, so a mouse is not needed. All functions are easily accessible via individual menus, the arrangement of which meet the principle of modular program design.

The tool has two main menus, the **Asset Manager** and the **Routes Manager**. After starting the TS Managers one of these two menus is shown. If an XML file was passed as a parameter at startup, then you are immediately in the menu of the Asset Manager, otherwise the Routes Manager is called. This has a logical background, as it makes sense to re-sort the routes or scenarios first, before the assets can then be updated with the Assets Manager according to the selected routes and/or scenarios. However, it's also possible to sort your assets immediately, you alone decide how your content is managed. The **Enter key** allows you to quickly switch between the two main modules, with important functions accessible in both the Assets Manager and the Routes Manager.

In order to facilitate the menu navigation for the user, each module or the associated menu has its own color theme, which makes it easy not to lose track of the rather nested menu structure.

When programming the tool, it was very important to provide the user with as much helpful information as possible, so that the user always has an overview of the status of his TS content. Each menu basically consists of two elements, in the upper part important information regarding the current module is displayed, followed by the individual choices of all module functions, indicated by a colored keyboard code in brackets.

Keyboard codes:

- (1) - press „1“ to select this option
- (F5) - press „F5“ to select this option
- (ENTER) - press „EINGABETASTE“ to select this option
- (B) - inactive selection

Sometimes certain features or options are greyed out to signal the user that they can not be used at this time.

With the key **ESCAPE** you always reach the higher-level menu or cancel actions.

2.1.2 User input

The interactions with the program in most modules are limited to pressing a single key to select a desired keyboard code and associated function. However, in some situations the TS Manager expects a longer keyboard input, which is signaled with an input field.

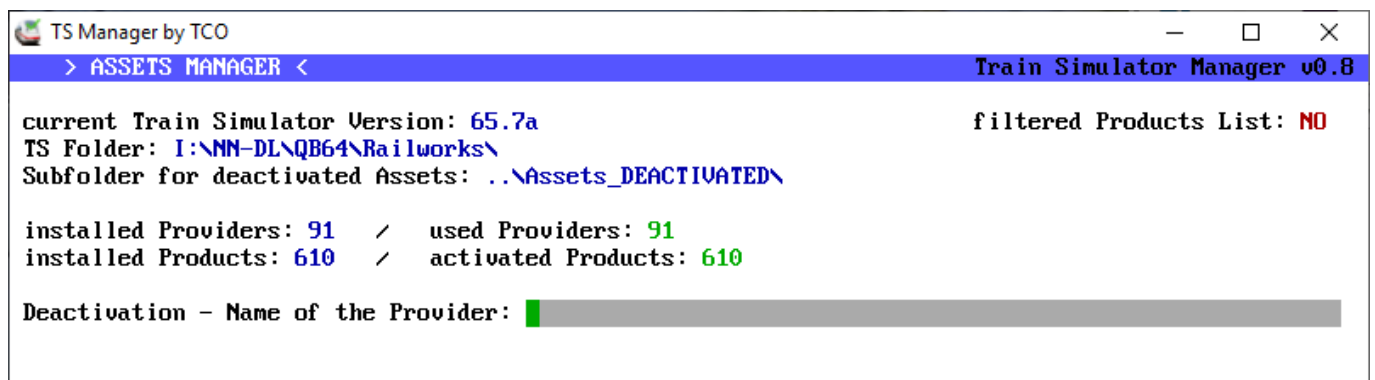


Figure 6: Input field

In order to facilitate the input for the user and to avoid incorrect entries, the input possibilities are limited.

The following restrictions are possible:

- the selection of the individual characters which can be entered
 - e.g. while you enter a file or directory name, invalid characters such as `</?|*\>` are automatically blocked
- the number of characters is limited to a restriction required by the program

While entering using a input field, the user has some features that can be used as follows:

- | | |
|-------------------------|---|
| POS1 / HOME | - jump to the beginning of the text field |
| END | - jump to the end of the text field |
| ARROW KEYS LEFT + RIGHT | - move the cursor to the left or right |
| BACKSPACE | - delete characters to the left of the cursor |
| DELETE | - delete characters on the cursor |
| INS | - switch between insert and overwrite modes |
| CTRL + C | - copy entire contents of the text line |
| CTRL + X | - cut the entire contents of the text line |
| CTRL + V | - paste content from clipboard |
| ENTER | - complete the input |

ESCAPE

- empty input field / cancel if input field is empty

For certain entries, there is already a preselection in the text field, which can be edited by the user or deleted by pressing the **ESCAPE** key once. Please note that if the text field is already empty, you can cancel the input with the **ESCAPE** key and, in most cases, the preselection as input is used.

2.1.3 List management

This chapter is intended to help the user understand how lists work. Lists are found in all modules and form the essential building block of the TS Manager. It could also be said that without the various lists, the work of this tool would not be possible.

In lists, entries are stored sequentially, which are created from specific data record fields, depending on the list type. There are many different types of lists with different tasks.

During the start process, the TS Manager initializes the work environment. These include checking the directory structure for integrity. Then a "screenshot" is made by assigning the single content to the most important main lists.

Examples of main lists:

- installed routes
- activated routes
- deactivated routes

Based on these main lists, the TS Manager can determine its status through a comparison when managing content.

In addition to these main lists, special lists are created by various modules, which are required for the further processing of specific tasks. If, for example, a *"RouteProperties.xml"* is specified as a parameter at startup, a specific program module is executed which evaluates the assets used for the specified route and generates special lists.

Examples of special lists:

- required products for selected routes - general
- Required products for selected routes - already activated
- Required products for selected routes - not activated
- Required products for selected routes - not installed

These special lists are a prerequisite for important functions of the TS Manager. For example, the list *"Required products for selected routes - not activated"* is required to activate the required

assets for selected routes.

All lists can be viewed by the user and can thus provide valuable information, be it to find out which assets are required by a particular add-on or if some assets are not installed.

```
(O) Products from last filtered List (128)
(A) Products from Database (610)
(B) installed Products (610)
(C) activated Products (610)
(D) deactivated Products (0)
(E) not installed Products from Database (0)
(F) needed Products for Routes and Scenarios (8)
(G) activated Products for Routes and Scenarios (8)
(H) deactivated Products for Routes and Scenarios (0)
(I) not installed Products for Routes and Scenarios (0)
(J) needed Products for Routes (1)
(K) activated Products for Routes (1)
(L) deactivated Products for Routes (0)
(M) not installed Products for Routes (0)
(N) needed Products for Scenarios (8)
(O) activated Products for Scenarios (8)
(P) deactivated Products for Scenarios (0)
(Q) not installed Products for Scenarios (0)
```

Figure 7: Example of list selection

The most interesting lists for the user may well be the filtered lists, because with the help of these lists content can be sorted or filtered according to the desired criteria.

2.1.4 Select routes / scenarios

If you want to manage the required assets for one or more specific routes and/or scenarios, so first you have to tell these to the TS Manager in advance. This is done by selecting content and is required for automatic asset management by the **Assets Manager**.

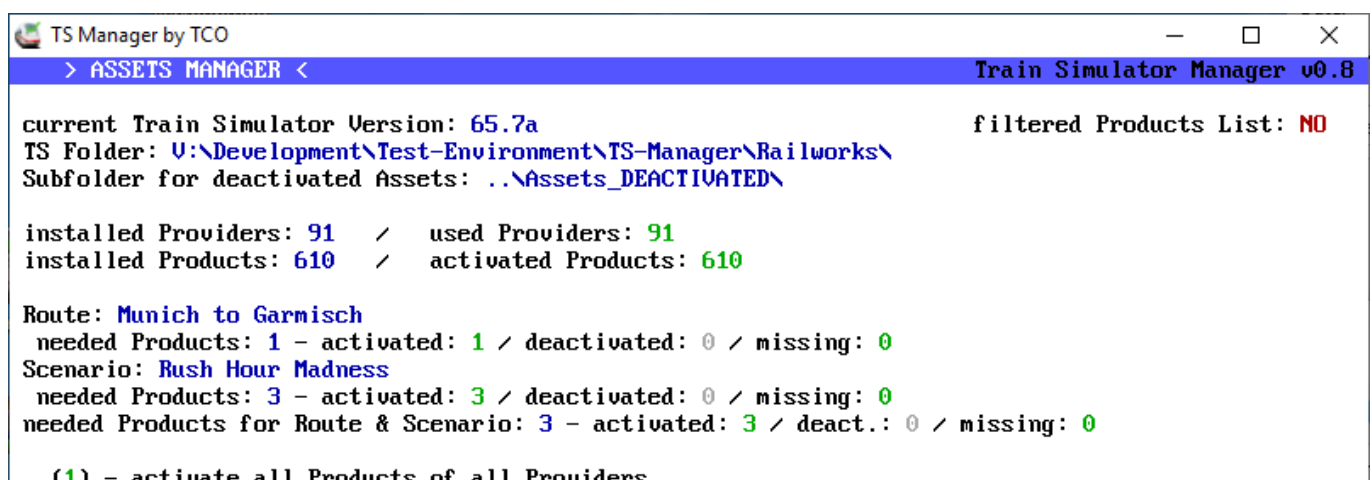


Figure 8: Information about selected route and scenario

Selecting content can be achieved in several ways:

- ✓ single route or scenario by start parameters (also drag and drop)
- ✓ single route in **Scenario Manager**
- ✓ Checking content in all modules selects it at the same time

In order to keep track of the selected routes and scenarios, information about the selected content is displayed at the top of both main menus and in the „**manage Products**“ menu.

Please note that reselecting content overwrites an existing list of selected routes and scenarios.

2.2 Settings

The „**Settings**“ can be accessed via the menus „**Assets Manager**“ or „**Routes Manager**“ and are used to adapt the TS Manager to your needs.

The settings are stored in the „*TS-Manager.ini*“ file in the TS Manager directory and can also be changed by experienced users by editing this INI file directly. For more information on handling the INI file, please refer to chapter [1.7 Settings File](#).

Installation path of the Train Simulator

The TS Manager requires the Train Simulator installation directory to be able to manage the content of the Train Simulator. This entry must contain a full directory path including drive letter. The easiest way to set the TS directory is to drag the **Railworks.exe** from the installation directory to the TS Manager.exe or one of its shortcuts.

Alternatively, the installation path can be customized by using an ASCII text editor directly in the „*TS-Manager.ini*“ file. See also chapter [1.7 Settings File](#).

2.2.1 General settings

Blueprint Localisation

Specifies the language in which data entries from the blueprint files (XML files) are transferred to the database.

Optimization of Lists

Select whether the individual lists should be optimized for further processing. Through optimization, modules can process them more efficiently. For the user, there is the additional advantage that the entries in the lists are sorted alphabetically and thus the individual entries can be found more easily.

Optimize Lists at Start

Enable this setting to optimize the lists at startup. Starting the TS Manager can be

significantly delayed, especially if you have a lot of installed content.
If this setting is enabled, you have the option during the startup process to suppress the optimization of the lists temporarily for the current program session with the **ESCAPE** key.

Database Saving Option

With this setting, you choose when changes to the database are saved.

ALWAYS Changes are immediately written to the database.

AUTO Changes are automatically saved when the tool is closed.

MANUAL When you quit the program, you are asked if you want to save changes to the database.

automatic Backup of the Database

Choose this option if you want to create a backup of the database. Selecting „**ONCE PER SESSION**“ will back up the database on first write access. A maximum of nine backups of the database are created in rotation before the oldest backup is deleted.

2.2.2 Assets Manager Mode

The „**Assets Manager**“ can be used in two different modes. In „**simple Mode**“ only the providers are managed. If you have a lot of installed content, this mode can greatly improve performance.

With the „**extended Mode**“ each product can be managed separately. Which mode should be used finally may depend on how much attention the user places on the sorting out of the assets. In most cases, limiting it to the providers will bring about the desired effect, namely, speeding up the launch and making the individual asset lists in the game much clearer. However, if you want to store additional information in the database for individual products, e.g. serial numbers or organizational codes, so the "extended mode" should be beneficial.

In summary you can say, both modes have their advantages and disadvantages and you can not make a firm statement as to which of the two modes is the better one.

The fact that the Assets Manager Mode can be easily changed at any time, a mixture of both modes is quite possible. For example, in „**simple Mode**“ you could roughly pre-sort the assets and then subsequently reduce the activated products in the „**extended Mode**“ of certain providers with whom you would like to work in the Train Simulator.

Attention: If you have switched to **extended Assets Manager Mode** and have added new assets since its last use, you must restart the TS manager so that the database can update all new providers and products and then use them correctly.

2.2.3 Directories for deactivated Content

The basic principle of the TS Manager is to make a part of the TS content for the Train Simulator „invisible“, so that the TS does not need to load this content and thus ultimately runs more agile and the player does not have to deal with long lists.

In order to deactivate desired content, the TS Manager requires a location on the hard disk to which the unneeded content can be moved.

It is strongly recommended that you use the default name or a name corresponding to the use for each of these disabled folders in order to be able to determine the contents of this directory at a later date. Note that these settings only specify a single directory name without drive and path and only valid characters may be used.

Folder for deactivated Assets

This directory points to the location on the disk to which the disabled assets are being moved. This directory must be located in the Train Simulator root directory, which also contains the „Assets“ folder. The folder will be created automatically if it does not already exist.

Folder for deactivated Routes

This sets the directory for the deactivated routes. The same conditions apply as before for the **Folder for deactivated Assets**.

Folder for deactivated Scenarios

This directory name is used to create a subdirectory for the deactivated scenarios in the respective route folder. Note that this folder is automatically created by TS Manager for each route separately in the same directory in which the scenarios folder exists.

2.2.4 Blueprint Cache Files löschen

To delete the Blueprint Cache file for a single or all activated providers, select **option 9** in the menu „**Settings**“. Afterwards you have the possibility to select the desired provider or to delete the blueprint cache files of all providers while pressing the key **DELETE**. If you want to delete the blueprint cache of a single product you can do so in the „**manage Products**“ module. See also chapter [2.4.5 Manage products](#).

2.3 Maintenance Mode

As discussed in chapter [1.3 Important notes](#), before changing deactivated TS content you should generally activate this relevant content to prevent a possible directory integrity error.

This is highly recommended, for example, for updates of addons or when using an additional mod manager.

At the beginning of a desired modification of TS content, you can manually activate the respective routes, providers or products involved or simply consider the option of using the „Maintenance Mode“. Should you decide to use the „Maintenance Mode“ so you benefit from the advantage that the TS Manager automatically stores a „screenshot“ of the current state of all TS addons in a special preset before activating all TS content and automatically restores the old state after switching off the „Maintenance Mode“, so ultimately only the content is activated, which was previously activated.

2.4 Assets Manager

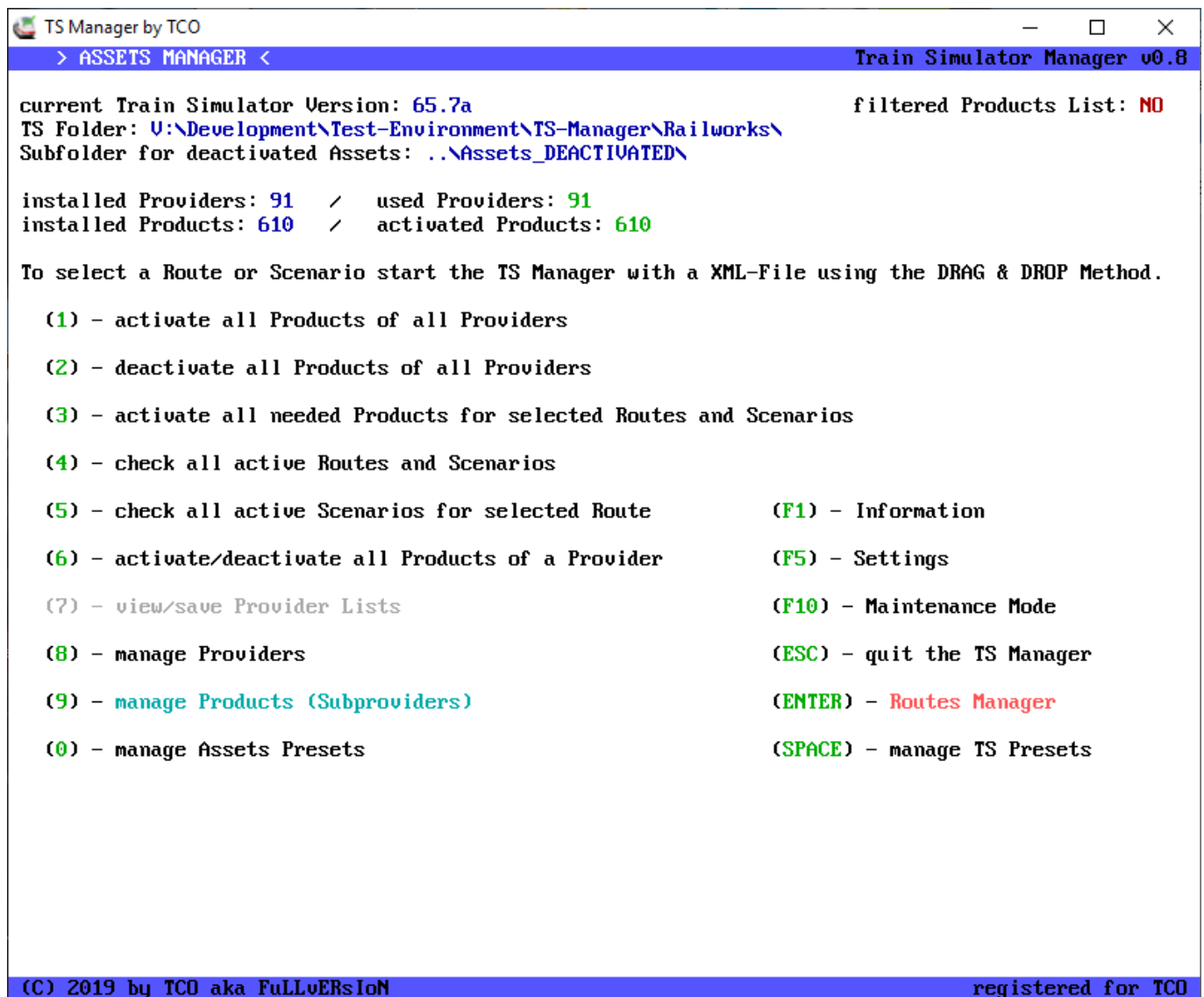


Figure 9: Main menu of the Assets Managers

The **Assets Manager** is used to manage the providers and products of all Train Simulator addons using also information provided by **Routes Manager** or **Scenarios Manager**.

Using the **Assets Manager** is optional. However, asset sorting has great potential in terms of shortening the start time of the Train Simulator or making provider, product and rolling stock lists clear in the editor and the train simulator itself.

In addition, the **Assets Manager** in extended mode offers the possibility for products to link additional information in the database.

2.4.1 Activation and deactivation of providers and products

When you deactivate providers and/or products, they are moved to a separate folder so that the Train Simulator can not find them and thus offer certain advantages for the user. See also chapter [1.2 Usage](#).

activate/deactivate all Products/Providers

Use this option to activate or deactivate all products. The operation will be carried out immediately and without further request!

activate/deactivate (all Products of) a single Provider

With this option, you can activate or deactivate all products of a single provider by entering the name of the provider directly.

activate all needed Provider/Products for selected Routes and Scenarios

To be able to use this option, you must first select one or more routes or scenarios and have the required assets checked for them. If the „**simple Assets Manager Mode**“ is active, all required providers are fully activated when using this function. In „**extended mode**“ only required products of the respective provider are activated.

With this option you can activate the assets cumulatively or absolutely.

- **absolute activation** - only the assets of the selected routes and scenarios will be activated at the end
- **cumulative activation** - the assets of the selected routes and scenarios are activated in addition to the already activated assets

2.4.2 Check routes and scenarios

When checking the routes and scenarios, all required assets are put together, which can then be activated via [menu item 3](#).

check all active Routes and Scenarios

Checks the assets of all currently activated routes and their scenarios. Before using this option, you should use the [Routes Manager](#) to activate all desired routes and scenarios.

check all active Scenarios for selected Route

This feature is only available on a single selected route and checks the assets of all activated scenarios of the selected route. First set up the desired activated scenarios with the [Routes Manager](#).

2.4.3 View or save provider lists

This menu item can only be called up in the „[simplen Assets Manager Mode](#)“ and offers the user the option of viewing the individual provider lists or saving them as a preset if required.

2.4.4 Manage Providers

With this module, you can activate or deactivate comfortable individual providers with all their products directly from a list view. This feature also gives you an overview of the current state of each provider.

2.4.5 Manage products

With [menu item 9](#) „[manage Products \(Subproviders\)](#)“ you can access the submenu of the [Assets Manager](#) if the „[extended Assets Manager](#)“ is activated and from there you have the possibility to manage your products.

You can use the [menu option 1](#) „[create a filtered Products List](#)“ to create your own product list with the required selection criteria. For more information about this function see [2.7.1 Create filtered lists](#).

With the module „[manage Products](#)“ the user has a variety of useful functions available, which are explained in detail in this chapter.

[Select option 2](#) to manage products. This takes you to a list selection where you can decide which individual products to use for a subsequent task. The selectable lists should actually be

self-explanatory. The number behind it indicates the number of product entries in the respective list. Grayed out lists have no entries and can not be selected accordingly.

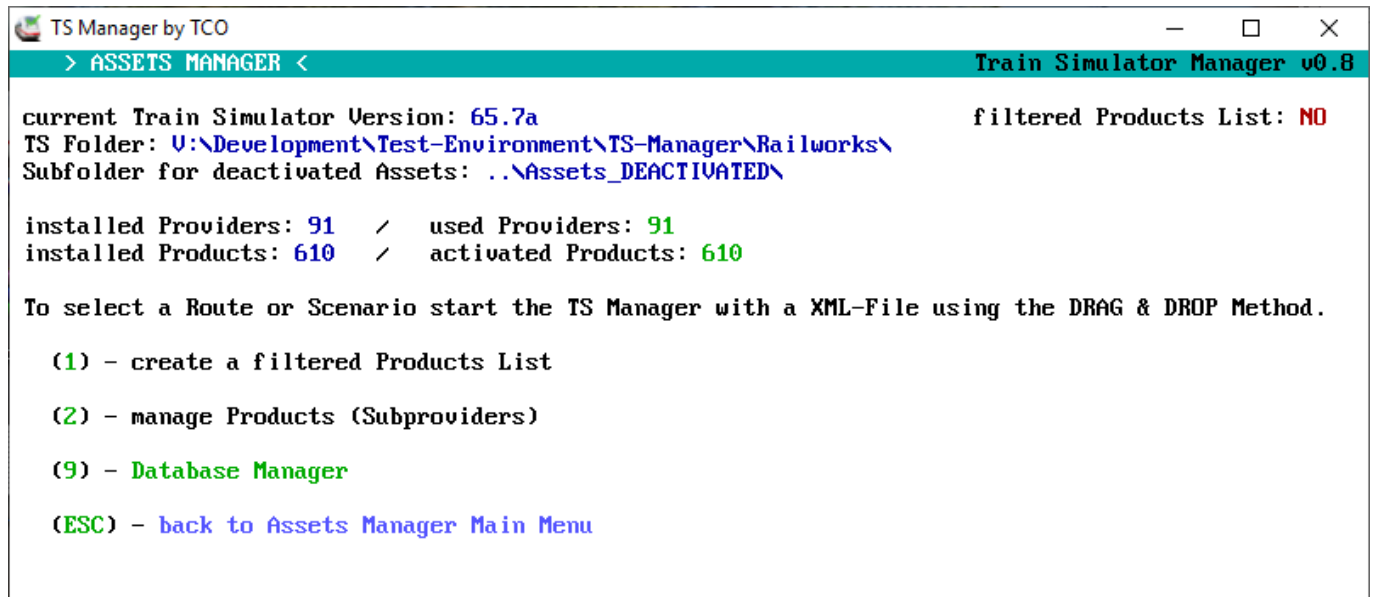


Figure 10: Submenu of the Asset Manager to manage the products

Explanations of some example lists:

Products from last filtered List

This list contains all entries from the last filtered list created by the user.

Products from Database

Contains all products stored in the database.

not installed Products from Database

This list only contains product entries from the database that are currently not installed, so they can not currently be found by the TS Manager.

not installed Products for Routes and Scenarios

Products required by the currently selected routes and scenarios but not currently found are listed here. For example, with this list you can quickly find out which TS addons may be needed to use the selected routes and scenarios in the TS.

After selecting the desired product list, you will be given further options to decide which task you want to perform with the selected list:

activate all Products from chosen List / deactivate all Products from chosen List

You then have the choice between **absolute** or **cumulative** activation/deactivation, whereby with the **cumulative** method the products are activated/deactivated in addition to the already activated/deactivated products and in case of **absolute** procedure only the products from the list are finally activated/deactivated.

save all Products from chosen List as Preset

Use this selection to save all products from the list as a preset. For more information about the uses of presets, see chapter [2.9 Presets](#).

manage Products from chosen List

This option gives you the possibility to view the list or to manage a single product. First, a list with all associated providers of the products from the previously selected product list appears. In addition, this selection gives you an overview of the status of providers involved. Using the **Page Up** and **Page Down** buttons scroll through the list and select the provider from which you would like to ultimately manage a product by pressing the parenthesized letter.

Please note, this selection is „**Case sensitive!**“ With a respective uppercase or lowercase letter you choose different providers!

After selecting the provider, you will be redirected to a list in which you can now select the desired product that you want to manage. This list view also includes a status overview of all products of the selected provider. Scroll up and down through the list using the **Page Up** and **Page Down** keys and select the product to be managed by pressing the parenthesized letter. Please note, this selection is „**Case sensitive!**“ With a respective uppercase or lowercase letter you choose different products!

After selecting the desired product, you will be taken to Product Management (**Figure 11**), where you will find some important information about the product:

- 1** - Provider with number of related products and their status
- 2** - the selected product with its current state:
 ACTIVATED - **DEACTIVATED** - UNINSTALLED
- 3** - Information about the existing Blueprint Cache file and the record number under which this product is stored in the database. This number makes it easier to find the data entry in the database file.
- 4 - Product Note** - linked data field to the product
 - can provide additional information, such as description, serial number or search and administration codes
- 5 - verlinkte Tags** - tags allow you to assign specific information to the product that is used when creating filtered lists
 - **green tags** are linked to the product, **red tags** are not

The following input options are available:

With the bracketed keyboard code in front of the individual tags, you can link them to the product or cancel a link. Please note, this selection is „**Case sensitive!**“ With a respective

uppercase or lowercase letter you choose different tags!

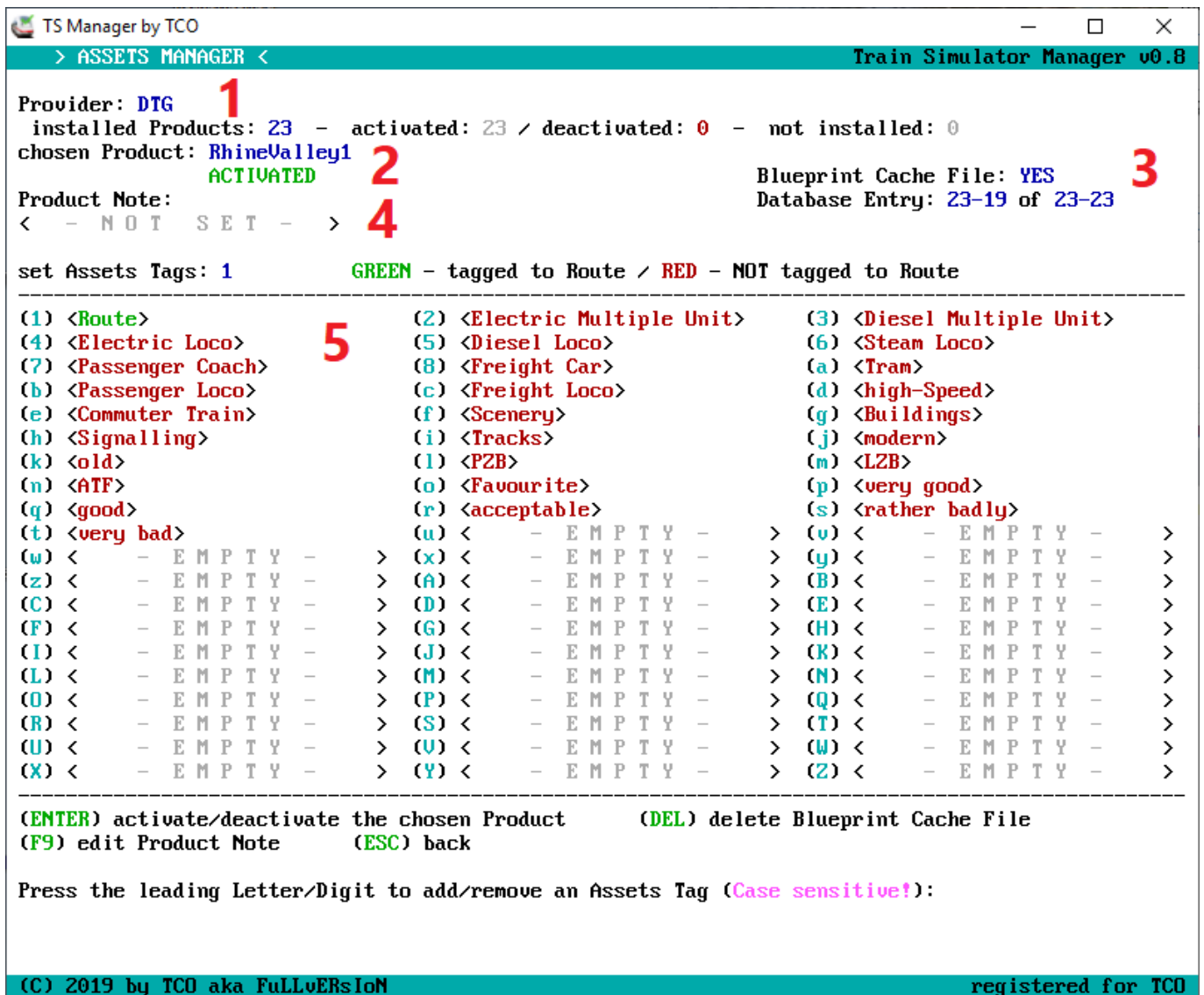


Figure 11: manage product

How tags are created and managed is described in chapter [2.8.1 Manage Tags](#).

ENTER - activates/deactivates the product

DELETE - clears the blueprint cache for this product; only available if cache file exists

F9 - create or edit the product note

ESCAPE - back to the product selection

2.5 Routes Manager

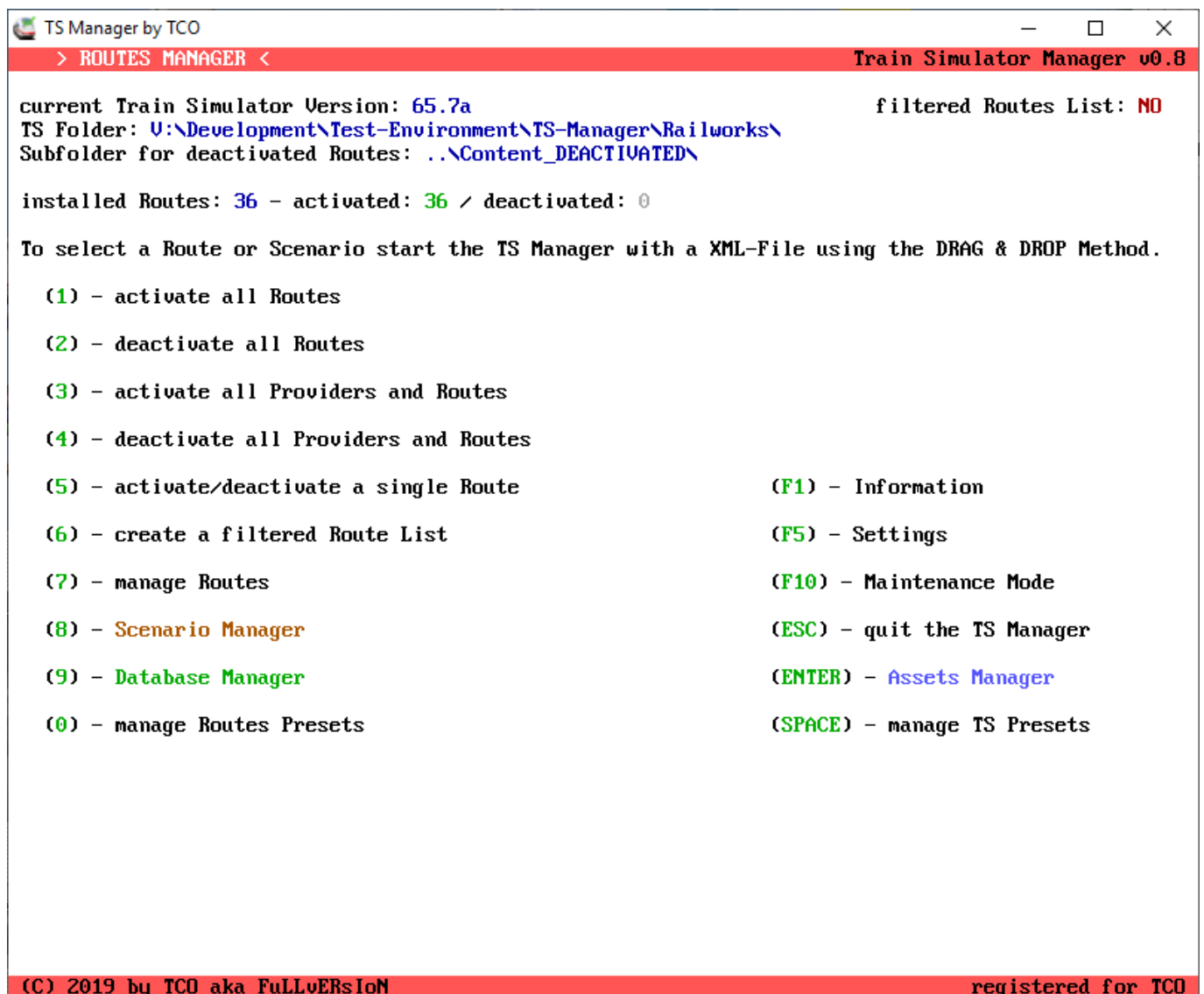


Figure 12: Main menu of the Routes Manager

The **Routes Manager** is used to manage the routes of all Train Simulator addons and also provides information for the **Assets Manager**, so that it can put together the required assets for certain routes.

Using the **Routes Manager** is optional. However, the sorting of the routes has the advantage that the **Assets Manager** can sort out the associated assets automatically.

Important information about AP files:

If the „*RouteProperties.xml*“ of a route is packed in an AP file, it is recommended to unpack it in order to use all functions of the TS Manager. This is not absolutely necessary, but then no data from the blueprint file can be used. The result is that the database entry does not contain a route name and the **Assets Manager** can not gather information about the required assets.

You can use the **menu option 6 „create a filtered Routes List“** to create your own route list with the selection criteria you require, for more information on this function, see chapter [2.7.1 Create filtered lists](#).

2.5.1 Activation and deactivation of routes

When disabling routes, they are moved to a separate folder so the Train Simulator can not locate them and thus offer certain benefits to the user. See also [1.2 Usage](#).

activate/deactivate all Routes

Use this option to activate or deactivate all routes. The operation will be carried out immediately and without further request!

activate/deactivate a single Route

This option allows you to activate or deactivate a route by entering the route ID directly.

activate/deactivate all Providers and Routes

Select this menu item to activate or deactivate all TS content at the same time. The operation will be carried out immediately and without further request!

2.5.2 Manage routes

With the module **„manage Routes“** many useful functions are available to the user, which are explained in detail in this chapter.

Select **option 7** to manage routes. You are taken to a list selection where you can decide which individual routes to use for a subsequent task. The selectable lists should actually be self-explanatory. The number behind it indicates the number of route entries in the respective list. Grayed out lists have no entries and can not be selected accordingly.

Explanations of some example lists:

Routes from last filtered List

This list contains all entries from the last filtered list created by the user.

Routes from Database

Contains all routes stored in the database.

not installed Routes from Database

This list only contains route entries from the database which are currently not installed, so they can not currently be found by the TS Manager.

After selecting the desired route list, you will be given further options to decide which task you would like to perform with the selected list:

activate all Routes from chosen List / deactivate all Routes from chosen List

With this option, the routes from the list can be activated or deactivated.

You then have the choice between **absolute** or **cumulative** activation/deactivation, whereby with the **cumulative** method the routes are activated/deactivated in addition to the already activated/deactivated routes and in case of **absolute** procedure only the routes from the list are activated/deactivated.

check all Routes from chosen List

Checks all routes and their activated scenarios and creates asset lists which can later be used in [Assets Manager](#) to activate the required assets. At the same time, all checked routes and scenarios are selected.

save all Routes from chosen List as Preset

Use this option to save all routes from the list as Presets. For more information about the uses of presets, see chapter [2.9 Presets](#).

manage Routes from chosen List

This option gives you the possibility to view the list or manage a single route. After the selection, you will be taken to the list view, where you can now select the desired route that you want to manage. In addition, this list view also gives you a status overview of all routes. Using the **Page Up** and **Page Down** buttons scroll through the list and select the route from which you would like to ultimately manage a product by pressing the parenthesized letter.

If the name of a route is not displayed and instead „- NAME NOT FOUND -“ is shown, the TS Manager could not find the „*RouteProperties.xml*“ belonging to the route. The cause can be a faulty route or a blueprint file packed in an AP file.

After selecting the desired route, you will be taken to the route management (**Figure 13**), where you will find some important information about the route:

1 - the selected route with its current state:

ACTIVATED - **DEACTIVATED** - UNINSTALLED

2 - shows if route name has been edited by the user

3 - Information about the existing blueprint file and the record number under which this route is stored in the database. This number makes it easier to find the data entry in the database file.

4 - Route Note - linked data field to the route

- can provide additional information, such as description, serial number or search and administration codes

5 - verlinkte Tags - tags can be used to assign specific information to the route, which is used when creating filtered lists

- green tags are linked to the track, red tags are not

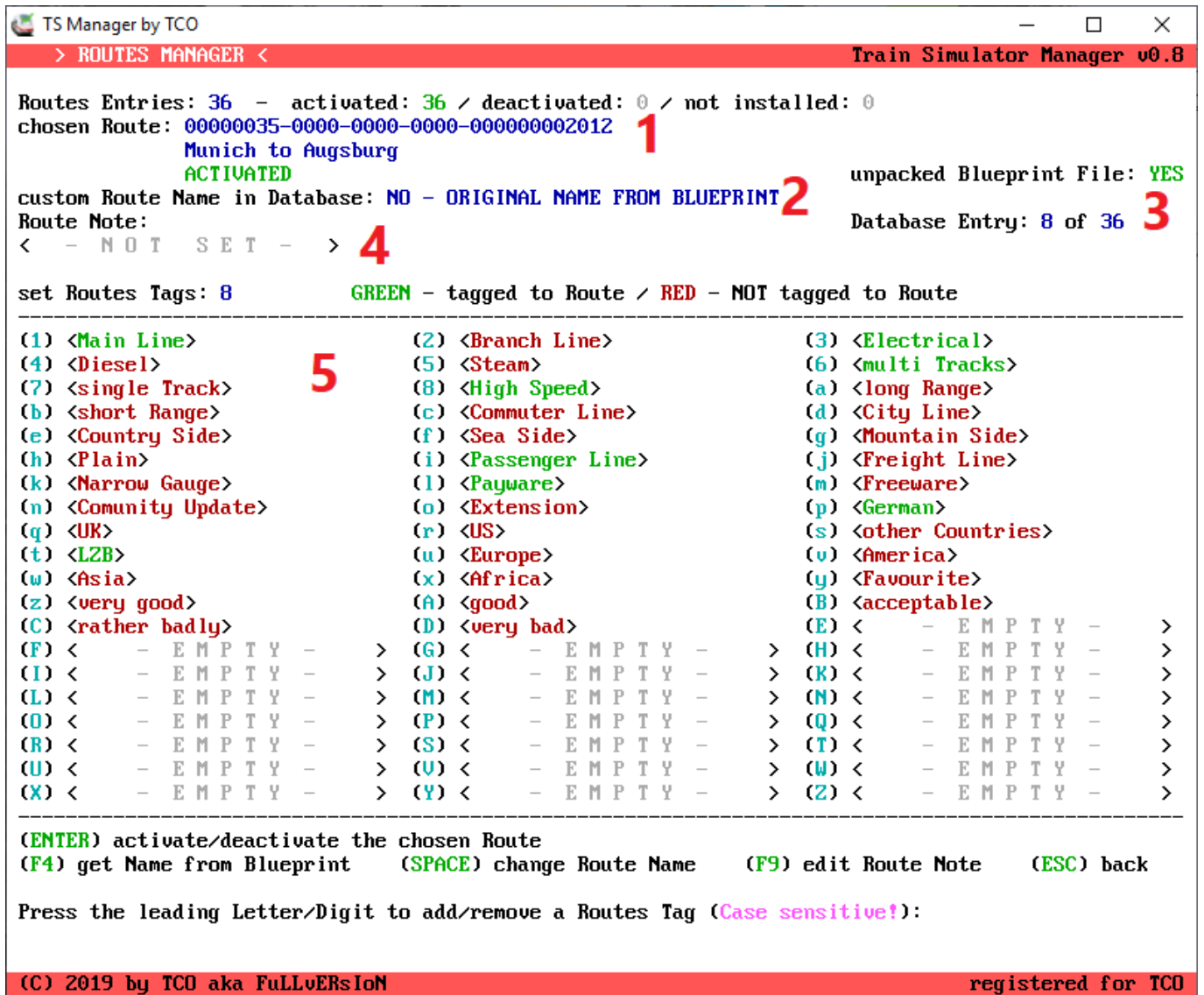


Figure 13: manage routes

The following input options are available:

With the bracketed keyboard code in front of the individual tags, you can link them to the route or cancel a link. Please note, this selection is „Case sensitive!“ With a respective uppercase or lowercase letter you choose different tags!

How tags are created and managed is described in chapter [2.8.1 Manage Tags](#).

ENTER - activates/deactivates the route
F4 - gets the route name from the Blueprint File
SPACE – enter or edit route names manually
F9 - create or edit the route note
ESCAPE - back to the route selection

2.6 Scenario Manager

the **Scenarios Manager** is used to manage the scenarios of the individual routes. He also provides information for the **Assets Manager** so that it can put together the required assets for specific scenarios.

The use of **Scenarios Manager** is optional. However, the sorting of the scenarios offers the advantage that the **Assets Manager** can sort out the corresponding assets automatically.

The **Scenarios Manager** only manages the scenarios of a single route. Before you can manage the scenarios of a route, you must first select the desired route in the **Scenarios Manager** menu. To select a route, you can either enter the route ID directly or select the route conveniently from a list view.

If you have started the TS Manager with a selected route or a scenario as a start parameter (also drag & drop), then this route or the route belonging to the scenario is already preset as route selection in **Scenarios Manager**.

Important information about using Scenarios Manager and Maintenance Mode:

Please note that the **Scenarios Manager** works completely independently of **Maintenance Mode** and **Routes Managers**. A switched-on **Maintenance Mode** and also the use of an activation or deactivation option from the menu of the **Routes Manager** will **NOT** affect the status of the scenarios of the individual routes!

Important information about AP files:

If some scenarios are packed in an AP file, it is recommended to unpack the AP file and then delete it or remove it from the route folder, otherwise the packed scenarios can not or only partially be managed by the TS Manager.

You can use the **menu option 6 „create a filtered Scenarios List“** to create your own scenario list with the selection criteria you require, for more information on this function, see chapter [2.7.1 Create filtered lists](#).

With the **menu option 8 „activate/deactivate the selected Route“**, the selected route can be directly activated or deactivated.

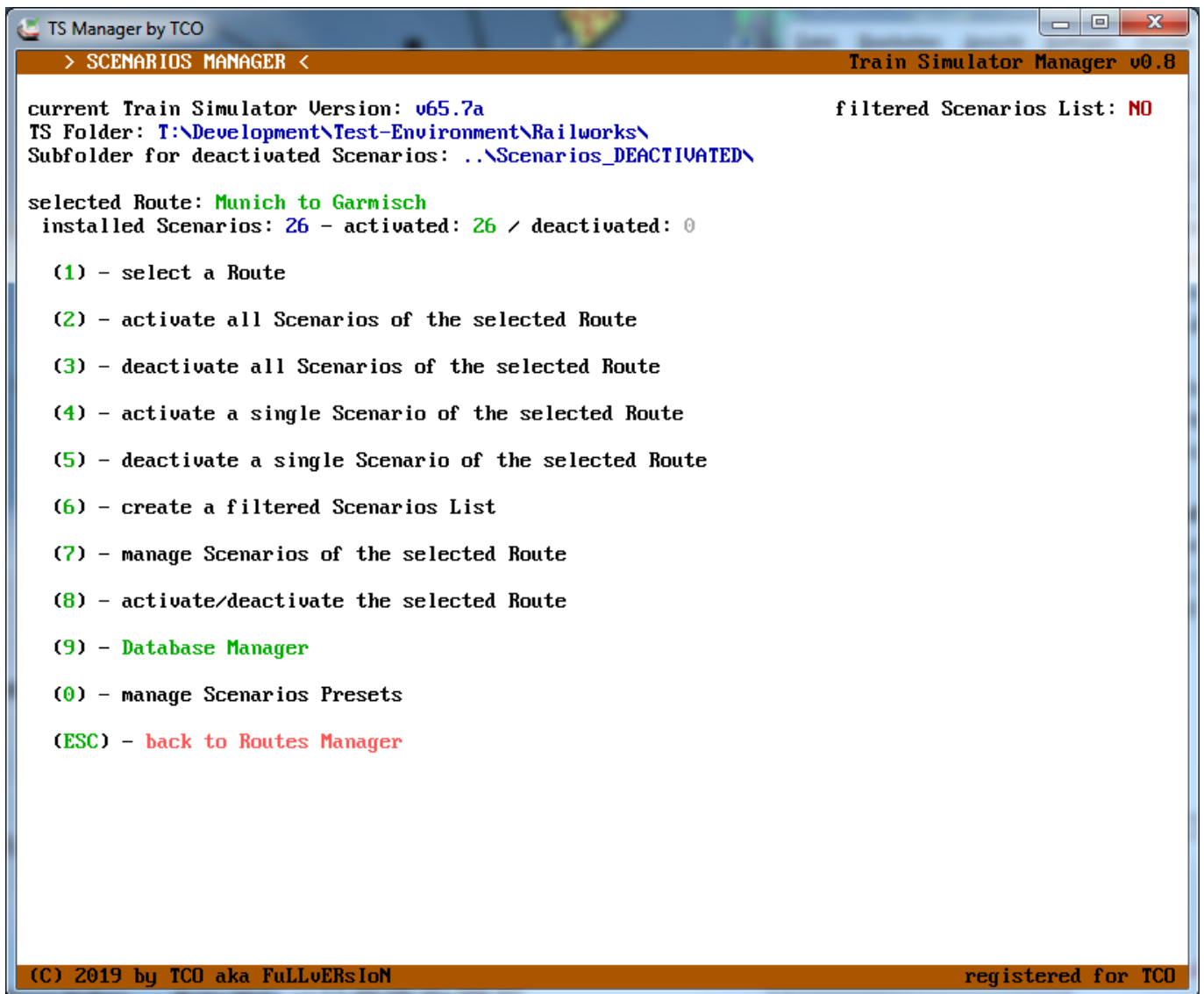


Figure 14: Scenario Manager menu

2.6.1 Activation and deactivation of scenarios

When deactivating scenarios, they are moved to a separate folder so that the Train Simulator can not find them and thus offer certain advantages for the user. See also chapter [1.2 Usage](#).

Note that after activating a scenario this is not necessarily used by the Train Simulator, as the scenario management is subordinated in the priority of the route management! If you want to use a scenario, it must be ensured that the associated route is also activated.

activate/deactivate all Scenarios of the selected Route

Use this option to enable or disable all scenarios of the selected route. The operation will be carried out immediately and without further request!

activate/deactivate a single Scenario of the selected Route

With this option, you can activate or deactivate a scenario of the selected route by directly entering the scenario ID.

2.6.2 manage scenarios

With the module „**manage Scenarios**“ a variety of useful functions are available to the user, which are explained in detail in this section.

Select **option 7** to manage scenarios. You will be taken to a list selection where you can decide which scenarios to use for a subsequent task. The selectable lists should actually be self-explanatory. The number behind it indicates the number of scenario entries in the respective list. Grayed out lists have no entries and can not be selected accordingly.

Explanations of some example lists:

Scenarios from last filtered List

This list contains all entries from the last filtered list created by the user.

Scenarios from Database

Contains all scenarios stored in the database for the selected route.

not installed Scenarios from Database

This list contains only scenario entries from the database which are currently not installed, so they can not currently be found by the TS Manager.

After selecting the desired scenario list, you will be given further options to decide which task you would like to perform with the selected list:

activate all Scenarios from chosen List / deactivate all Scenarios from chosen List

This option enables or disables the scenarios from the list.

You then have the choice between **absolute** or **cumulative** activation/deactivation, whereby with the **cumulative** method the scenarios are activated/deactivated in addition to the already activated/deactivated scenarios and in the case of **absolute** procedure ultimately only the scenarios from the list are activated/deactivated are.

check ALL Scenarios from chosen List

Checks **ALL** scenarios and create asset lists that can later be used in **Assets Manager** to activate the required assets. At the same time, all reviewed scenarios are selected together with the associated route.

It is important to note that in this module, unlike other modules, all scenarios are checked from the list, regardless of whether they are activated or deactivated.

save all Scenarios from chosen List as Preset

Use this option to save all scenarios from the list as Presets. For more information about the uses of presets, see chapter [2.9 Presets](#).

manage Scenarios from chosen List

This option gives you the option to view the list or manage a single scenario. After the selection, you will be taken to the list view where you can now select the scenario you want to manage. In addition, this list view also gives you a status overview of all scenarios.

Using the [Page Up](#) and [Page Down](#) buttons scroll through the list and select the scenario which you would like to manage by pressing the parenthesized letter.

If the name of a scenario does not appear in the list and instead „- NAME NOT FOUND -“ is shown, the TS Manager could not find the „ScenarioProperties.xml“ belonging to the scenario. The cause can be a faulty scenario or a blueprint file packed in an AP file.

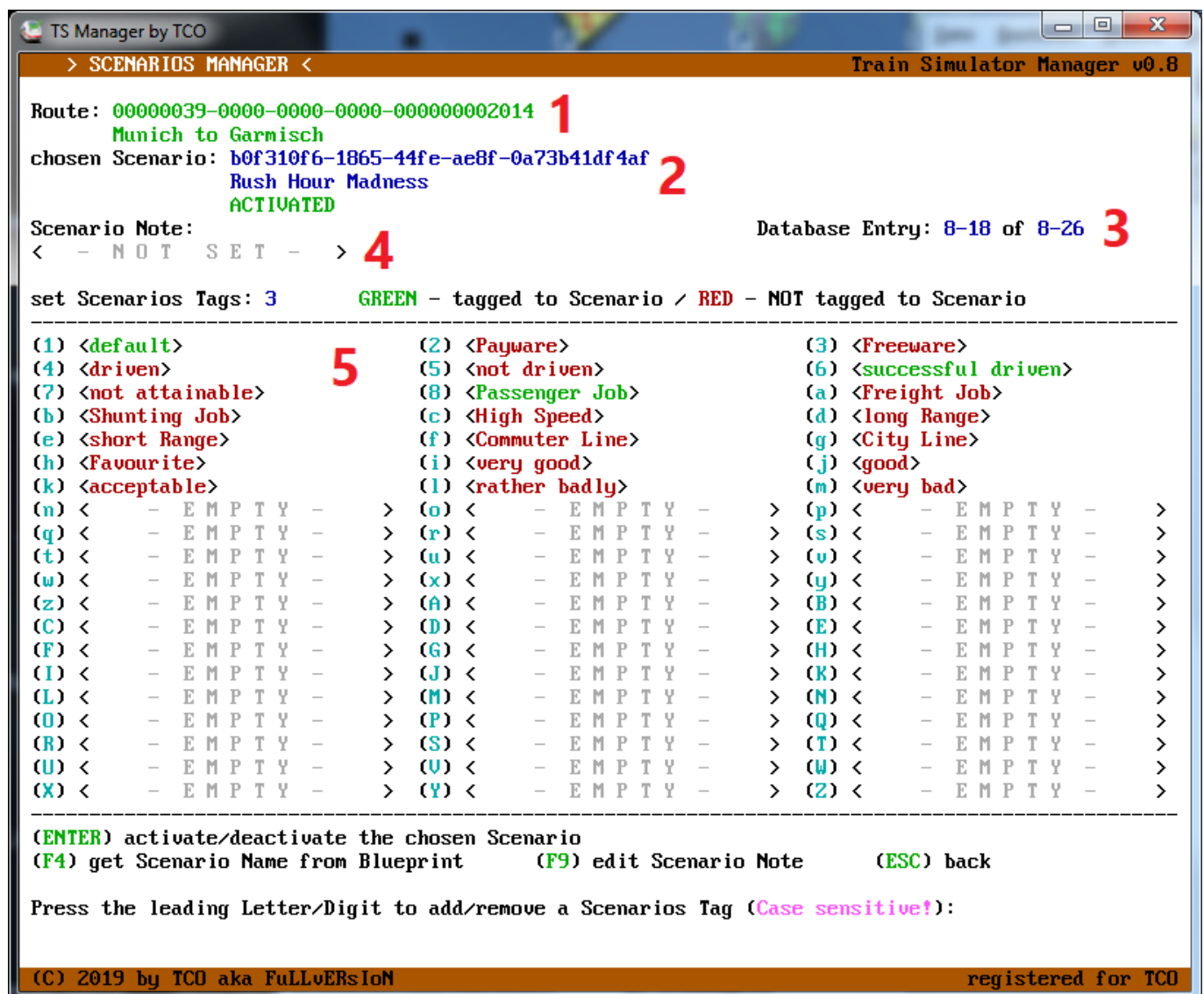


Figure 15: manage scenario

After selecting the desired scenario, you get to the scenario management (**Figure 15**), where some important information about the scenario is listed:

1 - the corresponding route with its current state:

ACTIVATED - DEACTIVATED

2 – the scenario with its current state:

ACTIVATED - DEACTIVATED - UNINSTALLED

3 - The record number under which this scenario is stored in the database. This number makes it easier to find the data entry in the database.

4 - **Scenario Note** - linked data field to the scenario

- can provide additional information, such as description, serial number or search and administration codes

5 - **verlinkte Tags** - Tags can be used to assign certain information to the scenario, which is used when creating filtered lists

- green tags are linked to the scenario, but red tags are not

The following input options are available:

With the bracketed keyboard code in front of the individual tags, you can link them to the scenario or cancel a link. Please note, this selection is „Case sensitive!“ With a respective uppercase or lowercase letter you choose different tags!

How tags are created and managed is described in chapter [2.8.1 Manage Tags](#).

ENTER - activates/deactivates the scenario

F4 - gets the scenario name from the Blueprint File

F9 - create or edit the scenario note

ESCAPE - back to the scenario selection

2.7 Filtered lists

Filtered lists are user-created lists in which the content has been sorted by specific filter options. With the help of these lists, certain products, routes or scenarios can be conveniently located in order to subsequently use them in another module.

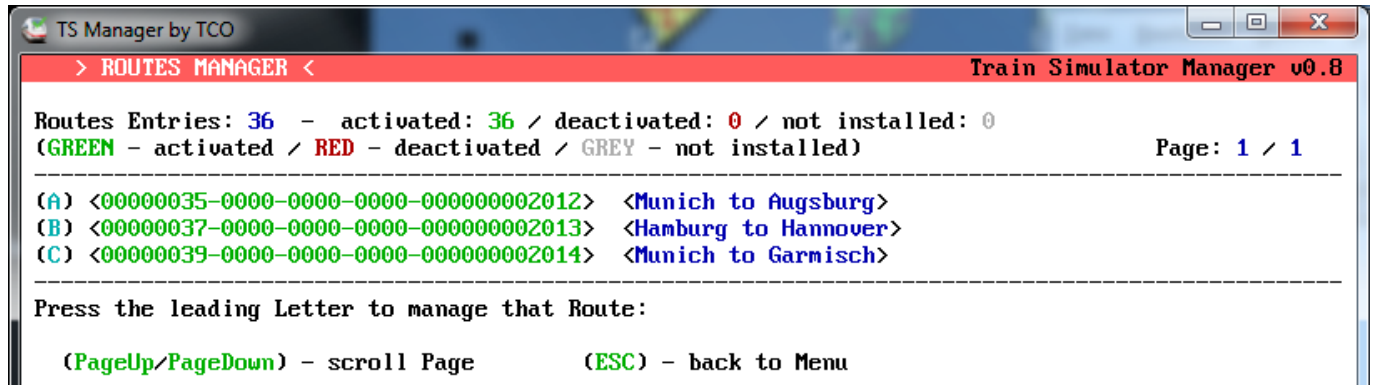


Figure 16: Filtered list in which *Hamburg & Munich* was searched in the data field *Name*

You can create filtered lists for products, routes, and scenarios, using the information from the database fields for each filter.

If you have already created a filtered list for a module is shown in the respective menu in the upper notification area.

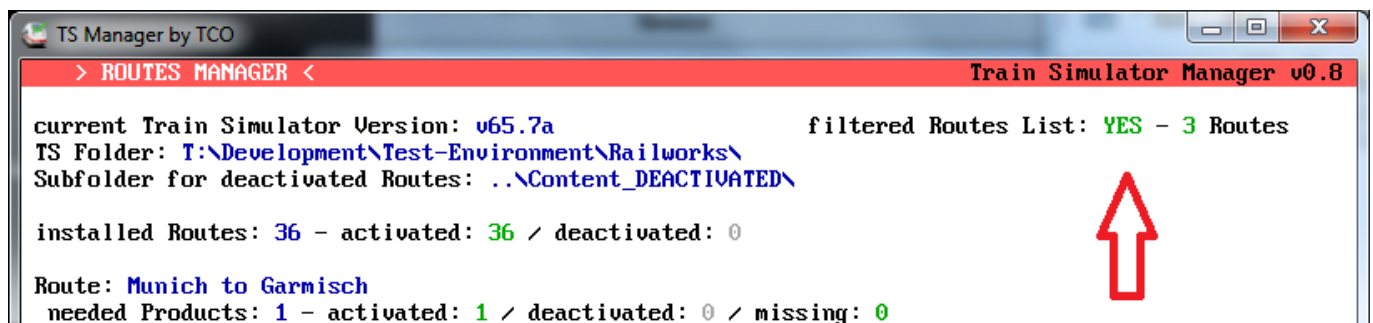


Figure 17: Info about filtered list in the menu

2.7.1 Create filtered lists

To create a filtered list, select „create a filtered ... List“ from the **Assets Manager** (manage Products), **Routes Manager**, or **Scenarios Manager** menu, depending on which content you want to filter. You will then be taken to the „Filter Selection Module“, where you can choose the filtering options in several steps. With Page Up and Page Down you can switch between the individual pages of the „Filter Selection Module“.

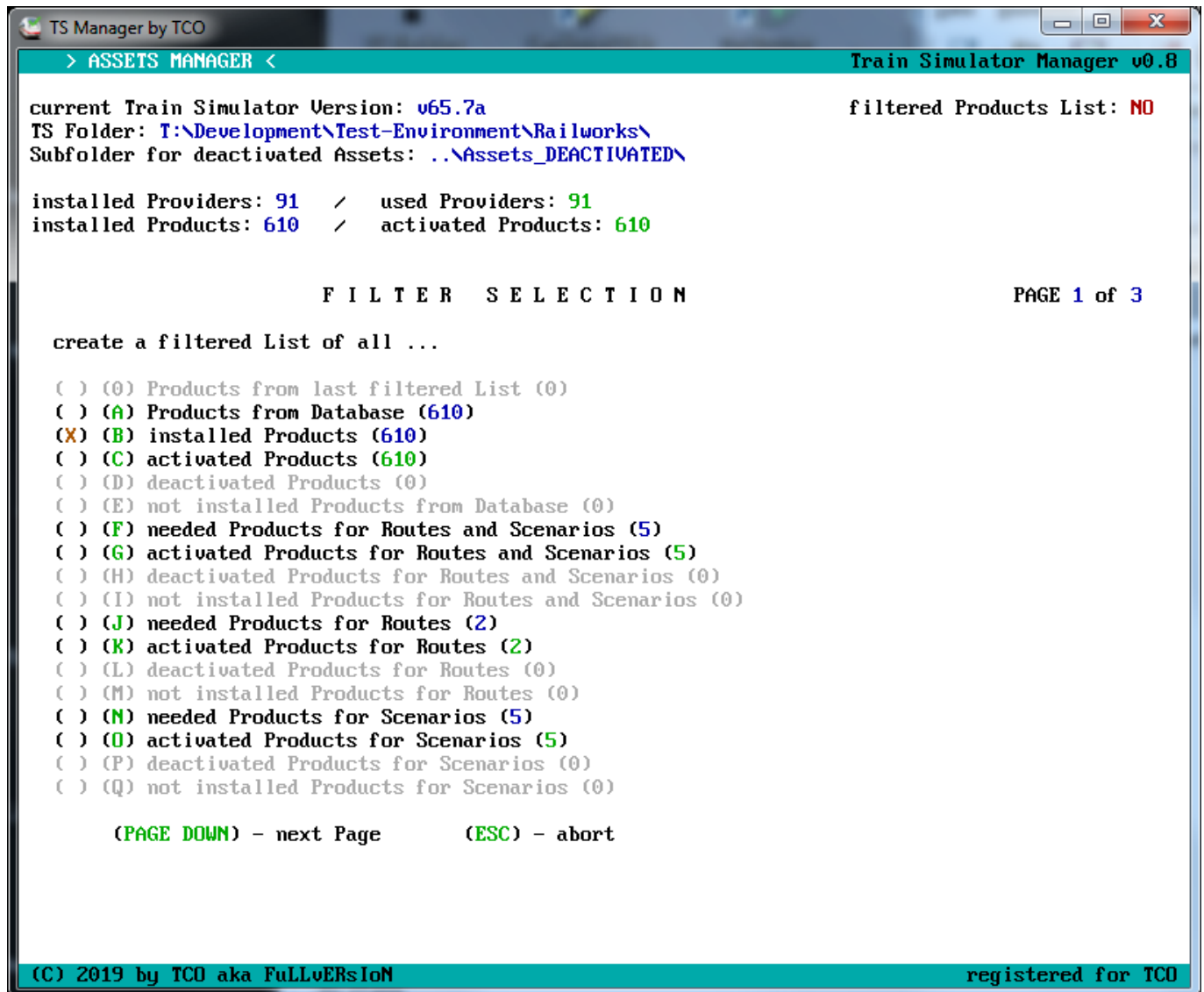


Figure 18: List selection in the Filter Selection Module

First, you have the option to choose a list whose entries you want to filter. You can also filter an already filtered list again, as often as you like.

Then you can use the individual filters as you like to achieve the desired filter result. The individual settings are made by selecting the corresponding keyboard code. Active options are marked by an „X“.

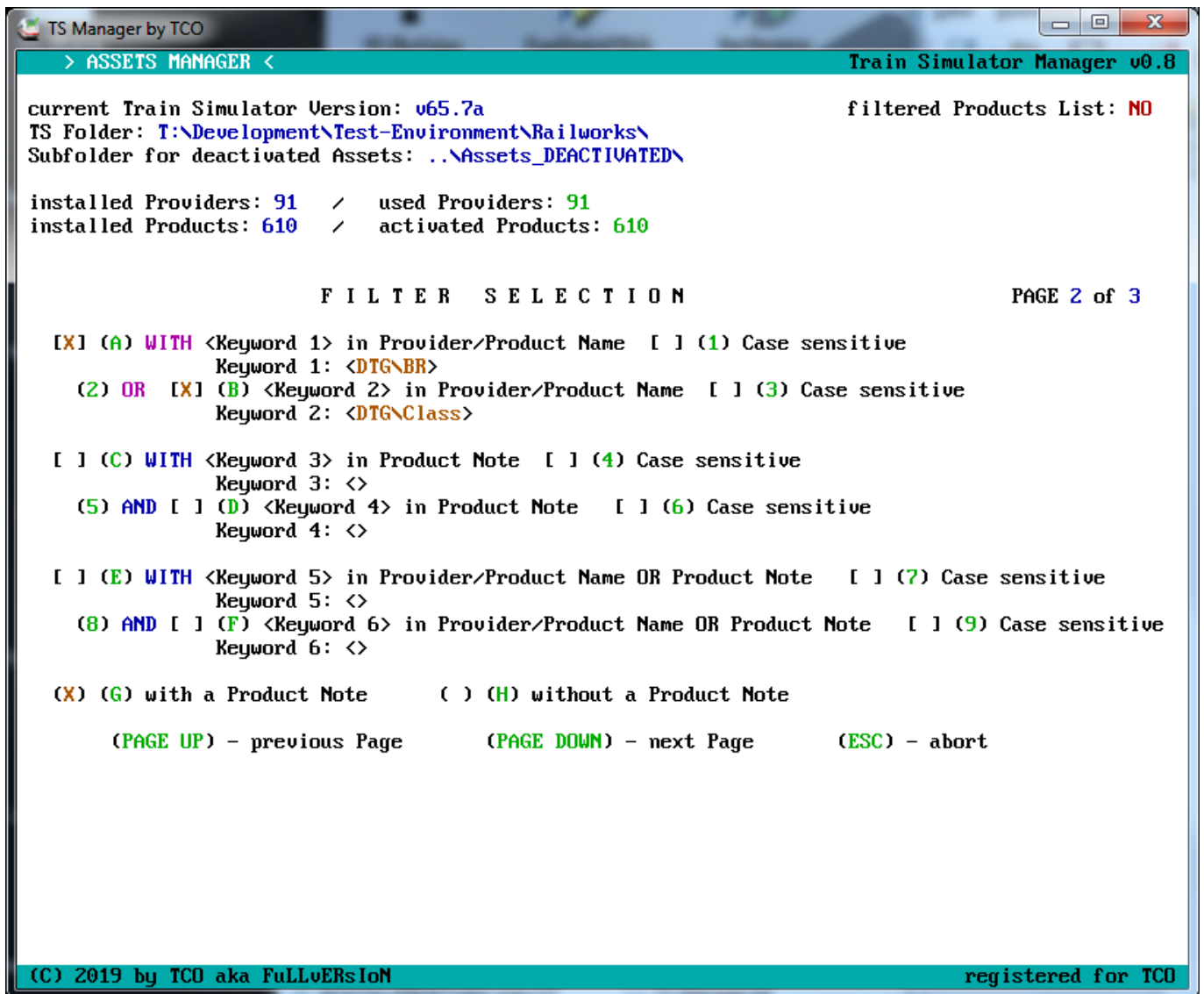


Figure 19: Filter Selection – logical combination of search terms

The following filters are available for filtering the lists:

Search terms

With search terms, the individual entries can be sorted out using search strings. Each **Keyword** contains exactly one search string, which is applied to the specified data field.

Two search terms can be logically linked together:

- "NOT" ... - first Keyword must NOT be included
- "WITH" ... - first Keyword MUST BE included
- "NOT" ... NOR ... - both Keywords must NOT be included
- "WITH" ... "AND" ... - both Keyword MUST BE included
- "WITH" ... "NOT" ... - first Keyword MUST BE included, second Keyword must NOT be included
- "WITH" ... "OR" ... - one of the two Keywords MUST BE included

To remove an existing search filter, delete its Keyword. This can best be achieved in the

input field by pressing **ESCAPE** and **ENTER**. Select „**Case sensitive**“ to be case-sensitive.

Hint: When creating a filtered product list, the search filters for the data field "Provider/Product Name" are combined in their function, so that the filter can be applied simultaneously to both data fields, provider name and product name.

Example: Providername is **DTG** and the product name is **BR442Pack01**, then the basis for the filter application is the data string „**DTG\BR442Pack01**“.

In the selection on **Figure 19** all products of „**DTG**“ are filtered out which start with „**BR**“ or „**Class**“. **Figure 20** shows the list of what it might look like after filtering.

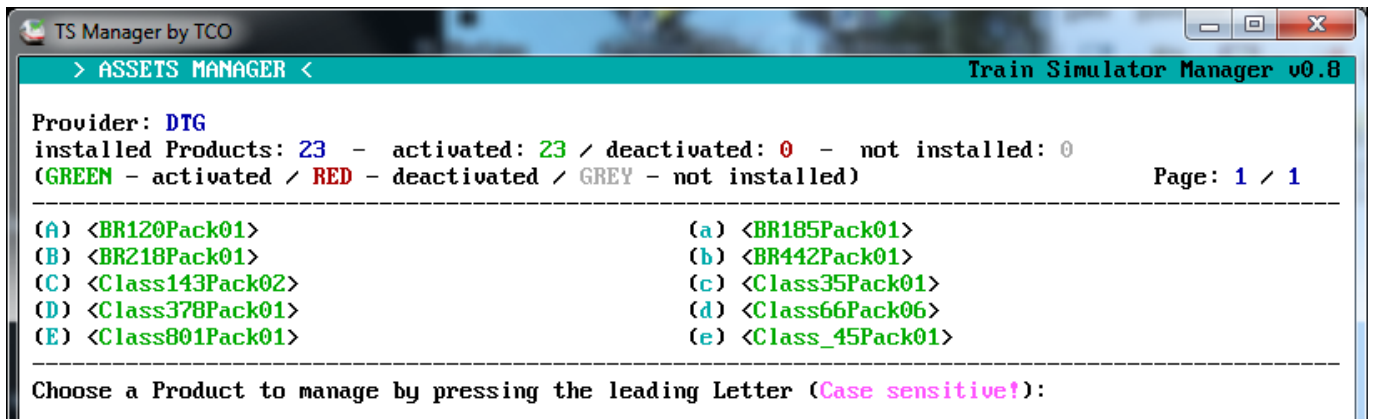


Figure 20: filtered list after the filter application from the example selection on **Figure 19**

Data field condition

If one of these options is selected, the condition must be met for a record to be included in the filtered list.

- | | |
|----------------------------|--|
| with custom Name | - Name must have been edited by the user |
| with no custom Name | - original name from Blueprint must be preserved |
| without a Name | - there must not be a name (NAME NOT FOUND) |
| with a ... Note | - record must contain a note |
| without a ... Note | - record must not contain a note (NOT SET) |

linked tags

Select any tags you want to set as a filter option. **GREEN** displayed tags are selected, **RED** are inactive.

You then choose a filter logic to apply a specific condition to the selected tags when you create the filtered list.

Key-Code **0** - **tagged with ONE selected Tags**

Only records that are linked to **exactly one** of the selected tags are taken over.

Key-Code **9** - **tagged with ONE OR MORE selected Tags**

Records to be included in the filtered list must be linked to at least **one or more** of the selected tags.

Key-Code * - **tagged with ALL selected Tags**

Only records that are linked to **all** selected tags will be included in the filtered list.

Key-Code - - **tagged with NO selected Tags**

Only records that are **not** linked to the selected tags will be included in the filtered list.

For more information about creating and managing tags, see chapter [2.8.1 Manage Tags](#).

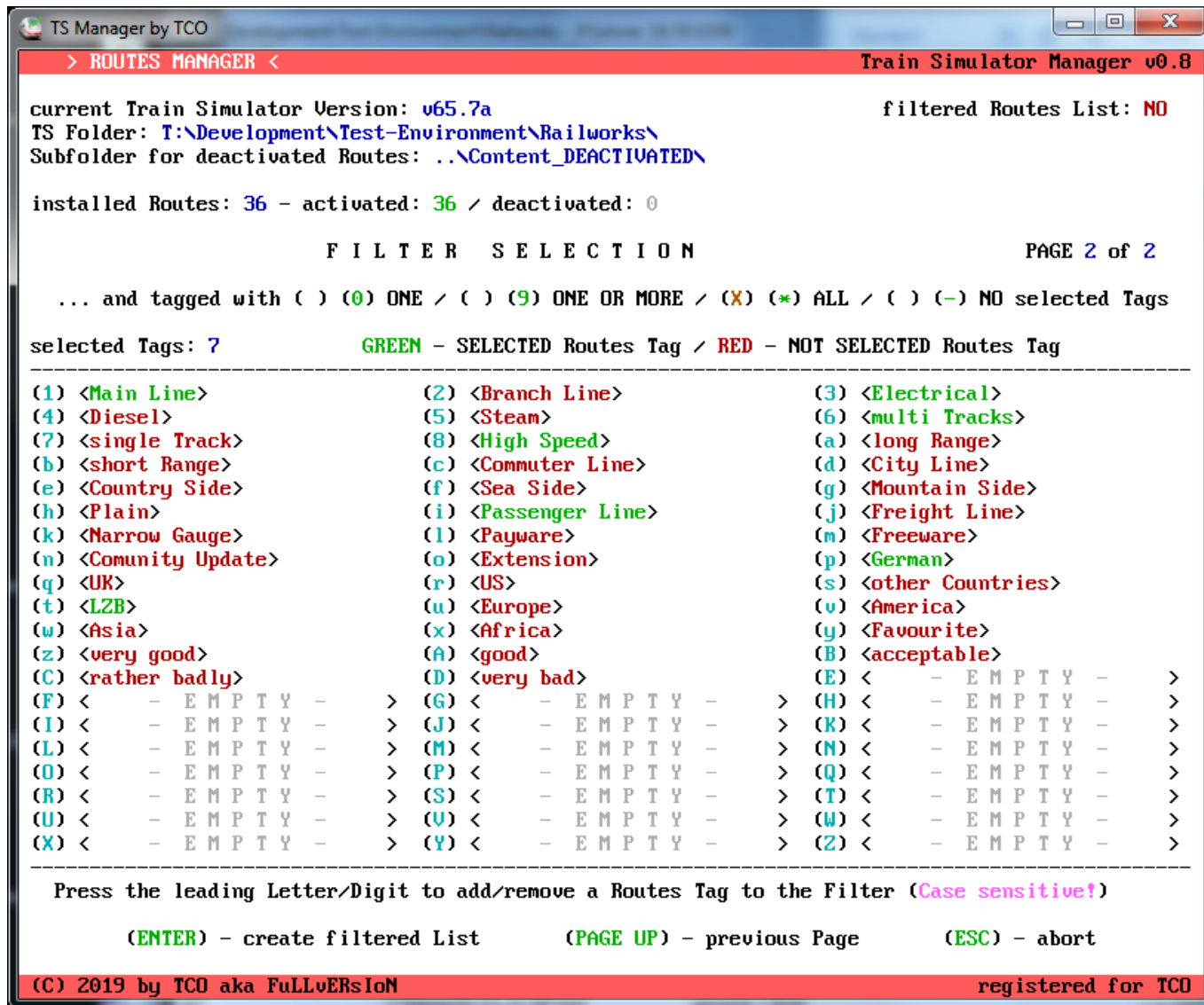


Figure 21: Selection of the linked tags in the Filter Selection module

Keep in mind that only records that pass through all selected filters are taken over to the filtered list. Therefore, consider exactly which data records you want to sort out and set the corresponding filters accordingly.

Once all filter settings have been made, the filtered list can be created with **ENTER**. You will

return to the menu and receive a brief information about the result. The created list is now selectable in other modules to perform certain functions with it.

2.8 Database Manager

With the **Database Manager** you can manage all functions of the database. You can reach the **Database Manager** from the menu of the **Assets Manager** (**manage Products**), the **Routes Manager** and the **Scenarios Manager**.

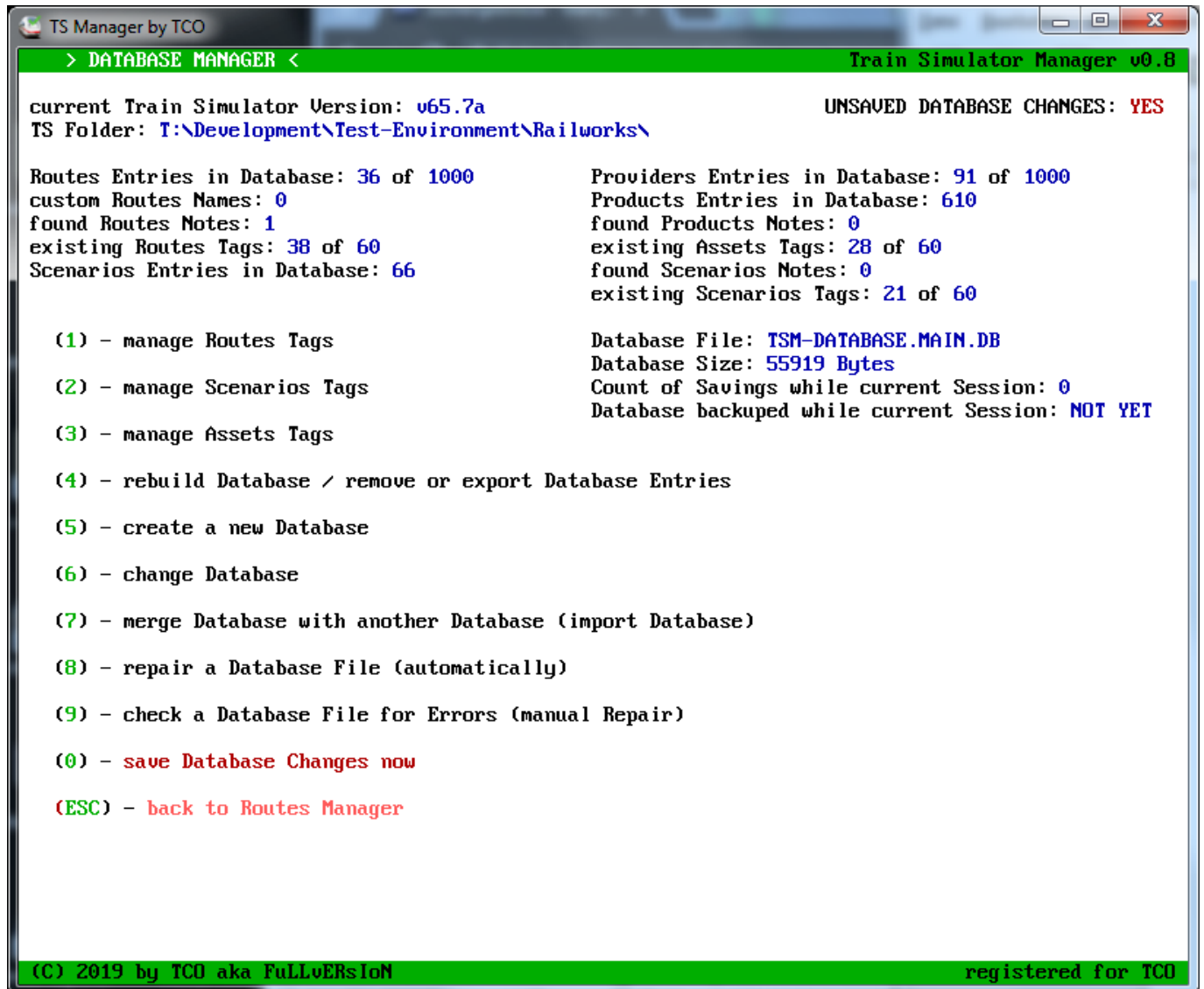


Figure 22: the menu of the Database Manager

In the **Database Manager Menu** you will find some useful information about the database in the upper area.

2.8.1 Manage Tags

Tags contain user-defined information that can be linked to individual content entries for later use in other modules. For example, linked tags work very well to filter certain content out of lists. Before creating your tag lists, you should think about how you want to logically build the information of each tag, and which benefit the linking and usage of these in the individual modules should ultimately bring.

There are three different types of tags - **Routes Tags**, **Scenarios Tags** and **Assets Tags**. These tags are used by the individual manager modules. Although all tags are managed in the same module, the call to edit each tag type is made through separate menu items in the **Database Manager Menu**, because each tag of a variety is stored in its own list.

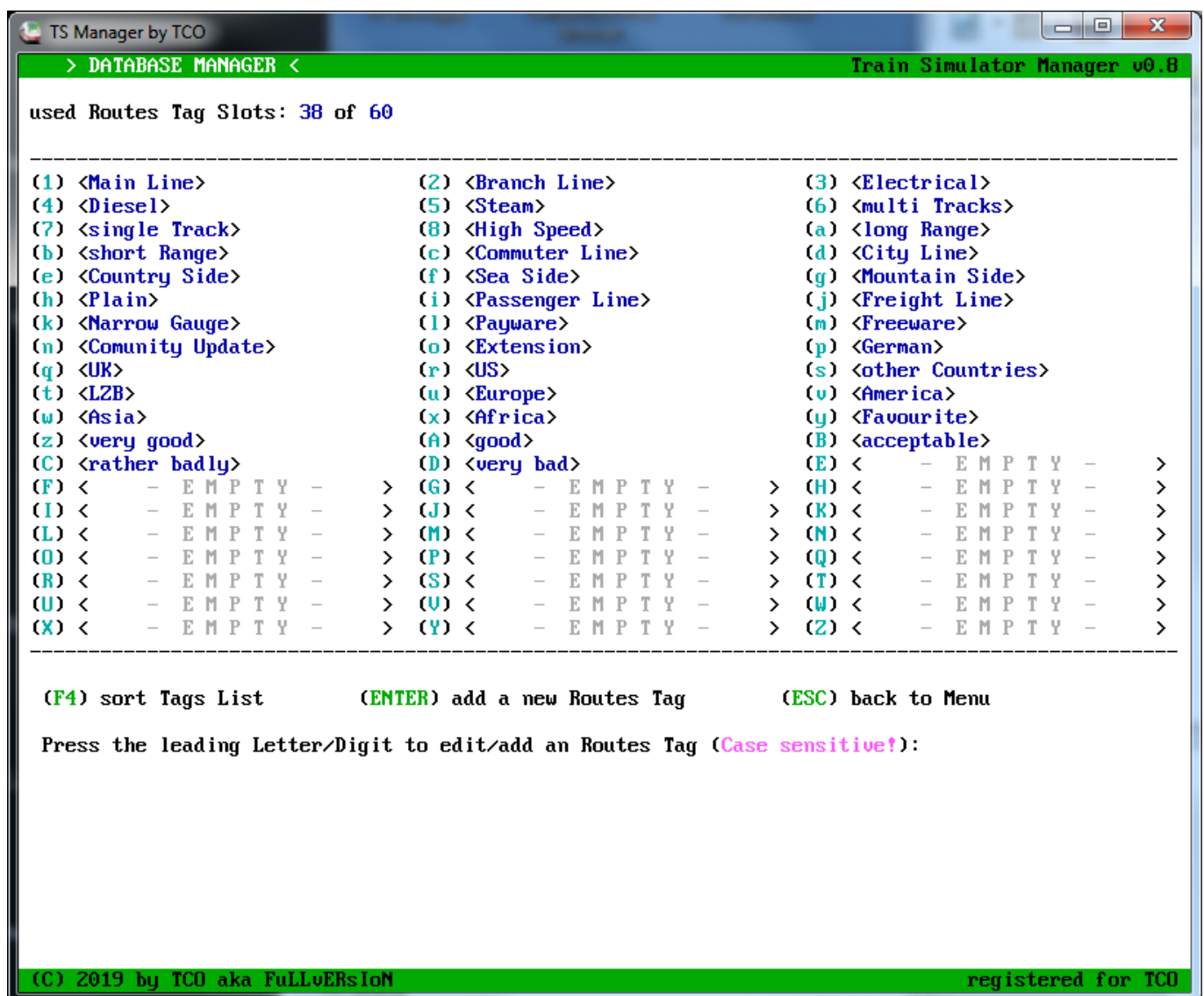


Figure 23: Management of Routes Tags

Before you can use tags in one of the modules of the TS Manager, you must first create them in the [Database Manager](#). The individual tags from a tags list can only be linked to certain content entries.

Assets Tags - can only be linked to products

Routes Tags - can only be linked to routes

Scenarios Tags - can only be linked to scenarios

After selecting one of the three menu options for managing a tag list from the [Database Manager Menu](#), a list view of the selected tags list appears.

You now have the following options:

[ESCAPE](#) returns you to the [Database Manager Menu](#).

With [ENTER](#) or the bracketed [keyboard code](#) in front of a **free tag slot**, you can create a new tag. A maximum of 60 tags can be created for each tag list.

With the bracketed [keyboard code](#) in front of an **occupied tag slot**, the associated tag can be edited or deleted.

Press twice [ESCAPE](#), while typing to restore the preselection. The following error message „**Tag already exists**“ can be safely ignored in this case.

Note that deleting a tag removes all links to that tag from all database entries.

With [F4](#), all entries in the tags list are sorted alphabetically. If you want to arrange the individual tags in a logical order, it is recommended to use a prefix for the tags. For example, you could use a letter or number code to sort the tags when sorting in a particular system.

Examples of the use of prefixes:

„AA - Mainline“ ; „AB - Branchline“ ; „BA - Electrical“ ; „BC - Diesel“ ; ...

or

„01 - default“ ; „02 - Payware“ ; „03 - Freeware“ ; „04 - driven“ ; ...

or

„A1 - Route“ ; „B1 - EMU“ ; „B2- DMU“ ; „B3 - Electric Loco“ ; ...

Alternatively, you can also specify the order of the tags by manually editing the database file. See also chapter [1.9.1 Manual editing of the database](#).

2.8.2 Delete or export database entries

This feature allows you to delete unneeded data entries from the database or to export currently unused data entries to another database file for later reuse.

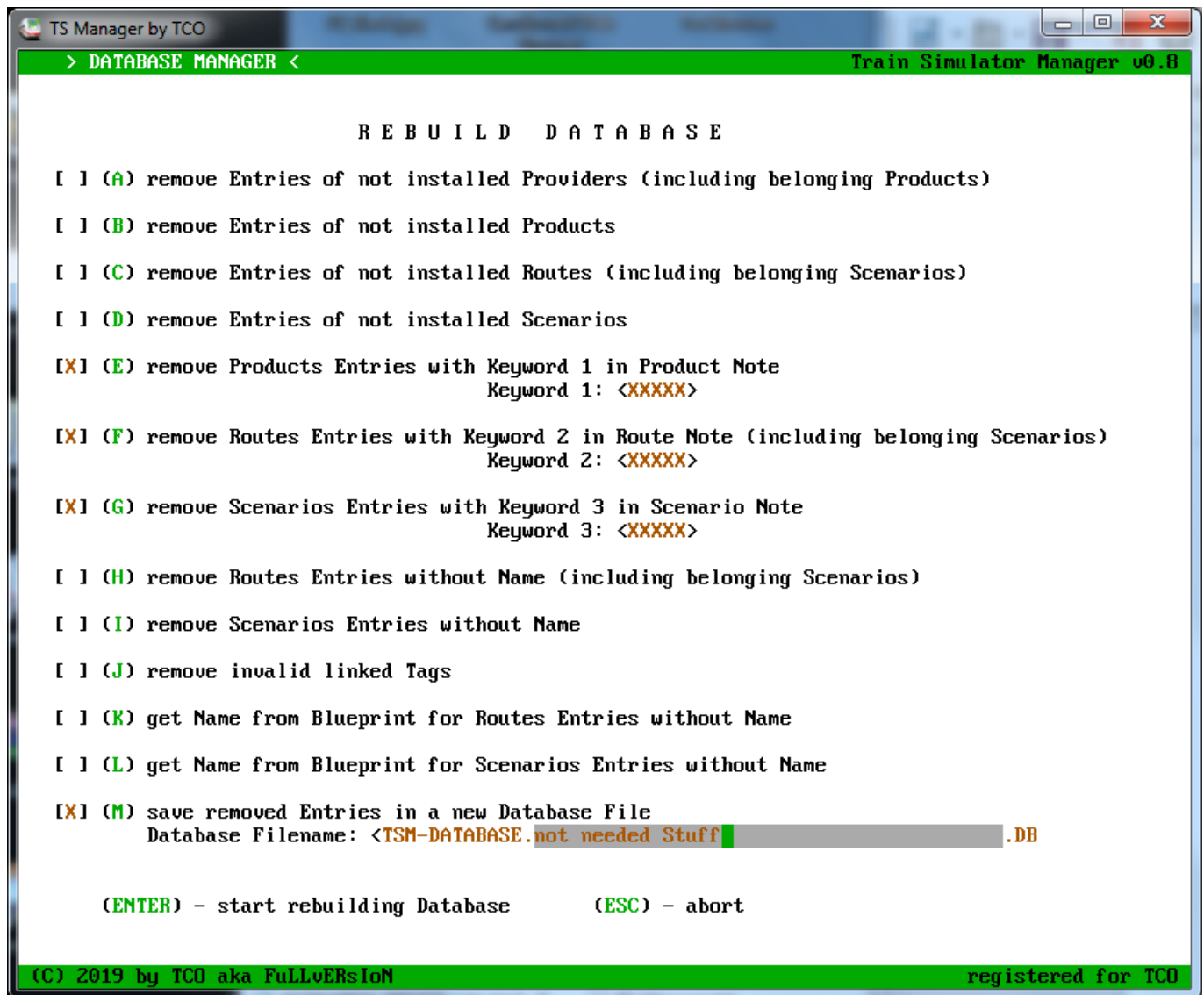


Figure 24: Selection of options in the module „Rebuild Database“

Select all the options you want to apply. Active options are marked by an „X“.

Key-Code **A** - **remove Entries of not installed Providers**

Key-Code **B** - **remove Entries of not installed Products**

Key-Code **C** - **remove Entries of not installed Routes**

Key-Code **D** - **remove Entries of not installed Scenarios**

Removes all entries of the selected content from the database that are not currently installed. Please note that when selecting providers and routes, their product entries or scenario entries are also deleted from the database.

Key-Code **E** - **remove Products Entries with Keyword in Product Note**

Key-Code **F** - **remove Routes Entries with Keyword in Route Note**

Key-Code **G** - **remove Scenarios Entries with Keyword in Scenario Note**

These options delete database entries of the selected content whose note contains a specific search term. This function can be used to detect and delete entries that have been previously marked with specific keywords. Mark entries for deletion by adding a character string of your choice to the note data field of desired content entries. Choose a unique term that you do not usually use, such as "XXXXX". You can also export data entries with this "flag" in combination with the option **M** to another database. The Note field can be edited with one of the Content Managers.

More information on managing content entries can be found in chapters [2.4.5 Manage products](#), [2.5.2 Manage routes](#) und [2.6.2 Manage scenarios](#).

The search query is **NOT CASE SENSITIVE!** For example, the keyword „XXXXX" also deletes data entries that include „xxxxx" in the note.

To remove an already set option, delete the associated keyword. This is best achieved in the input field by pressing **ESCAPE** and **ENTER**.

Key-Code **H** - **remove Routes Entries without Name**

Key-Code **I** - **remove Scenarios Entries without Name**

Select this option to delete data entries for routes and scenarios from the database for which no name could be determined from the Blueprint File. In list views, such entries are marked with „NAME NOT FOUND" in the name field.

Please note that when you select routes, their scenario entries are also deleted from the database.

Key-Code **J** - **remove invalid linked Tags**

This selection represents a database repair option that removes links to non-existent tags from all database entries.

Invalid links may result if the database file is edited inappropriately by the user. One can recognize such invalid links very well when managing entries in the individual Content Managers, if the number of linked tags does not match the tags of the selected list.

It is also recommended to use this option after a database has been repaired to prevent any problems with tagged lists.

Key-Code **K** - **get Name from Blueprint for Routes Entries without Name**

Key-Code **L** - **get Name from Blueprint for Scenarios Entries without Name**

Use this function if you want to retrieve the name from the blueprint file for all route and scenario entries for which no name exists in the database and whose list views are marked with „NAME NOT FOUND" in the name field. This is useful, for example, if you have forgotten to unpack the AP file in the route folder for one or more routes and

entries from this route or those routes and their scenarios have already been created without a name in the database because the blueprint files could not be found. After unpacking the AP file(s), the name fields of the data bank entries involved can now be updated with this option.

Key-Code **M** - **save removed Entries in a new Database File**

Saves all data entries to be deleted to a new database file so that they can be reused. This feature is useful if you have already spent a lot of time and effort customizing the entries you want to delete and want to reimport them later, or if you want to use the newly created database as the new main database.

To avoid misunderstandings: All entries selected for deletion by the individual options in this module will be removed from the database and written to the new database at the same time.

Once all the required options have been set, you can use **ENTER** to rebuild the database, removing all desired database entries and, if necessary, writing them to a new database file.

Deleted entries from the database are automatically added to the database again the next time the TS Manager is started, provided the associated TS content is installed and can be found and read by the TS Manager.

With **ESCAPE** you can abort the process and return to the **Database Manager Menu**.

During the operation you can track how many data entries or invalid tag links have been removed and whether name fields of entries could be updated.

Hint: The entire operation runs in the computer's memory and the "refreshed" database is not immediately written to the actual database file, but is stored at the earliest after acknowledgment of the summary, depending on the **Saving Options**. If you are not satisfied with the result, you can end the TS Manager with a mouse click on the **"X"** in the title bar of the program window without saving the database.

2.8.3 create a new database

Select this function to create a new empty database file. The old database is renamed and receives the addition "OLD_FROM_" along with a timestamp. Previously you have the option of transferring all created tag lists from the old database to the new database. Subsequently, the TS manager is automatically terminated. The next time the program starts, the new database is loaded. You can also switch back to the old database later.

Hint: The next time the TS Manager is started, entries are written to the new database for all

TS addons found. So you should uninstall all addons, which should not be included in the new database, or move them to directories from which the TS Manager does not read any data. For more information, see chapters [1.7 Settings File](#) und [2.2.3 Directories for deactivated content](#).

2.8.4 Switch database file

You can use the [menu option 6](#) in the [Database Manager Menu](#) to change the current main database. After selection, the desired database can be selected from a list of all databases found, which will be used by the TS Manager in the future. Please note, this selection is „Case sensitive!“

For a file to be recognized by the TS Manager as a database, it must be in the TS Manager directory with the prefix „*TSM-DATABASE.*“ and the file extension „*.DB*“.

After replacing the database file, the TS Manager must be restarted. The old database is renamed and receives the addition „*OLD_FROM_*“ and a timestamp.

2.8.5 Import database

This module gives you the option of importing entries into the current main database from another database file.

In the [Database Manager](#), select the option „[merge Database with another Database](#)“. Then you can select the desired database from which you want to import the entries from a list of all databases found. Please note, this selection is „Case sensitive!“

With the option "Overwrite existing Database Entries" you can determine whether entries from existing content in the current database should be updated with the data of the entries from the database to be imported.

It is strongly recommended to square the taglists of both databases before importing to avoid problems with exceeding the maximum possible number of tags of 60 pieces per list in advance.

You can keep track of which data has been imported on the evaluation screen:

first column

Shows the number of found entries of the individual lists from the database to be imported.

second column

Here you can see how many entries were taken from the other database.

third column

- updated** - number of existing entries whose data has been updated
- not updated** - count of existing entries with different data that were not transferred
- same Tags** - number of tags from the other database that already exist in the current database

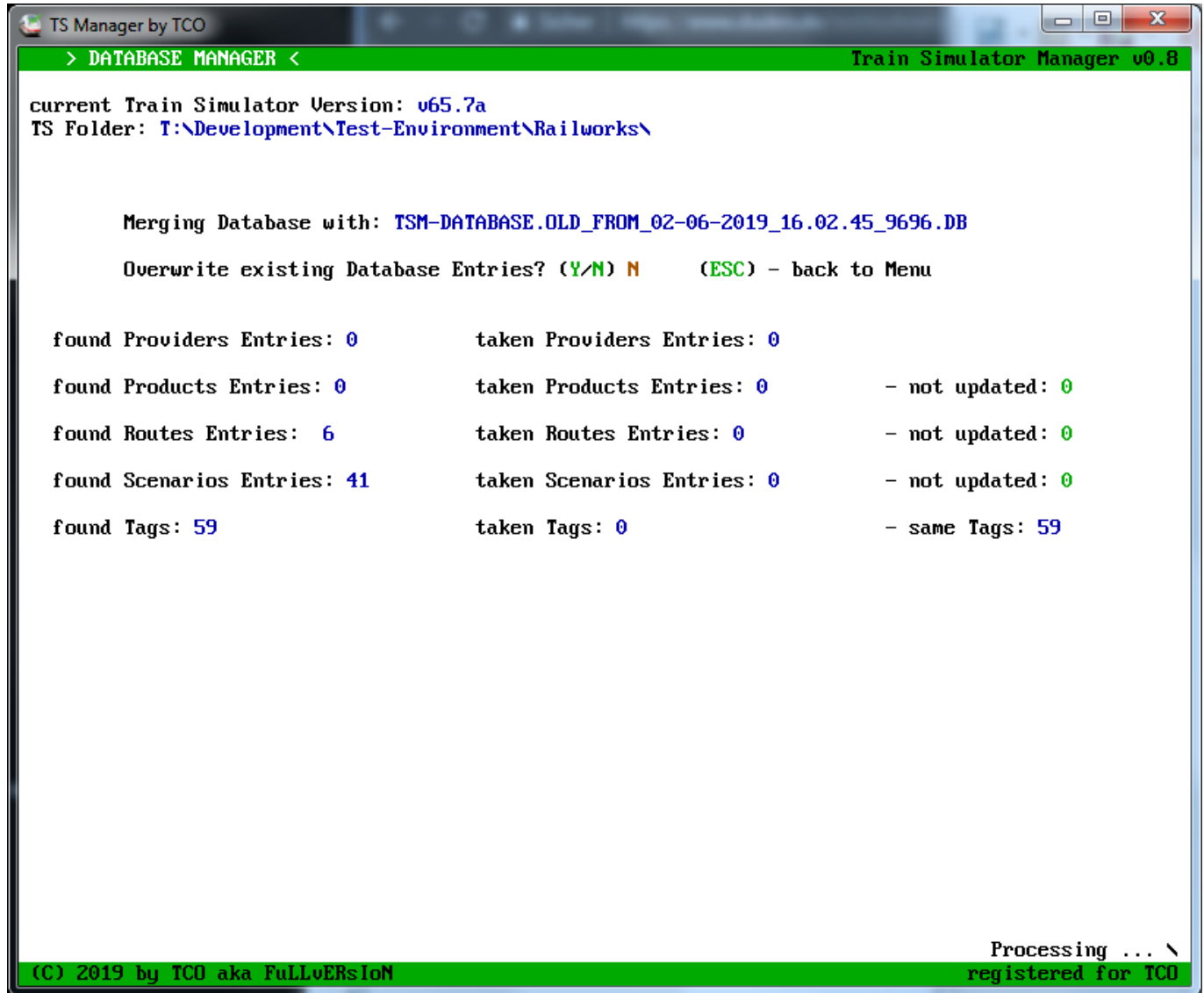


Figure 25: Module „merge Databases“

Warning: If some tags from the other database were not taken over because of the limit being exceeded, you should use the Database Manager's „rebuild Database“ module to check all linked tag lists with the „remove invalid linked Tags“ option enabled.

2.8.6 Repair database automatically

If a database is corrupt, the TS Manager will stop using it and flag it as bad by renaming the database file and adding the addition „*CORRUPT_*“ along with a timestamp.

The cause of a faulty database is usually a manual manipulation of the database file by the user. Please use only an ASCII text editor without text formatting to edit a database and ensure compliance with the given syntax of the individual entries in the database.

With the module „**repair a Database File**“ you can in most cases successfully have a faulty database automatically repaired. Depending on the degree of damage, individual data sets may be incomplete or contain incorrect data after a repair and, in some cases, complete entries may be missing. For unsatisfactory results, try to get a better result with a manual repair. After selecting this module in the **Database Manager Menu**, the desired database that you want to have repaired can be selected from the database list.

Options of automatic repair

mark repaired Entries

If this option is selected, all repaired entries in the database are marked with the repair tag „**(ERR)**“. This makes it easier to find them in a subsequent manual repair or when managing the entries in the TS Manager.

mark repaired Folder Data Fields

Also marks the repaired data fields provider name, product name, route ID, and scenario ID, which contain a directory name as a data value. Keep in mind that if you use this option, you should always edit the updated database manually, since even correctly restored entries contain a corrupted directory entry and therefore become unusable. If the option „**do not write obvious destroyed Entries**“ is not active, the data fields with directory names will always be marked with the repair tag!

do not write obvious destroyed Entries

Entries that are obviously irreparably destroyed and that are likely to contain incorrect data will not be kept. Enabling this option will result in less-corrupted data entries for heavily corrupted databases, significantly increasing the chance of getting a usable database after the repair process, which can then be easily re-used. However, keep in mind that even intact product and scenario entries may have to be discarded under certain circumstances, namely when destroyed, parent provider or route entries have been excluded.

You can follow the repair process on the evaluation screen and use the information to see how much the database was damaged and how many of the individual entries were restored or had to be removed.

```

TS Manager by TCO
> DATABASE MANAGER < Train Simulator Manager v0.8

Repairing of the Database File: TSM-DATABASE.---MAIN---.DB

[ ] (1) mark repaired Entries
  [ ] (2) mark repaired Folder Data Fields (Provider/Product Names, Route/Scenario Keys)
  [ ] (3) do not write obvious destroyed Entries

found Providers Entries: 91      kept Providers Entries: 91      - repaired: 0
found Products Entries: 610     kept Products Entries: 610     - repaired: 0
found Routes Entries: 36        kept Routes Entries: 36        - repaired: 0
found Scenarios Entries: 66     kept Scenarios Entries: 66     - repaired: 1
found/kept Tags: 87 / 87        removed linked Tags: 0         read Lines: 3138

Repaired Database saved to File: TSM-DATABASE.REPAIRED_AT_02-07-2019_12.56.01_6947.DB

Repairing of the Database completed - occurred Errors: 1

====> It is strictly recommended to rebuild the Database
       with the Option "REMOVE INVALID LINKED TAGS".

NOTE: If the Database was heavily damaged there is a Risk that some Entries are messed up.
Fixed Entries are flagged with an ending Space in the Database File so you can look for
them with the Search String "\> " while using an ASCII Text Editor.

- press any Key to return to Menu -

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```

Figure 26: Evaluation screen of the automatic database repair

Usage of repair marks

Each line from the database that is not identical to the read line when writing to the repaired database file and thus contains a faulty syntax is automatically marked with a space at the end of the line. Although this space is not syntax compliant, it does not interfere with the loading of the database and is removed the next time it is saved, but can be used by the user to locate this repaired line in an ASCII text editor. Since every error-free database entry ends with the closing tag ">", the marked lines can easily be found with the search string "> " in order to check the repaired entry and, if necessary, to correct it manually.

In addition, repaired entries can be marked with the repair tag ",(ERR).", which essentially serves the same purpose, but also assume the function as a wildcard in erroneous data fields. Should an entry with a directory name be empty, the repair tag is used together with a consecutive error number to compensate the actually essential directory name. The user then has the opportunity to reconstruct the correct directory name of the data field. The user can control the use of this marking with the two options „**mark repaired Entries**“ and „**do not**

write obvious destroyed Entries“.

The repaired database receives the addition „*REPAIRED_AT_*“ and a timestamp, leaving the original, damaged database unchanged.

Basically, you should after each database repair and possibly switching to that database, even if this could be completed successfully, search the individual content lists for conspicuous „uninstalled Content“ in order to detect any erroneous entries and correct.

2.8.7 Check database / repair manually

This module gives the user the possibility to check a database for errors and if necessary to repair it independently with the support of the TS Manager.

First select the database you want to check or repair from the database list. Please note, this selection is „Case sensitive!“

Press **ENTER** to start checking the database. If a faulty entry is found by the program, the process is stopped and you have the opportunity to correct the error. To do this, you must load the same database file in an ASCII text editor and jump to the specified line.

The TS Manager will give you suggestions for using the syntax that matches the current situation. Take a look at the erroneous entry and, if necessary, the entries before and after, and decide how to proceed. It is strongly recommended to create a backup before editing the database.

Possible options:

- D** - copies the file name of the database with complete path to the clipboard
- then you can insert the file name in the **Open dialog of the text editor** to open the database for editing
- L** - copies the erroneous entry to the clipboard in order to use it as a search term in the text editor
- S** - copies a syntax proposal to the clipboard, which can be used as a template
- Keep in mind that in some situations there are different possibilities and the suggested proposal does not necessarily correspond to the current circumstances!
- ENTER** - After correcting the erroneous entry and **SAVING THE DATABASE IN THE TEXT EDITOR**, you can use the **Enter key** to start another test run.
- ESCAPE** - cancels the manual repair and returns to the menu

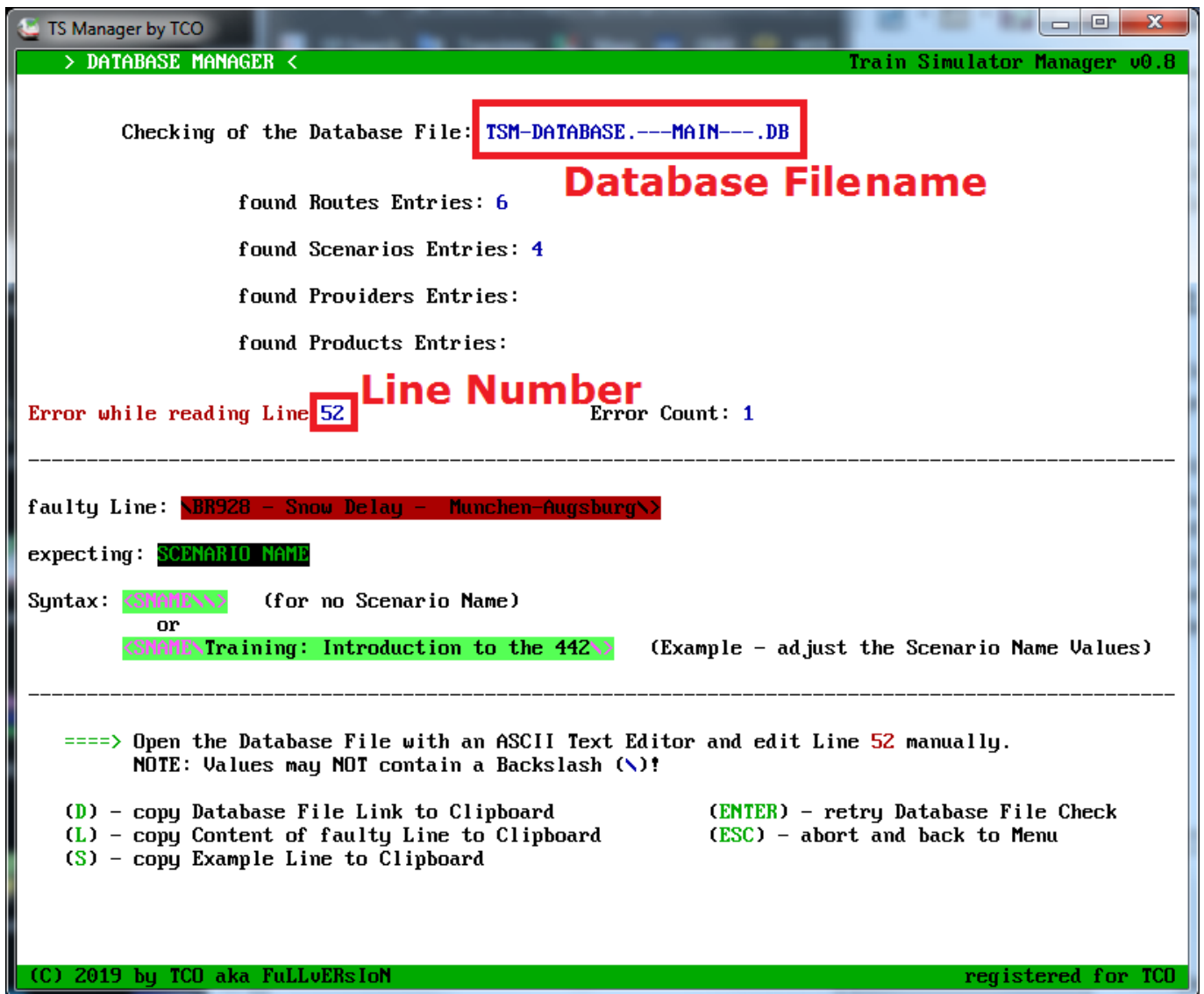


Figure 27: manual database repair – TS Manager

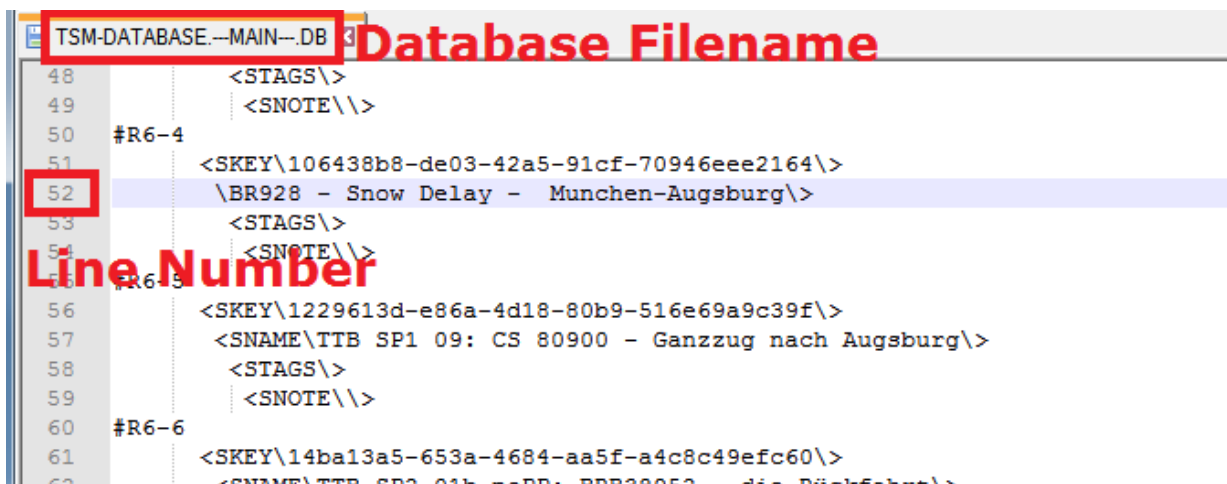


Figure 28: manual database repair – Text Editor

In the example from **Figures 27 & 28** it can be clearly seen that the incorrect entry is a scenario name and the start tag "<SNAME" is completely missing.

After correcting the error, save the database in the text editor and check the database for errors again with **ENTER**. If another error occurs, the TS Manager will interrupt the operation again so that you have the opportunity to correct the erroneous entry. It is therefore best to leave the text editor with the already loaded database open so that you do not have to constantly reload it in case of further errors. After the correction, start another test run. Repeat this procedure until the database is healthy.

2.8.8 Save database manually

You can save the database manually at any time by using **menu selection 0** in the Database Manager menu. You can recognize by the red text color of the menu selection text or in the upper info area of the **Database Manager Menu** whether there are unsaved changes to the database.

2.9 Presets

Presets are basically stored lists of certain TS content that can be loaded to determine the state of the included addons. There are different types of presets, which are explained below.

Assets Presets contain a list of providers and/or products, depending on which **Assets Manager Mode** the preset was created in. An Assets Preset of „**simple Mode**“ contains only provider entries. In contrast, an Asset Preset created in „**extended Mode**“ contains both provider and product entries. All Assets Presets are fully compatible with both **Assets Manager Modes** regardless of which **Assets Manager Mode** they were created in. So you can also load an Assets Preset created in „**simple Mode**“ in „**extended Mode**“, but all products of the single providers stored in the Asset Preset will be used. If, on the other hand, you load an Assets Preset created in „**extended Mode**“ in „**simple Mode**“, only the providers are used.

For example, **Assets Presets** can be used to take a "screenshot" of the current "Assets Folder," which can later be restored by loading the preset. However, asset lists can also be saved as a preset, which can be additionally activated or deactivated, or also act as a kind of "screenshot" of the "assets folder".

Routes Presets contain a list of routes and can be used, for example, to take a "screenshot" of the current "Content\Routes Folder", which can later be restored by loading the preset. It is also possible to save route lists as a preset, which can be additionally activated or deactivated or also act as a "screenshot" of the "Content\Routes Folder". Note, however, that the status of the individual scenarios of the routes is not influenced by Routes Presets!

TS Presets can include lists of providers, products, and routes. They are actually a mix of **Assets Presets** and **Routes Presets**, and can be used, for example, to make a "screenshot" of the TS content, which can later be restored by loading the preset. They can also be additionally activated or deactivated. Note, however, that the status of each scenario of the routes is not affected by TS Presets!

Scenarios Presets contain a list of scenarios of a single route and can be used, for example, to take a "screenshot" of the current "Scenarios Folder" of a route that can later be restored by loading the preset. However, scenario lists can also be saved as a preset, which can be additionally activated or deactivated or also act as a "screenshot" of the "Scenarios Folder" of a route.

2.9.1 Manage Presets

The administration of the individual presets is done via different menus, which can be called from the individual content managers. Some modules have functions for creating presets, which can then be accessed directly in the respective module by selecting an option.

create Presets

In each „manage Presets“ menu, you can use menu item 1 „save all momentary activated ... as a ... Preset“ to create a preset whose content depends on the selected „manage Presets“ menu. For example, if you go to the „manage TS Presets“ menu, all activated assets and routes are stored in a TS preset.

You also have the option to save a list as a preset in certain program modules.

To create a preset, give a description for the preset, which then serves as part of the preset file name.

The file name of a preset is composed as follows:

(ASSTES_PRESET).Preset-description.LST

or

(ROUTES_PRESET).Preset-description .LST

or

(TS_PRESET).Preset-description .LST

or

(SCENARIOS_PRESET).Preset-description .LST

manage Presets

The TS Manager can only manage presets stored in the TS Manager directory. To manage a preset file, you must first select the desired preset from a file list. In such a preset list, there are always presets of a kind that converge to the currently selected „manage Presets“-menu.

Please note, this selection is „Case sensitive!“

Menu options 3 and 4 allow you to delete or rename presets. Alternatively, the presets can also be deleted or renamed with an external file manager. However, it is important to note that the preset prefix and file extension are preserved, otherwise the file will not be recognized by the TS Manager as a preset file.

load a Preset

When loading a preset, all TS content stored in the preset file will be activated. Depending on the preset, these can be providers or products, routes and scenarios.

Once you have selected the preset file for loading, you can then decide how to load the preset.

- **absolute activation:** only the content of the selected preset will be activated at the end of the respective associated TS content
- **cumulative activation:** the content of the selected preset is activated in addition to the already activated TS content

By using the drag & drop function, a preset can already be loaded when starting the TS Manager. Read chapter [1.6.1 Drag and Drop functions](#).

You can also load several presets in sequence. Starting with the second preset, these should be loaded cumulatively, otherwise the effect of the previously loaded presets will be lost. Particularly easy and effective is the loading of several presets from a batch script. More information can be found in chapter [1.6.2 Use in Batch Script](#).

If you would like to load a Scenarios Preset and use its scenarios in the Train Simulator, make sure that the corresponding route is also activated, since the status of the individual scenarios is subordinate to the corresponding route.

3 Support

The developer only offers limited support for the TS Manager. Program errors, suggestions for improvement, constructive criticism or other questions regarding the tool that are not answered by the documentation can be communicated via the following e-mail address:

ts-manager@web.de

The goal is to continuously develop the tool and, if necessary, to add new functions. If you would like to support this project, you can make a donation via the following link or QR code.

Donation link:

[https://www.paypal.com/cgi-bin/webscr?cmd= s-xclick&hosted button id=GLRMMLKK4Q5XU&source=url](https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted_button_id=GLRMMLKK4Q5XU&source=url)



If you donate at least **8,- Euro**, there is the possibility to personalize the TS Manager by a registration, whereby in addition an unrestricted use of the tool under consideration of the disclaimer of liability is guaranteed by the developer. The Paypal name and Paypal email address will be used to personalize the tool during registration in the TS Manager. So make sure that this data is transmitted during the donation.

3. 1 Program restrictions

Closing TS Manager by a mouse click

With a mouse click on the "X" in the title bar of the program window you end the TS Manager immediately without further program interrogation. If the database contains unsaved changes, they will be irretrievably lost!

Keyboard input issue

Due to a technical inadequacy, there is a problem with keystrokes of third-key assignments of a key. Affected are the following, actually supported by the TS Manager, characters: {} [] \ @ ~ |

If you want to use one of these characters, the following procedure is recommended:

- Write the character you want into another text-based Windows app, such as the Windows Notepad
- mark the character and copy it with **CTRL+C** into the Windows clipboard
- now switch to the TS Manager and insert with **CTRL+V** the character at the desired position in the input line

no support for special characters

The TS Manager supports all characters of the Latin alphabet, but no special characters or characters from other languages!

The use of the TS Manager is designed exclusively for the needs of the English language.

4 Disclaimer

Please note that the use of this software is at your own risk. Liability claims for any and all damages, whether material or immaterial, caused by the use or disuse of the information and software provided or by the use of incorrect and incomplete information and software are excluded. Also, there is no guarantee for the topicality, correctness, completeness or quality of the software provided.

Despite careful testing of the software by the developer, errors can not be completely ruled out.

The software may only be used for its intended purpose.

Manipulation or use of the program code or parts thereof is prohibited.

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