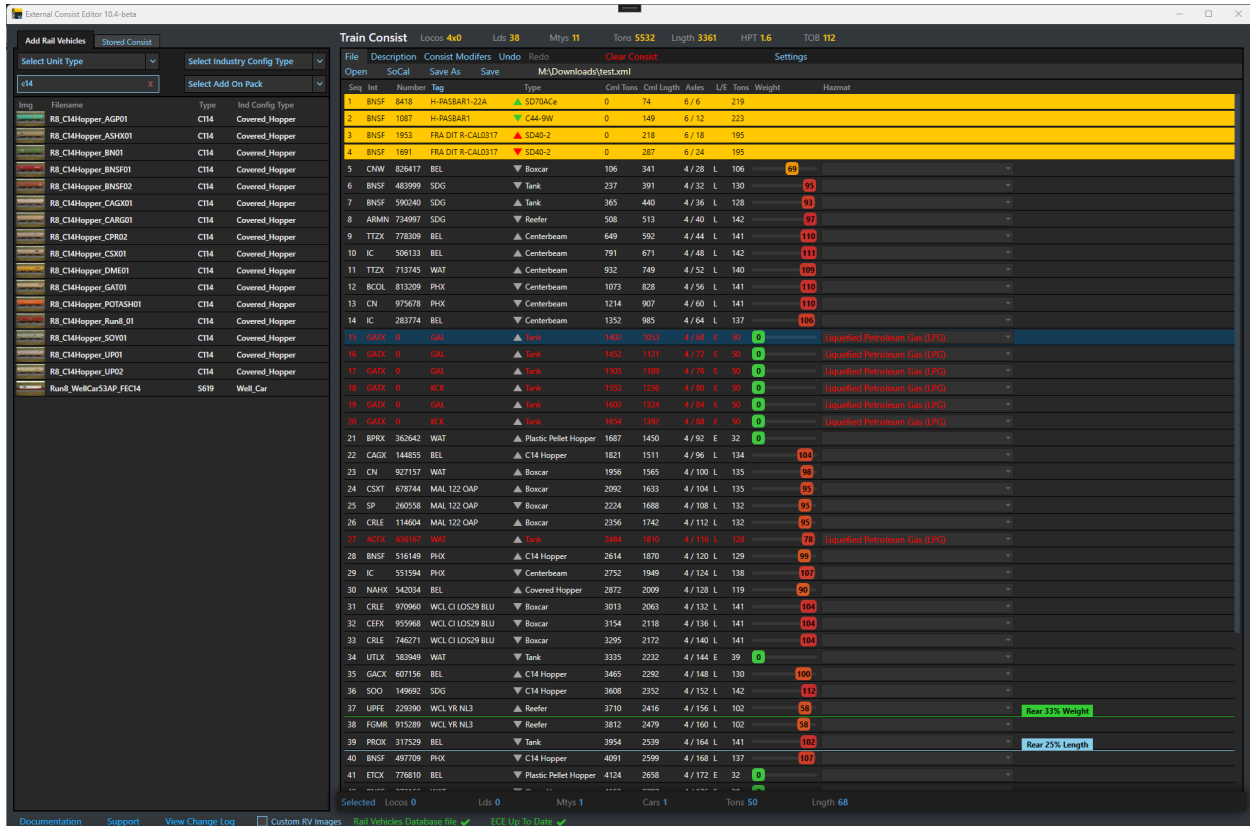


External Consist Editor User Guide 10.0

External Consist Editor (ECE) is a third-party tool designed to make building and editing train files easier for Run 8 Train Simulator V3. Taking the time to read this user guide and understand the many features of ECE will ensure you have the best experience.



For support, please email RailCoderHelp@Gmail.com

Please do not contact Run 8 Developers with any concerns about ECE.

ABOUT EXTERNAL CONSIST EDITOR 10

External Consist Editor started out as a simple idea due to a limitation in Run 8 V3's Train-Maker-Upper (TMU) where there was no drag and drop functionality like V2 had.

This idea has evolved and over the years ECE has become essential in the Run 8 community for building trains. After I noticed some shortcomings of the predecessor version and while my programming skills evolved, I decided to start from scratch and completely rebuild External Consist Editor from the ground up. You'll notice ECE 10 is a lot smoother, faster, visually appealing and loaded with many new features as well as old features that are just better implemented. Every single rail vehicle has been resurveyed to make the train totals insanely precise. It's all just mobetta. It's so much better that I skipped from version 5.3 straight to 10.

Thank you everyone for your interest and support over the years. I'm glad to provide the community with necessary a tool. Enjoy!

Kyler Briskey

AUTOMATIC DOWNLOADS

Whenever ECE is opened, it will automatically check for a new version of ECE and offer it to the user. Although you may decline the update, it's strongly recommended to always choose to accept and install the newest version of ECE.

ECE will also check for a new rail vehicles database file and download it for immediate use.

The *db_railvehicles.db* file is stored in the users *AppData/Local/Railcoder* folder.

Type **%LOCALAPPDATA%** into your Windows Explorer, then navigate to the Railcoder folder if you need to access this folder.

OPENING EXTERNAL CONSIST EDITOR

Previous versions of ECE required it to be opened in Administrator Mode for some features to work. **ECE 10 does not require this.** Actually, it's recommended to NOT run ECE 10 in Administrator Mode or some features may not work.

CUSTOM RV IMAGES

Users can use their own images of rail vehicles if they want. This is great if you have a reskin/repaint of a particular rail vehicle.

Inside the ECE directory, you'll notice a folder called **CustomRVImages**. Screenshots of your rail vehicles may be placed here.

To Use Custom RV Images

- Only 1 image per model can be used.
- Image must be named **exactly** as it appears in ECE. (With underscores)
- .PNG filename only
- Although any image resolution should work, it's recommended to use 500x281 for best results.

Once the above is done, open ECE and make sure **Custom RV Images** at the bottom is checked. Unchecking this option will display the default RV Images for all rail vehicles.

ADDING RAIL VEHICLES

There are 4 different ways to filter the available rail vehicles

- Unit Type (Just like Run 8's TMU)
- Industry Config Type
- Add On Pack
- **Smart Search** Textbox - Can filter by
 - Filename
 - Car Code
 - Common Name
 - Add On Pack
 - Industry Config
 - Road Initial

Example 1) Typing "dttx" will populate any rail vehicles with DTTX in the filename or as its car Initial.








Example 2) Typing "double" would bring up all double stack intermodal cars.

Hovering over the thumbnail of the rail vehicle will display a larger image and more information about the rail vehicle.

Img	Filename	Type	Ind Config Type
	R8_WellCar40_DTTX02	S110	Well_Car
	R8_WellCar40_DTTX03	S113	Well_Car
	R8_WellCar40_DTTX04	S113	Well_Car
	R8_WellCar40_DTTX05	S110	Well_Car
	R8_WellCar40_DTTX06	S110	Well_Car
	R8_WellCar40_DTTX07	S110	Well_Car
	R8_WellCar40_DTTX09	S110	Well_Car
	R8_WellCar40_DTTX10	S113	Well_Car
	R8_WellCar40_DTTX11	S113	Well_Car
	R8_WellCar40_DTTX12	S110	Well_Car
	R8_WellCar40_DTTX13	S110	Well_Car
	R8_WellCar40_DTTX14	S110	Well_Car
	R8_WellCar40_DTTX16	S110	Well_Car
	R8_WellCar40_DTTX17	S113	Well_Car
	R8_WellCar40_DTTX18	S113	Well_Car
	R8_WellCar40_DTTX19	S110	Well_Car
	R8_WellCar40_DTTX20	S110	Well_Car
	R8_WellCar40_DTTX21	S110	Well_Car
	R8_WellCar40_DTTX23	S110	Well_Car
	R8_WellCar40_DTTX24	S113	Well_Car
	R8_WellCar40_DTTX25	S113	Well_Car
	R8_WellCar40_DTTX26	S110	Well_Car
	R8_WellCar40_DTTX27	S110	Well_Car
	R8_WellCar40_DTTX28	S110	Well_Car
	Run8_WellCar53_DTTX01	S610	Well_Car
	Run8_WellCar53_DTTX02	S619	Well_Car
	Run8_WellCar53_DTTX03	S610	Well_Car
	Run8_WellCar53_DTTX04	S619	Well_Car
	Run8_WellCar53_DTTX07	S619	Well_Car
	Run8_WellCar53_DTTX08	S619	Well_Car
	Run8_WellCar53_DTTX09	S610	Well_Car
	Run8_WellCar53_DTTX10	S610	Well_Car
	Run8_WellCar53_DTTX11	S610	Well_Car

After you find some rail vehicles you want to add to your Train Consist, there are a few ways you can add them

- **Drag and Drop** - Drag and drop them into the Train Consist. An insert line will appear to where they will insert.
- **Arrow Keys** - Using the RIGHT arrow key will add the selected rail vehicles to the very bottom of the Train Consist. The LEFT arrow will remove the last rail vehicle from the Train Consist. Holding either arrow will quickly add or remove, which can be used as a way to add a bulk amount of rail vehicles.
- **Scroll Bulk Add** - Holding down LEFT_SHIFT and Scrolling up on your mouse will make the bulk add number appear. If you want to add 50 of the same rail vehicle, scroll until the number reaches 50. Then drag and drop the rail vehicle to the Train Consist.

Img	Filename	Type	Ind	Config	Type
	R8_Boxcar_Grnv10kcuft_NADX01	A806			Box_Autoparts
	R8_Boxcar_Grnv10kcuft_SSW01	1006			Box_Autoparts
	R8_Bulkhead_Thrall_TTJX01	F253			Bulkhead_Flat
	R8_Bulkhead_Thrall_TTPX01	F253			Bulkhead_Flat
	R8_Bulkhead_Thrall_TTPX02	F253			Bulkhead_Flat
	R8_Reefer_PCF_FGMR01	R470			Refrigerator_Car
	R8_ShovePlatform_BNSF01	M930			

Note: Only 1 rail vehicle can be added at a time with this feature.

i Any newly added rail vehicles will have a unit number of 0.

STORED CONSIST

The Stored Consist tab allows you to load an existing train file that you can use to move cars to the Train Consist. The Stored Consist tab cannot be modified in any way as it's designed to only copy rail vehicles from it to the Train Consist.

Example use case: Let's say there's a block of cars you like to add on various trains that you build. You can build this block of cars with ECE, save it as "BlockOfCarsILikeToAddOnVariousTrains" (or something more descriptive. When you want to use some or all of the cars from that block, load it into the Stored Consist, and move what you want over to the Train Consist.

TRAIN CONSIST

The Train Consist is the main focus of ECE. It will display a lot of information necessary to the train you are building. You can also modify the Train Consist directly. The better you understand these functionalities, the better your ECE experience will be.

Here are some key functionalities of the Train Consist.

- **Type column** - Displays the Type, Common Name or Filename rail vehicle.
 - Displays an UP or DOWN triangle, indicating which way the rail vehicle is facing.
 - Locomotives will display green if in RUN or a red if ISOLATED. To isolate/run a locomotive, hold ALT and double click the locomotive.
 - Hovering over the type text of each rail vehicle will display an image and more information about that rail vehicle.
- **Tag column** - Displays the tag of the rail vehicle.
 - To modify the tag of a rail vehicle, double-click the tag text.
 - You can also modify the tags of all selected rail vehicles simultaneously by holding SHIFT or CTRL, then double-clicking the tag text. Press ENTER on the keyboard to commit the changes or ESC to cancel.
 - You'll notice the Tag column header is the only one that is blue. This indicates you can click the **Tag** header which sorts the Train Consist by Tag text Ascending. Click it a second time to sort it by Descending. This was one of those happy accidents users of older versions of ECE found useful.
- **Weight Sliders** - Moving the slider will adjust the slider of each selected rail vehicle. The number inside the slider thumb is the load weight of the rail vehicle. There's a color scalar from green to red based on the percentage weight of the rail vehicle, just like Run 8 does.
- **Hazmat** - The hazmat column allows you to select which hazmat placard you want to apply to a car. Select which cars you want to add a placard to, click the hazmat drop down and select a hazmat placard. This will apply to all selected cars turning the row text red. The common name of the hazmat placard will display in the drop down. Hovering over this will display more information about the selected hazmat.

Rail Vehicle Direction - Right-clicking rail vehicles will reverse or forward them. If multiple rail vehicles are selected, their direction will be synced.

Move Columns - You can move columns of the Train Consist around. Just click and drag the column header to its desired new location. Note: This will reset after restarting ECE.

Selected Totals - Appears at the bottom of the Train Consist anytime the selection of rail vehicles change. Useful for quickly figuring out how long or heavy a specific block of cars are.

TRAIN CONSIST MENU BUTTONS

The buttons above the Train Consist is what you'll use to load, save, and modify the Train Consist.

- **File**
 - **Open** - Opens dialog box to select and open an existing train file.
 - **Region Select** - Shows the current region the train file will save as. Click to change which region it will save as.
 - **Save As** - Opens a Dialog box to save the Train Consist as a new train file.
 - **Save** - Saves the current train file, overriding if necessary. If a file path is not set, it will prompt to select where to save the train file.
 - **File Path / Filename** - Shows the filename or full file path of the currently loaded train file. Click to open to this folder location.
- **Description** - Displays a textbox to type a description for your train file. When your train is saved, ECE will automatically append *Built Using External Consist Editor* info.
- **Consist Modifiers** - Various tools to modify cars in the Train Consist. The leftmost text will indicate if *All Cars* or *Selected Cars* will be modified. Locomotives in the Train Consist will be unaffected. To deselect all rail vehicles in the Train Consist, press the ESC key.
- **Undo** and **Redo** - Undos or Redos adding, removing, or moving rail vehicles in the Train Consist, for now. You can also use **Ctrl + Z** or **Ctrl + Y** to Undo or Redo, respectively.

TRAIN CONSIST SETTINGS

One of the biggest features of ECE 10 is the ability to customize your experience with Train Consist Settings. This sub menu is accessible in the top right above the Train Consist.

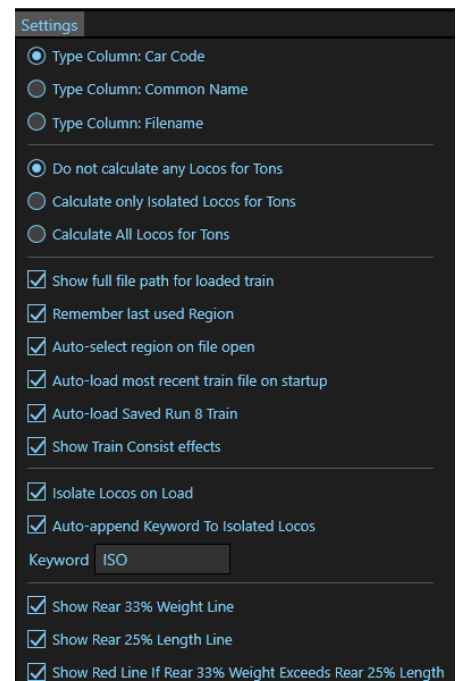
All of these settings apply in real time and are remembered each time you start ECE.

Type Column - Change what is displayed under the Type column

- Car Code
- Common Name
- Filename

Locomotive Weight Calculations - Change how locomotives weights are calculated

- Do not calculate any Locos for Tons
- Calculate only Isolated Locos for Tons
- Calculate All Locos for Tons



Show full file path for loaded train - Shows the full file path for the loaded train in the Train Consist. If unchecked, it will just show the filename.

Remember last used Region - Remember the last used Region and apply it on startup.

i This may be overridden by other settings.

Auto-select region on file open - Have ECE automatically set the Region based on the loaded file path. Example: If the file path includes *HRS_Southeast* it will automatically set the region to Aline.

Auto-load most recent train file on startup - Automatically loads the most recent loaded or saved train file when ECE is opened.

Auto-load Saved Run 8 Train - Automatically loads train saved from Run 8 if the filename is *_ECE_AutoLoad*

i This feature will clear the Train Consist without asking.

i When turning this setting on, you will have to point ECE to where your *Run8 Train Simulator V3* folder is.

Show Train Consist Effects - Shows effects when adding, removing or editing values in the Train Consist. Disabling this may result in slightly faster operations.

Isolate Locos on Load - Automatically Isolates Locomotives based on if the Tag contains the Keyword when a train file is loaded.

Auto-append Keyword To Isolated Locos - Automatically appends the Keyword to the Tag of all Isolated Locomotives when a Locomotive is Isolated.

Keyword: Type the Keyword ECE should look for in the locomotive Tag. This is NOT case sensitive. If blank, the feature will be disabled. Example: 'ISO'

Show Rear 33% Weight Line - Displays a green line where the rear 33% train weight is in the Train Consist.

Show Rear 25% Length Line - Displays a blue line where the rear 25% train length is in the Train Consist.

Show Red Line If Rear 33% Weight Exceeds Rear 25% Length - Displays a red line if the rear 33% train weight is beyond where the rear 25% train length is in the Train Consist.

i Most Railroad rules prohibit more than 33% of the weight of the train to be beyond the rear 25% of train length.

SAVING THE TRAIN CONSIST

After you are done modifying the Train Consist, before you save you must double check

1. The region is properly set for the region you are building the train for.
2. There's a description for the train file (optional).

Afterwards you can save by clicking **File > Save**. After a successful save, you will get a confirmation message.

If you save the file in one of the regions Trains folder, ECE will create a duplicate train file called **_ECE_MostRecent** which should appear at the top in the Load\Save Menu in Run 8, making it a little faster to access your most recently built train.

LOADING THE TRAIN INTO RUN 8

When ECE saves the train file, it also creates the necessary **.info** file. This allows your newly saved train to load directly into Run 8 without needing to restart Run 8.

Due to the way Run 8 handles externally built trains, you cannot load the train directly from the Main Menu. **When you are in the Run 8 world, press F1 to bring up the Load\Save Menu and click the Train tab. Navigate to the train you saved or click _ECE_MostRecent at the top. With your train selected, click Load Into Consist Editor. This will open the train in Run 8's Train-Maker-Upper (TMU). After it's done loading, click Place Train and place your train on the rails.** After the train loads on the rail, you are all set!

Pro Tip: If you want to override the location of this train spawn, after placing your train in the desired location where you want it to always spawn, select the train in the Trains Menu and click Save- Override. This train can now be directly spawned without copying into TMU and used exactly like a normally created train.

MISC FEATURES

- You can drag and drop any train file from your Windows Explorer directly onto the Train Consist.
- To deselect from the Train Consist and Add Rail Vehicles, push the ESC key.
- To delete rail vehicles in the Train Consist, push the DELETE key.
- Hot Keys
 - **Ctrl + S** Save
 - **Ctrl + O** Opens
 - **Ctrl + L** Fully loads all selected cars in Train Consist
 - **Ctrl + E** Fully empties all selected cars in Train Consist
 - **Ctrl + R** REV direction of all selected cars in Train Consist
 - **Ctrl + F** FWD direction of all selected cars in Train Consist