

EBP Help

Empire Builder Pronto plays "crayon rails" against you, itself, or a combination of human and computer players. EBP is an "open system": it displays and lets you play on a wide variety of game maps, including maps you or others create.

If you like this software, please support our efforts, and get a bonus, by registering.

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AI

At the heart of any competitive computer game are artificial intelligence (AI) routines. The AI helps the computer make decisions in the game...the better the AI, the better the decisions. AI players in games are often called "bots".

TRIP FINDER

The primary workhorse of EBP's AI is the trip finder; it searches for a good series of load pickup and delivery trips. The number of possible trip combinations grows factorially with the number of cities supplying loads, and number of demands. In order to save time, depending on the situation, some combinations are skipped. To influence how deeply EBP searches, adjust the Skill setting in the Game Setup window.

Even though EBP's trip finder is not perfect, it usually picks a decent route in a short amount of time. The most difficult (time consuming) calculation occurs at the start of the game when the AI also has to decide the city in which to start its train.

BUILDING DECISIONS

The next most important AI decision is where to build. By changing the AI's "personality", the Type/Style setting (in the Game Setup window), you can influence the relative weight the AI applies to the decision, and thus how it plays the game. For example, the Jay Gould AI prefers to build track to cities that generate high payoffs.

BAD DECISIONS

If you find a situation in which you feel the AI clearly makes a poor decision or recommendation, we would like to know about it. In order to investigate, we will need a copy of the game saved *just prior* to the poor choice. See the Technical Support topic for instructions on how to obtain and send us the game.

CHEATING

By default, the AI plays "fair and square" (no cheating). It does not know what contract or event is coming next. Unlike the AI in most games, in EBP the AI players do not collude against the human players.

If you want the extra challenge of the AI colluding and/or cheating, in the Options window, see the Computer Play frame, and pick one of the revenge or cheat options. When you play with the "revenge" option enabled, the computer players will gang up on you, but they still will not cheat. Ganging up means they ride your railroads less frequently. Cheating lightly means the AI will deal itself the next contract from the deck that demands a load supplied by the city at which it is presently located. Cheating heavily means the AI will search the deck and deal itself what it deems the best such contract.

TESTING

To run experiments with the AI, see the continuous play topic.

Alternate Maps

A game map of the USA is included free with EBP; the map contains 51 cities and 26 load types. Because EBP is an "open system" you can play on other game maps as well. Alternate maps can be a fun, new challenge.

OBTAINING MORE MAPS

Alternate game maps can be downloaded from our Web site, or ordered from us when you register EBP. Some maps are free and others available for a small fee. Visit <http://www.railgamefans.com> for an up-to-date list.

TO PLAY ON AN ALTERNATE MAP

From the game's File pull-down menu, choose Load Map. Select a map from the list. Please note that to *play* on an alternate map you must first register your copy of EBP.

To learn about a new map before playing on it, from the Information menu choose Map Basics and Map Details. When ready to play, use the Game, Start Game menu item.

MISSING MAPS?

The set of files that make up an alternate map **must** be placed in the same directory / folder as your EBP.EXE game program. If you download a map in ZIP form, uncompress it and put the resulting files in the same directory / folder as your EBP.EXE game program.

Map files have file name extensions of .EBM. Map background images are named xxxBGND* (usually .JPG), for example USABGND.JPG. Load icons are named xxxICON* (usually .GIF). Put all these files in the same directory / folder as your EBP.EXE game program.

CREATING ALTERNATE MAPS

EBPEdit is our visual map editor software. EBPEdit lets you modify existing maps as well as create new ones. You visually create the dots, regions, cities, railroads and borders that constitute a map. Contact us to obtain a copy of the program, or order it when you register EBP.

RESERVING A MAP NAME

Maps are identified by the first three characters in the name of their files. To avoid creating a map with a name already in use by someone else's map, contact us to reserve a map name. There is a small fee associated with reserving a name.

DISTRIBUTING ALTERNATE MAPS

If you would like us to sell an alternate map you have created, contact us for details on issues such as reserving a map name and collecting royalties on sales of your map.

OWNERSHIP

Please note that while some alternate maps are considered freeware, others are shareware, and still others are copyrighted and may not be redistributed without permission. [View Information, Map Basics](#) to check.

Blitz Play

In Blitz Play mode there's no waiting for an opponent: all players keep taking turns until someone wins. It makes for a speedy, exciting challenge for experienced players. Try it by selecting Blitz in the Game Setup window when you are setting up a match. Blitz can be played against the AI and/or remote human opponents via the Web.

ROUND TIME

For Blitz matches with AI players, be sure to set a Round Time in the Game Setup window. Round Time controls how often the AI players take a turn. Without this limit, the human player would not be able to keep up since EBP's AI can finish an entire match in just a few seconds.

EBP divides the Round Time you choose among all AI players in the match. For example, if you set it to 45 in a 4-player match (1 human and 3 AI players), each of the 3 AI players will start a turn 15 seconds after the completion of the previous AI turn. Expert human players can challenge themselves by gradually reducing the Round Time setting. Can you win with a setting of 30 seconds? What about 15? What about 10?

During the first round of a match, no AI player will take a turn until either the Round Time has elapsed, or you complete building some track. If there are no AI players in the match, the Round Time setting is superfluous.

BUILDING CONFLICTS

Two players may simultaneously survey track segments between the same two mileposts, but the player who wins the right to actually build the track is the one who first confirms they have finished building that turn by clicking the OK (done) button.

LOAD CONFLICTS

As you are placing loads aboard your train, note that other players may be doing so simultaneously. EBP actively updates the Loads window to depict the currently available number of loads. Due to the lag time associated with communication over the Internet, it is remotely possible during Web Play that two human players could grab the last available load of a given type at the same time and thus temporarily introduce an extra load of that type into the match. This will correct itself after the excess load is delivered or tossed.

EVENTS

EBP automatically turns off events for a Blitz match because many events cause too much confusing disruption of the rapid-fire blitz play. Note this means the Tax event will not occur, and therefore cash level will be secret for the entire match unless you disable "Keep cash levels secret" in the Game Options.

DISCARDING CONTRACTS

In a Blitz match no player may discard contracts more than once per round. A round is defined as a chance for all players to take a turn. This automatic limitation prevents players from rapid, repeated discards done simply to find a desirable set of contracts.

AUTOMOVE

For matches vs. the AI, EBP gives each AI player a full turn in between the human player's automove steps. For Blitz matches with multiple humans, we strongly recommend disabling Automove by clearing its checkbox found in the Game Options window. Automove operates so quickly that a human vs. human Blitz match can degenerate into a contest of who can engage the feature most often.

SUGGESTIONS

Since speed is very important in Blitz mode, we suggest you turn off EBP's map background animation feature: clear its checkbox in the Display Settings window.

Movement is more important than careful building. Don't spend too much time building the best route, instead build an acceptable route quickly, and use the time savings to move your train.

In the race to the victory cash level, don't forget you also need to connect the minimum number of big cities.

The Open Contracts variant vastly increases the amount of computation the AI must perform, and may result in sluggish user interface response on older, slower computers. If you experience this, we recommend not using Open Contracts during Blitz Play on that computer.

Building Track

Each player is allowed to build track each round, spending up to the MaxBuildPerTurn setting (see [Game Options](#)), normally \$20.

All track built must extend from the player's existing track, or from any big (hexagon) city, to an immediately adjacent milepost. You may build out of a big city up to 2 times per turn; further attempts the same turn are considered building *into* the city, and normally cost more. EBP automatically pays build costs to the bank and adjusts your remaining cash.

HOW TO BUILD

EBP will prompt you for the build phase of your turn: the mouse cursor will change to I beam style, and the B button near the lower right corner of the map will gently blink. To zoom the map to a build location, point your mouse at the area and press the z key; to unzoom press Shift+Z. To zoom to the area of your previous build, click the B button.

To survey a route, point to the milepost at which to start building, left click and hold, then drag the mouse to an adjacent milepost. As you go, EBP lays down railroad ties in your color and displays the total build cost.

Build cost is influenced by the terrain you are building across and to. For example, building across a river, and/or to a mountain or alpine, typically costs more than to a clear milepost. You can customize these fees via the in the [Game Options](#) window.

If you build too far, press Backspace to undo the last segment, or Shift+Backspace to undo a whole branch, or choose the Turn, Undo Building/Upgrade pull-down menu. Alternatively, trace backward over the track with your mouse.

When you are happy with your surveyed route, click the OK (done) button, at which time EBP will build the track (add rails atop the ties) and move to the next player's turn.

DISALLOWED BUILDS

There are various limitations on building, for example no more than 2 players may build into a given small city. EBP will warn you if you attempt an illegal build.

Certain game event disallow building for a brief period. EBP overlays orange (default color) lines to mark event areas. To build in such areas you must wait until after the event ends.

AUTOBUILD

When it is the build phase of your turn, simply click a distant milepost and EBP will automatically survey a route all the way there. If you like the suggestion, click OK (done) to build that track, otherwise undo it with Backspace or Shift+Backspace. Autobuild is not available until you have some track on the map. To Autobuild to a big city, click an a milepost outside but near the city and then finish the connection manually. Autobuild (followed by undo) can be handy to estimate the total track build cost from your network to a distant location.

Continuous Play

EBP's continuous play feature is a handy way to test the ability of the various computer players against each other, or to test a custom map.

To enable continuous play, from the Game menu choose Start Game. From the Game Setup window that appears, click the Game Options button. In the Game Options window, enable both the "Non-stop play" and "Continuous game repeat" check boxes.

STATISTICS

You can view cumulative statistics about the continuous games via the Game Status window: from the Display pull-down menu choose AI Stats.

INCREASING PLAY SPEED

After play has begun, for maximum play speed, minimize the map window: EBP will skip updating the display until you restore the window to its normal size, and will execute in the processing background so that you can run other Windows programs concurrently. If you will *not* be running other programs simultaneously, you can gain an additional 10% speed boost by enabling the "Maximum processor use" check box on the Game Options window. This is commonly employed when letting the game run unattended overnight to collect stats.

Leaving the Game Status window open at its normal size will not slow the game much, especially if left viewing the AI Stats.

SUM DATA

If your computer has a multi-core processor, you can run multiple instances of EBP, and each (up to the number of cores) will automatically execute on its own processor. Enabling the Sum Data checkbox on the Game Options window tells EBP to gather and combine the data from all instances into the AI Stats displayed for the first instance. Tech note: the data communication is handled via DDE.

To use this feature, when setting up for continuous play, enable the Sum Data checkbox for each EBP instance. Be sure to employ the same map and settings (number of players, etc.) for each instance, otherwise the statistics gathered may be unreliable.

"Error 286 in ddesend" means the EBP instance gathering the statistics was busy at the time another instance tried to send it statistics. If the error occurs sporadically it can be ignored because the stats are not lost, but instead will be retransmitted after the next game is completed.

CONTINUOUS SAVES

To save every game the AI plays, enable the "Save at end" checkbox in the Game Options window. Upon completion, each game will be saved into the directory that contains EBP, and automatically assigned a name, such as 08311DXL.EBZ, that represents the date and time.

EBPHP

If you register both EBP and EBPedit, you are entitled upon request to a free copy of EBPHP, the high performance version of EBP. It can run about twice as many continuous play games in the same amount of time. Note that to achieve the higher speed, certain error checking is omitted from the program, and that introduces the possibility that EBPHP may hang or fail unexpectedly.

Display

The "display" is the main EBP game window.

MAP BOX

The majority of the display is occupied by the map box. It is here that track is displayed and trains are moved during game play; see symbols. To adjust the size of the map box, drag the resize icon found near its lower-left corner. Other aspects of the map display, such as font and color, can be adjusted to suit your preferences via the Display Settings window.

Learn how to zoom and scroll the map in the Map Use topic.

HISTORY BOX

Beneath the map is the scrollable history box. It records a text description of game play. To search for text within the box use the Game, History, Search pull-down menu.

PLAYER CONTRACTS

At the left of the map is the Player Contracts box. During a game, the Player Contracts box lists the players in turn order. The listing for each player includes (from the top):

Player's name and engine speed

Loads onboard (mouse over for load names)

Contracts, each listing 3 demands of cities/loads/payoffs (mouse over to blink cities on map)

If your track serves a demand city, that city name is italicized; if your train is in that city, a * appears before the city name. If you have a load onboard that matches a demand, that load name is italicized.

If any Special Demands are active, they are displayed below the contracts of the last player.

To remind yourself about a particular delivery, click on it to toggle the display of a RR crossing icon at its left. If a particular delivery is locked and must be done (honeymoon variant rules), a padlock icon will automatically be displayed. As a further reminder, EBP will also overlay these icons in the Loads window.

Right click on a demand's city or load to popup a menu, and choose Information for details.

To open a separate window showing the contracts of all players, use the Game, Contracts menu. Resize the window taller than wide and EBP will show two players per column. Right click for a popup menu to adjust the text size for a better fit, or toggle non-player contracts so that only Special Demands and Open Contracts show. Those running a dual-monitor system can drag the window to their other monitor.

CASH BOX

Near the bottom left corner of the display is the cash box. It shows the current cash level for each active player as well as loads onboard. Players are listed in turn order; the name of the

current player is underlined; the name of the most recent player to collect a payoff is displayed in bold. Mouse over to view the speed and load capacity of a player's train as well as the names of any onboard loads. Click on a player's name to scroll to that player's contracts.

The exact cash level can be hidden by enabling the "Keep cash levels secret" check box on the Game Options window. When cash is secret, multiple currency symbols will show the approximate cash levels of the players. When a tax card event occurs during a match, cash becomes public through match end.

If you find the text in the Cash box too difficult to read, right click on it to reverse the background color.

Display Settings

Many aspects of the main EBP display can be adjusted to suit your preferences. From the File menu, choose Display Settings. You can adjust:

the map's background image
zoom operation
map symbol colors
text fonts and font size
and more

BACKGROUND IMAGE

The background image is that displayed on the map behind the track, mileposts and cities. If you find the image distracting, or if you receive a "StretchBlt failed" message from Windows, try disabling the background image. Also, note that some maps come with alternate background images; if so, you can select the image of your choice from the nearby dropdown list.

Map background images are named xxxBGND* (usually .JPG), for example USABGND.JPG. Feel free to create your own alternate images with your preferred graphics editor; for example, you might name such an image USABGNDMINE.JPG.

REVERSE BGND COLOR

Enable this option to inverse (reverse) the map's background color. Try this if you have trouble seeing the track because of limited contrast with the normal background.

ZOOM: AUTOMATIC

With this enabled, during game play EBP automatically zooms the map to your train.

ZOOM: ANIMATED

With this enabled, EBP animates the map background when you scroll or zoom.

ICONS

Most maps come with one or more sets of icons to depict loads. The icon storage files are named xxxICON* (usually .GIF), for example USAICONS.GIF. If more than one set of icons is available, you can choose among them via the Load Icons drop down.

Engines

Each player has an engine (locomotive) to propel his train for movement. During play, your engine/train is represented by a rectangular symbol matching your chosen color. You can upgrade your engine to types that can move further (faster) each turn and/or carry more loads.

MOVING YOUR TRAIN

Your rectangular engine symbol blinks gently when it is the movement phase of your turn. To learn how to move it, see the Moving help topic.

UPGRADING YOUR ENGINE

Multiple types of engines can be employed in the game. Upgraded engines let you move further (on average) each turn, and/or carry more loads. The default engines available are:

Slow Freight - move 6, carry 2
Freight - move 9, carry 2
Heavy Freight - move 9, carry 3
Fast Freight - move 12, carry 2
Super Freight - move 12, carry 3
Ultra Freight - move 16, carry 3

Certain maps employ custom engines of other speed and capacity. You can create custom locomotives via the EBPEdit map editor.

You can upgrade your engine when the game allows you to build track: use the Turn, Upgrade Engine pull-down menu. You'll be told how much the upgrade costs when asked to verify your choice.

Each player normally begins a match with a Freight, but you can start with any engine by changing the "Start with Engine" setting in the Game Options window. Ultra Freight is an upgrade from Super Freight and available only if you enable the Ultra Freight checkbox found on the Game Options window.

Events

Events are random special occurrences that can have a variety of effects on game play. An "event" can occur any time a load delivery is made. Common events are derailments, floods and storms.

Upon an event EBP describes what happens, and highlights via the "event color" (orange by default) map areas impacted. Players can lose turns or loads due to an event. Taxes may be charged. Some events have an immediate impact and are finished, while others endure for another round or more.

TAXES

Upon and after the Taxes event, the cash level of all players becomes public.

LOSE LOAD

Certain events, such as a derailment, cause a loss of one or more loads. If you have a choice of loads to lose, EBP will automatically open the Loads window, and you must toss a load before you can continue moving.

ACTIVE EVENTS

At the upper left corner of the map, on the Event button EBP displays the number events currently active. If the button color is the event color (normally orange), at least one event is active. If two events are active, the button will read "2E". If the only events active are Shortages and/or Special Demands, the letter S will be displayed in place of E.

VIEW EVENTS

For more information about Events, click the Event button (near upper left corner of the map) to open the Events window. The Events window displays a full list of events in the game. In the list, Events prefixed with the letter A are currently active, those marked with X had occurred and are no longer active, and those with P are pending and may occur later in the game.

For more information, highlight an Event in the list and click Details. To visualize the areas of the map impacted by one of more events, use the Checked, Pending, or All buttons. These buttons do not trigger the event, they merely let you view its effect.

SPECIAL DEMANDS

A Special Demand event is a demand for delivery of one or more loads to a particular city. Any player can satisfy a Special Demand, but only the first player to do so collects the payoff offered. Unlike the Shortage event, no separate "normal" demand contract is needed. When multiple loads are demanded, they must all be delivered by the same player in the same round. EBP displays a list of Special Demands in the scrollable contracts window at the left of the map, below the contracts of the players. Not all game maps have Special Demand events; the Russia map is one that does.

DISABLE EVENTS

To play without any Events, in the Game Options window uncheck the Apply Events variant checkbox.

FAQ - Frequently Asked Questions

For a more extensive FAQ, visit the Crayon Rail Fanatics Web site at <http://www.railgamefans.com>.

Q. I reinstalled Windows, but my old EBP registration passcode doesn't work. Help!

A. Solutions are described in the Lost Registration section of the [registration](#) topic.

Q. Where can I buy a copy of Empire Builder board games?

A. Specialty hobby and game stores often carry the game, or you can order it from Mayfair Games <http://www.mayfairgames.com>

Q. The distance display box route is interfering with my ability to choose a route. Help!

A. Click on the box or press Esc to hide it temporarily.

Q. How does EBP calculate the game score?

A. This is described in the [Hall of Fame](#) topic.

Q. EBP crashed mid-way through the game. What's the problem?

A. The most likely cause of a mid-game crash is the display driver for your copy of Windows. Try changing your Windows Control Panel, Display settings to some other resolution (screen size) and/or color depth, then restart EBP. If the problem goes away, it means the drivers for the resolution and/or color depth you had been using contain bugs. You might be able to obtain updates from Microsoft or your computer's manufacturer. If the problem continues, in order to investigate, we will need a copy of the game saved just before the crash.

Q. Does Mayfair know about EBP?

A. Yes, Mayfair Games has granted us license to use their trademarked content in Empire Builder Pronto.

For more questions and answers, see the FAQs at our Web site <http://www.railgamefans.com>

Files

The following files (found in EBP.ZIP) are considered shareware and may be distributed to others provided no fee whatsoever is charged (even if other files are distributed at the same time):

EBP.EXE
EBP.CHM
EBP.HLP
USAICONB.GIF
README.TXT

The following map files (also found in EBP.ZIP) are considered freeware and may be distributed to others provided no fee whatsoever is charged (even if other files are distributed at the same time):

USAMAP.EBM
USABGND.JPG
USAICONS.GIF
USAINFO.TXT
EBPENG1.WAV
EBPENG2.WAV
EBPENG3.WAV

The following files are support files for EBP.EXE:

CP5DLL32.DLL
INSTALL.BAT
MSINET.OCX
MSINET.INF
MSWINSCK.OCX
MSWINSCK.INF

EBP also employs various driver files that are typically provided by Microsoft with each copy of Windows; one such file is MSVBVM60.DLL. If your computer lacks this driver file, or you experience unusual problems running EBP (particularly in Windows 95), obtain and install the most recent version of VBRUN60.EXE as described on the FAQ page at our Web site.

For Web features, EBP relies on the Windows components MSINET.OCX and MSWINSCK.OCX. If you experience problems with Web Play, obtain and install the most recent version of these drivers as described in the Hardware topic.

UNINSTALLING

If you installed EBP into a directory/folder of its own (such as one named \EBP), you can remove the game from your computer easily: simply delete all the files in that directory/folder.

Game Setup

The Game Setup window appears when you choose Start Game from the Game pull-down menu. In the Game Setup window you choose the configuration of the match you wish to play.

NUMBER OF PLAYERS

You can choose from 1 to 6 players. Any combination of computer and human players is allowed. A computer-only game can be operated in continuous play mode, which runs one or more matches without stopping in order to collect statistics and study other aspects of the game.

NAME

Enter a unique name for each player. The default name matches the default player color. Click on the Name label to reset the player names to match their color.

COLOR

Choose a color with which to depict the player's track and train. If you prefer a color not in the list, choose Custom.

TYPE/STYLE

Designate the player's type here, human or computer AI. Several different types of computer players are available; each computer player type makes slightly different play decisions. As you make a selection, a brief description is given in the Type/Style Information box.

The ability level of the built-in AI computer players differs. On the USA map, their order from toughest to weakest competitor, is as follows: Gould, Hill, Vanderbilt, Morgan, Pullman, Newby.

SKILL

Choose a skill level for the player. The skill level influences how deeply EBP's AI searches for good combinations of pickups and deliveries. Higher skill levels generally find the better combinations, but play more slowly. For a human player, the skill level determines how deeply EBP searches when you ask it for a suggestion. Click on the Skill label to advance the setting for all players.

RANDOMIZE TURN ORDER

Choose how you want EBP to determine the turn order of the players at the start of the game.

ROUND STYLE - TURN BASED

Choose this for a match in which each player takes a turn in sequence, as in typical board games.

ROUND STYLE - BLITZ

Choose this for a match in which each player takes turns repeatedly/rapidly without waiting for other players. Recommended for experienced players only. See [Blitz Play](#).

ROUND STYLE - PAUSE / ROUND

For turn-based matches, enter the number of seconds to pause after each computer turn. Enter 0 for no pause, or -1 to pause until you click OK (done). For use with Blitz matches, see [Blitz Play](#).

MAP - Load Alt Map

Use this pull-down menu to choose a different map on which to play. You can obtain and use more maps by registering your copy of EBP.

MAP - Randomize

Use this pull-down menu to change the contract demands (payoffs, loads, etc.) and/or city locations. For contracts, you can 1) edit the list manually, 2) click Randomize Contracts, or 3) copy and paste demand sets from the Crayon Rails Deck Generator on the Web. Any changes take effect for this game only, they are not saved with the map; to restore the original contracts, simply reload the map (Map, Load Alt Map).

As of this writing the Crayon Rails Deck Generator is found at <http://www.icynic.com/cgi-bin/rails>. Visit the site with your browser, and choose the appropriate map. For "Output format" choose Plain Text. For "Where to put results" choose Show in form. Then click Generate a new deck. When the deck appears, highlight and copy it from your browser to EBP. Do not worry if the Deck Generator abbreviates city names, EBP should recognize them anyhow.

For more variety, try the Randomize City Location feature. It relocates cities randomly, and adjusts the contract payoffs to match the supply/demand locations. Enter a number that acts as a randomizer seed, or have EBP pick one for you. Any changes take effect for this game only, they are not saved with the map; to restore the original, simply reload the map (Map, Load Alt Map). To later recreate a particular city randomization, reuse the same seed number.

LEVELS

Use these pull-down menus to select a built-in computer opponent configuration (i.e. easily change the player type and skill levels to one of various predetermined settings).

WEB

Use these pull-down menus to play a game via the Internet versus remote human opponents, or against local opponents via your network/router.

MORE GAME OPTIONS

Click this button to open a window with more configurable game options.

Glossary

Here are definitions of some terminology used in the game.

AI - artificial intelligence; when a computer program evaluates situations and makes decisions, it is sometimes said to be artificially intelligent; see AI

alpine - very mountainous terrain that typically is expensive to build through; it is represented on the map by an empty triangle; see symbols

big city - the phrase by which EBP refers to all cities larger than medium; includes major (hexagon), jumbo (large hexagon) and oval cities; players may build track outward from big cities even if their network does not already connect to them

container ferry - a type of **ferry** that cannot be moved across but which can be used to **deliver** and pick up **loads**

contract - an offer from cities for payment upon **delivery** of a specific type of **load**; typically each player holds 3 contracts at a time; typically 3 demands appear on each contract, and the player chooses which one to satisfy; also known as a demand card

crayon - an ancient tool for drawing railroad track upon board games; EBP reduces the wear and tear on your crayons

deliver - to transfer a **load** onboard a train to the city demanding it

demand - a payment offer for **delivery** of a specific type of **load**; typically 3 demands appear on each **contract**

EBPEdit - map editor for EBP; lets you modify existing game maps and create new ones

event - a random special occurrence that can have a variety of effects on game play; common events are derailments, floods and storms; see events

ferry - a connection between otherwise non-adjacent mileposts; trains typically must stop and wait until next turn to cross a ferry

load - a good, an item to be transported from one place to another; loads are supplied by cities, and are typically depicted on the map via a small icon; see loads

major city - see **big city**

medium city - a city represented on the map by a square; only 3 players may build into a given medium city

milepost - a unit of distance on the map marked by dots, triangles and other symbols depending on terrain

net worth - cash plus amount spent on track and engine upgrades

operation phase - the part of a turn during which a player may move his train and pick up / deliver **loads**

payoff - cash collected upon **delivery** of a **load**

pitch - to discard one's **contracts** for fresh, hopefully better ones

small city - a city represented on the map by a circle; only 2 players may build into a given small city

spec loads - speculative loads are picked up and carried even though a player does not currently have a **demand** for them

special demand - a type of **event** that requests **delivery** of one or more **loads** at a particular city; any player may satisfy a special demand, and the first to do so collects a payment

teleport - a specialized type of **ferry** that imposes no delay upon movement; the Moon map has teleports to connect its sides

track rental - moving your train upon the tracks of an opponent in exchange for a **use fee**

track segment - the piece of track connecting two adjacent **mileposts**

tunnel - a type of **milepost** that can be served by the track of only one player, the first one to build to it

use fee - a cash payment to another player that reflects the track on which the player's train moved

Hall of Fame

The Hall of Fame (HOF) records the highest scores achieved by both human and computer AI players. You can view the HOF by choosing it on the File pull-down menu.

SCORE

The score is EBP's way of evaluating a player's performance. First, EBP establishes a baseline for how many rounds it "should" take a player of average skill to win. The primary factors involved are: how much cash it takes to win, how much you start with, and how large the payoffs are relative to the distance traveled. That formula looks like:

$$\text{WinByRound} = 4 * (\text{WinCash} - \text{StartCash}) / (\text{MapAvgPayPerMP} * \text{MapHighestSpeed})$$

On EB5 map that's $4 * (250 - 50) / (0.93 * 12) + \text{adjustment} = 66$ rounds

Given that number, EBP can calculate the amount of cash that must be earned per round to reach the WinCash level:

$$\text{EarnPerRound} = \text{WinCash} / \text{WinByRound}$$

On EB5 map that's $250 / 66 = 3.79$

The EarnPerRound value gives EBP a yardstick by which to measure how well someone is doing. Simply multiply it by the round number, and, voila, compare it to your cash to see if you are on pace (the pace of a player of average skill).

For example, at round 10, you should have $3.79 * 10 = 38$ cash (rounding up) to be on pace to reach 250 by round 66. Of course, in the early phases of the game, you are investing in track and engines, so your cash will likely lag the average pace. That's OK, you'll catch up in subsequent rounds.

With that data, EBP can generate a Score that expresses how close you are to winning, as well as how close to the average pace. This does that:

$$\text{Score} = 100 * \text{PlayerCash} / (\text{EarnPerRound} * \text{Round})$$

Here are examples of the Score value at certain times in a game:

$$\text{At game start (round 1): } 100 * 50 / (3.79 * 1) = 13$$

$$\text{At round 3, all cash spent: } 100 * 0 / (3.79 * 3) = 0 \text{ (score dips, like that of a startup RR company)}$$

$$\text{At round 36, midgame: } 100 * 100 / (3.79 * 36) = 74$$

$$\text{Win at round 66: } 100 * 250 / (3.79 * 66) = 100$$

$$\text{Win at round 50: } 100 * 250 / (3.79 * 50) = 132 \text{ (more pts due to quicker win)}$$

Furthermore, upon winning, the victor is granted bonus pts equal to 10% of his score margin over each of his opponents. The bonus is reduced if the opponents are of lower skill. The formula looks like:

$$\text{Bonus} = \text{Bonus} + 0.1 * (\text{WinnerScore} - \text{Opponent1Score})$$

$$\text{Bonus} = \text{Bonus} + 0.1 * (\text{WinnerScore} - \text{Opponent2Score})$$

$$\text{Bonus} = \text{Bonus} + 0.1 * (\text{WinnerScore} - \text{Opponent3Score})$$

etc.

$\text{TotalWinnerScore} = \text{WinnerScore} + \text{Bonus}$

The TotalWinnerScore is used for ranking within the Hall of Fame.

An average win vs. exactly equal opponents (not possible, of course) would yield a TotalWinnerScore of 100.

A TotalWinnerScore approaching 200 can be attained by playing the max number of opponents and winning in the fewest rounds by a large margin over the opponents.

Hardware

At minimum, EBP requires the following computer equipment:

Wintel '486 computer or newer

32M RAM available

Windows 32-bit version (98, NT4, 2000, ME, XP, Vista, etc.)

VGA display (256-color mode minimum, higher recommended)

Mouse

WINDOWS 95

Windows 95 can usually be coaxed to work if you install the most recent version of VBRUN60.EXE as described on the FAQ page at our Web site.

WINDOWS VISTA

EBP works properly within Windows Vista. For the setup and registration process, you must run the game as an Administrator. Running *Windows* as Administrator is not enough, you have to run the *game* as Administrator. The easiest way to do so is to right click on the game's desktop icon and choose Run as Administrator. If you still have trouble, see the FAQ at our Web site.

DRIVERS

If you wish to use EBP's Web features (Web play or Download Update) the MSINET.OCX and MSWINSCK.OCX drivers must be installed on your computer. Many computers already have these Windows internet communication drivers installed, but if yours does not, when you attempt to use the features they provide, EBP will detect a problem (usually error number 372 or 339) and offer to automatically install the drivers.

If the automated install fails or if you prefer to install the drivers manually, here is what to do: exit EBP and look for the MSINET.INF and MSWINSCK.INF files in the directory in which you installed EBP. If they are not there, you can find them on an EBP CD, at our Web site, or at Microsoft's Web site (search for msinet.ocx and mswinsck.ocx). Using Windows to view the folder contents, right click on MSINET.INF file and choose Install, and then repeat for MSWINSCK.INF. Finally restart EBP and retry the feature.

If you continue to have trouble, check the FAQ at our Web site for updated driver information.

ALTERNATE PLATFORMS

Playtesters report that EBP runs successfully on a Macintosh via a PC emulator such as that from Parallels.com. Similar success is reported on UNIX and Linux using Wine. Use such alternate platforms at your own risk.

History Box

The history box appears beneath the map; it records in textual form the action of the game.

HIGHLIGHT

Double click on a move or build to highlight it on the map.

HISTORY SEARCH

To search this history, from the Game menu, choose History, Search. You will be prompted to enter the word or phrase for which to search. Lines containing your entry will be highlighted.

SHOW INFO

To (re)show the description of an event, or highlight route of move or build, double click in the history box.

HISTORY PRINTING

The Game pull-down menu contains an item that prints the history text on your printer, or copies it to the clipboard.

Information

The Info pull-down menu tells about the map and other elements.

EVENTS

Choose this to open the Event Info window.

MAP BASICS

This displays basic information about the map, such as name, version, copyright, etc.

MAP DETAILS

Choose this to open the Map Details window, where the pull-down menus provide a wide variety of statistics about the map.

FIND BEST TRIP

Choose this to have EBP calculate what it deems to be the best sequence of pick up and delivery trips for a given group of contracts. This calculation is the same that EBP's AI players employ.

FIND

Use this and enter a milepost, city or load name to highlight it on the map.

FIND CITY

Displays an alphabetized list of cities; click one to highlight it on the map.

FIND LOADS

Displays an alphabetized list of loads; click one to highlight on the map the cities that supply it.

RAIL CORRIDORS

Choose this to ask EBP to calculate the most popular routes on the map. These corridors are determined by the contract set, location of supplied loads, and geographic map features. The most popular corridors are displayed via the thickest lines. They are usually good places to build mainline track.

SPANNING TREE

The Spanning Tree depicts on the map a way to connect all cities with the minimum (or close to the minimum) length of track. It is for information purposes only.

Introduction

Welcome to Empire Builder Pronto, the software that plays Empire Builder crayon rails.

PLAYING A GAME (QUICK START)

EBP assumes you are familiar with how to play Empire Builder. If this is the first time you have used EBP on your computer, and you want to get started playing right away, after you close this help window:

- 1) If the "About EBP" window is open, close it.
- 2) From the Game pull-down menu, choose Start Game.
- 3) In the Game Setup window that appears, click OK.

The three quick steps above will start a 4-player game with 3 computer opponents of various skill levels and 1 human player. The blue color is the human player (you). EBP will automatically make decisions for the computer players, and, when it is your turn, prompt you to build and move.

RULES

If you don't recall how to play, review the rules summary. If you don't recognize symbols on the map, see the symbols help topic.

REGISTERING

You can use EBP freely for the first 30 days. If you like the software, please register it and receive as a bonus another map on which to play.

ALTERNATE MAPS AND VARIANT RULES

EBP works with many different maps, not only a USA map. See the alternate map topic for more information. EBP also supports many popular game variants.

MORE INFORMATION

For more information about the software, visit the contents page of this on-line help system, or our Web site at <http://www.railgamefans.com>. Context-sensitive help is available in many places in the program by pressing the F1 key. Thanks for using EBP!

Keys

Listed below are various hot keys / shortcuts you may find handy:

MAP WINDOW

F1	Context-sensitive help
F2	<u>Game Status</u> window
F3	Find a milepost, city or load supplier
F4	Contracts window
F12	Save game window
Backspace	Undo last track segment built or moved
Shift+Backspace	Erase track branch
Ctrl+A	disengage automove
Ctrl+B	zoom to location of last build
Ctrl+C	display Find City list
Ctrl+G	engage automove to a city
Ctrl+L	display Find Loads list
Ctrl+R	reengage automove
Ctrl+T	zoom to train
z	zoom in to mouse location
Shift+Z	zoom out
+ key on the numeric keypad	zoom in
- key on the numeric keypad	zoom out
5 on the numeric keypad	reset the map to center, unzoomed
double click in History box	Highlight build or move

LOADS WINDOW

Alt+1, Alt+2, etc.	highlight an available load
Ctrl+1, Ctrl+2, etc.	highlight an onboard load
Ctrl+W	highlight warehoused load
o	put a highlighted load onboard
d	deliver a highlighted load
t	toss a highlighted load
w	warehouse a highlighted load

Loading a Game

You can (re)load a game that was previously saved to disk. To do so, from the File menu, choose Open Game. If the game had not been completed, you may resume playing it.

MISSING MAP

Stored with a saved game is the name of the map on which the game is played. When you load a game that employs an alternate map, EBP will automatically attempt to load that map. If that alternate map cannot be found, you will not be able to load and resume the game. A map's .ebm file must reside in the same folder/subdirectory as your EBP program.

Loads

Loads (goods) are key to the game because to collect payoffs players must transport loads from their supply location to their demand location. Each player's engine can haul a limited number of loads at one time.

FINDING LOADS

Loads are typically represented by icons. If you zoom into the map, the loads supplied by a city are displayed by icons. If you see load names as text instead it is either because the map's designer did not include load icons, or because you have turned the icon display off via Display Settings.

When you mouse over a city, above the map EBP displays a list of loads supplied by that city, as well as the number available. If all loads of a given type are already aboard trains, temporarily none are available and you cannot pick up another of that type.

If you mouse over a load name on a contract, EBP will blink the cities that normally supply it. EBP will also blink supplying cities if you use the Info, Find Loads feature.

PICKING UP LOADS

To pick up a demanded load, move your train to a city that supplies it, and EBP will automatically open the Loads window. If your train is already in the city, use the Turn, Loads pull-down menu to manually open the Loads window, or click on the loads area of your train above your contracts.

In the Loads window, use the mouse to drag and drop loads from the supplied area to your train, or from your train to the delivery/warehouse/toss areas. Mouse over an icon to see a load's text name.

Instead of dragging and dropping loads, you can use the keyboard. Press:

Alt+1, Alt+2, etc. to highlight an available load
Ctrl+1, Ctrl+2, etc. to highlight an onboard load
Ctrl+W to highlight the warehoused load
o to put a highlighted load onboard
d to deliver a highlighted load
t to toss a highlighted load
w to warehouse a highlighted load

SPECULATIVE LOADS

There is no fee to pick up or carry a load, so many players carry extra ones in case of a derailment, or in hope of later getting a demand for them. Note that if you enable the Light Trains variant, leaving empty slots allows your train to move further.

DELIVERING LOADS

When you arrive at a city that demands a load, the Loads window opens and you can deliver the load by dragging it from your train to the delivery area. Doing so satisfies that demand, and EBP immediately assigns you a new contract. An event may also occur. Delivering a load makes it immediately available for pick up at all cities that normally supply it. If you find it necessary to reopen the Loads window manually, use the Turn, Loads pull-down menu.

WAREHOUSING

Warehousing is a variant rule that lets you store up to one load at a city. Any player may pick up a warehoused load just as if the city normally supplied it. You can enable warehousing in the Game Options window. Warehoused loads can be set to expire after a certain number of rounds, or remain indefinitely. When a warehoused load is in a city, on the map EBP displays a small box around the city milepost. If you mouse over the city, above the map EBP will display the name of the the warehoused load along with either (w) for permanent warehousing, or (r##p##) for the round number and player turn at which the warehousing expires.

CIRCUS

The Circus load is available on some maps, such as Europe. The Circus stays in the city at which a player delivers it, occupying the warehouse. The Circus is a variant rule that you can enable in the Game Options window. If a player tosses a Circus load, EBP places it in the nearest city. On some maps the Circus goes by a different name, for example on Mars it's called a Road Show, but its function remains the same.

CANCEL

If you moved to the wrong city and the Loads window opened, close the window via the Cancel button. Doing so then allows you to undo the move via the Turn, Undo Move pull-down menu. Note that you cannot cancel after delivering a load.

Map Use

This topic describes how to use EBP's map display. For information about choosing a game map on which to play, see the [alternate map](#) topic.

ZOOMING

Zooming (magnifying) can be accomplished in any of several ways:

- * turn the mouse wheel
- * use the horizontal slider located above the Start game / OK (done) button
- * press the z key to zoom in to mouse location, Shift+Z to zoom out
- * press the + key on the numeric keypad to zoom in, - to zoom out
- * click the left then right mouse buttons at a desired location on the map

To zoom to your train, click the T button or press Alt+t. To zoom to the location of your most recent [build](#), click the B button or press Alt+b.

By default, if a background image is displayed, EBP will animate the zooming process. To remove this animation, disable the "Zoom: Animate" checkbox in the [Display Settings](#) window.

SCROLLING

Scrolling (sliding the map) can be performed several ways:

- * click close to the edge of the map
- * use the long horizontal or vertical slider bars at the lower and right sides of the map
- * use the arrow keys when the map has the focus (click on the map to give it the focus)
- * point to the map, hold down the Alt key, then left click, hold and drag
- * point to the map, hold down the Ctrl key, then left click to zoom and scroll to an absolute map area. For example, Ctrl+click in the upper left area of the map to zoom into the upper left area of the whole map.

By default, if a background image is displayed, EBP will animate the scrolling process. To remove this animation, disable the "Zoom: Animate" checkbox in the [Display Settings](#) window.

RESETTING

To quickly reset the map to center, unzoomed, press the center 5 digit on the numeric keypad or click on "Zoom" near the lower-right corner of the map.

RESIZING

To alter the area of the window occupied by the map, use the mouse and drag the small resize icon located at the lower-left corner of the map.

MOVING YOUR TRAIN

See the [Moving](#) help topic.

SHORTCUTS

See the Keys help topic.

Moving

A mouse is required when playing an EBP match. You need the mouse to designate the desired route for your train and to build track.

MOVING YOUR TRAIN MANUALLY

During the operation phase of your turn, to manually mark the track you want your train to follow, click on a milepost adjacent to your engine, then the next mp, etc. As you mark the route, a small "trip tip" box floats nearby with distance information. If the box gets in the way, click on it to temporarily hide it. When EBP encloses the distance value within parentheses, you are pointing to a location further than you are allowed to move this turn.

To undo the move one segment at a time, press Backspace, or click/move your mouse backward over the route you had marked. To undo the entire move, press Shift+Backspace or choose Turn, Undo Move.

Your train will not actually move until you consume the maximum distance you can move this turn. If you wish to stop at a milepost before consuming the max move, click OK (done).

The rules do not allow you to end your movement at a wrap point (teleport) milepost. You must either stop before it, or continue across to the other side and move away from the wrap point.

If you move upon the tracks of another player, to that player you must pay a rental fee, traditionally \$4. EBP automatically collects this fee from you at the end of your movement. If you'd like to change the amount of this fee, in the Options double click on UseFee.

MOVING YOUR TRAIN WITH ASSISTANCE

This is easier than clicking adjacent mileposts. As you slide your mouse around the map, the trip tip box will display the distance. When that value equals your max move distance for the turn, click on that milepost, and EBP will move your train all the way to that spot. If you do not like the route EBP used, choose Turn, Undo Move and redo your move step by step.

AUTOMOVE

Automove moves your train along your tracks all the way to a destination. There are several ways to engage Automove, plus you can tell EBP whether or not you want the program to wait for you to build after each automove. To engage Automove, when it is your turn either 1) point to a milepost served by your track, right click and choose Automove, or 2) point to a city name on one of your contracts, right click and choose Automove.

Another way to engage Automove (without building) is via the Turn, Go To pull down menu.

Automove automatically moves your train when it is possible to reach your destination using only your track. To turn off Automove, even when it is not your turn, press Ctrl+A. Automove deactivates itself automatically upon any event, but can be reengaged by pressing Ctrl+R.

BUILDING TRACK

See the [Building Track](#) help topic.

RIGHT CLICKING

Right clicking on a milepost displays a popup menu with additional features. The function of most should be obvious. Here are few notes.

Information - displays more information about the milepost, such as terrain type, and estimated build cost from your existing track.

MOUSE WHEEL

The mouse wheel zooms in or out of the map. Configure the direction of zoom, or turn off this feature entirely, via the [Display Settings](#) window.

Options

Via the Game Options window you can alter the operation of many aspects of the game. To change the "master copy" of these options (saved in the EBP.INI file), choose the File, Game Options pull-down menu. To change the settings for the current map, choose the Game, Edit Setup pull-down menu and click the More Game Options button in the Game Setup window.

Note: a separate copy of most settings is saved for each map! Therefore, if it seems EBP is not remembering your settings, it may be because you had made changes for a different map.

Related configurable items are grouped into frames, and described below.

MOVEMENT - START WITH ENGINE

Select the engine each player starts with. Normally, this should be set to Freight.

MOVEMENT - ULTRA FREIGHT

Enable this if you want a faster speed engine (usually speed 16) available as a final upgrade.

MOVEMENT - AUTOMOVE

Enable to allow human players to ask EBP to automatically move their train to a desired spot. We recommend you disable this feature when setting up for Blitz Play.

MOVEMENT - FERRY

For maps with ferries, choose the movement style you prefer.

MOVEMENT - WAREHOUSING

Enable this to allow field warehousing. One load may be dropped at a warehouse at each city. Enter the number of rounds the warehouse keeps the load; use 0 for permanent warehousing, or -1 to permanently warehouse tossed loads (often used as part of the 2-player Honeymoon variant).

MOVEMENT - CIRCUS

For maps that have circus-type loads, enable this to convert the lowest payoff on certain contracts into a Circus demand. Via the digits field indicate which contracts will be converted (examples: entering 0 will convert all contracts with a card number ending in 0, while 05 will convert all contracts with a card number ending in either 0 or 5. If the map does not have a circus-type load, EBP deactivates this check box.

COMPUTER PLAY - NON-STOP

Enable this to skip the messages during computer player turns that require you to click OK. NOTE: even when this feature is enabled, if an error occurs, the game will stop and show the error message.

COMPUTER PLAY - CONTINUOUS GAME REPEAT

Enable this to have EBP start a new game immediately after one finishes. This feature is handy for running multiple games that consist only of computer players. For such multiple games, also enable the non-stop feature described above. Cumulative statistics for multiple games can be found in the Game Status window. Enable the Save checkbox to save to disk each game at its end.

COMPUTER PLAY - MAXIMUM PROCESSOR USE

Enable this to tell EBP to not give much processing time to other Windows applications running simultaneously. Takes effect only when the map window is minimized, and then boosts play speed about 10%. Useful when running continuous games while you are away from the computer.

COMPUTER PLAY - SUM DATA (RUN MULTIPLE EBP)

Enable this on multi-core processor computers to collect and combine AI statistics from multiple instances of EBP running continuous games simultaneously.

COMPUTER PLAY - AI REVENGE/CHEAT

Choose this feature to make the computer players team up against human players or cheat. When revenge is chosen, the computer players make efforts to avoid riding track owned by human players. Cheating lightly means the AI will deal itself the next contract from the deck that demands a load supplied by the city at which it is presently located (this reduces the AI's average rounds-to-win by about 12%). Cheating heavily means the AI will search the deck and deal itself what it deems the best such contract (this reduces the AI's average rounds-to-win by about 25%).

MONEY, BUILDING, ETC.

Via the money fields you can customize the values for cash, engine prices, track fees and other miscellaneous items. EBP's AI should be able to handle all *reasonable* customizations. An example of an unreasonable customization is setting the starting cash greater than the amount of cash needed to win. We cannot guarantee that EBP will operate properly with unreasonable custom values.

Most values should be self explanatory. A few notes follow:

StartContracts - the number of contracts EBP should give to each player at the start of the match; the range is 3 to 6. EBP will prompt each player to discard any excess down to 3 contracts before he places his train.

WinMajor - the number of big cities that must be connected by a player to be eligible to win. A value of -1 means "all but one" of the big cities.

WinMust - the name of a city to which a player's track must connect to be eligible to win

WaterMove - the number of additional movement steps consumed by moving to a water/snow milepost

WarehousingCost - the fee to charge each time a player places a load in a warehouse; payment goes to the bank

BorrowMax - the maximum total a player may borrow from the bank; double the loan amount must be repaid; EBP automatically collects repayment when the player delivers loads

TunnelBuildMin - the minimum engine needed to be allowed to build to a tunnel milepost (-1 = slow freight, 0 = freight, 1= heavy freight, 2= fast freight, 3 = super freight)

TunnelMoveMin - the minimum engine needed to be allowed to move to a tunnel milepost (-1 = slow freight, 0 = freight, 1= heavy freight, 2= fast freight, 3 = super freight)

Pilgrims - the number of Pilgrim loads that may be carried aboard a train (appears only for those maps with Pilgrims)

UseFee - rental fee for use of opponent's track

NormalCost - the build cost to a standard milepost

CityPlus - the added cost (above and beyond that of the milepost) to build into a small or medium city

YellowPlus - the added cost to build across a yellow boundary line on the map

JungleMax - the maximum number of jungle-type mileposts to which a player can build per turn (set to 0 for no limit)

FreeMax - the maximum number of 0 cost mileposts to which a player can build per turn (set to 0 for no limit)

MONEY - KEEP CASH SECRET

Enable this to keep the cash level for your opponents secret until a tax event.

AUTOSAVE - BEFORE EVERY TURN

Enable this to automatically save the game before each turn; the games will be saved in files with names such as ebpAS001a.ebz, ebpAS002d.ebz, etc.

AUTOSAVE - LOCATION

Choose the disk path to the location for storage of AutoSaved games; a RAM disk makes the fastest AutoSave location. EBP will also use the location for temporary files.

VARIANTS - BACKTRACKING

Enable this to allow trains to reverse direction at any milepost after loss of a full turn.

VARIANTS - CROSSGRADING

Enable this to allow players to change between Heavy Freight and Fast Freight engines. When crossgrading from Heavy to Fast, if there is insufficient room on the Fast for all loads being carried on the Heavy, the rightmost displayed onboard load is automatically removed from the train.

VARIANTS - EQUAL-TURNS VICTORY

Enable this to grant all players an equal number of turns in the game. If a player declares meeting victory conditions, the remaining players of the round each get to take their final turn. Any subsequent events that occur cannot disqualify a declared player from winning. If a remaining player also meets victory conditions and has more cash than the player who declared initially, then the remaining player wins. If there is a tie in cash, the Winning Cash level is increased by the Starting Cash amount, and play continues unless the Sudden Death variant has been enabled in which case the game ends in a tie.

VARIANTS - EVENTS

Enable to allow events to occur during the match. Events occur at random from a selection designed with the map.

VARIANTS - EXTRA LOAD

Enable this to increase the load carrying ability of all engine types by 1.

VARIANTS - FAST TRAINS

Enable this to increase the speed of all engine types by one third. Tests indicate Fast Trains reduces the average number of rounds in match by about 20%.

VARIANTS - HALL OF FAME

Enable this feature to make the game eligible to appear in the Hall of Fame should player end-game score(s) qualify.

VARIANTS - HONEYMOON 2-PLAYER

Enabling this 1) reduces availability of each load by one, 2) disallows both players from building into the same small city, and 3) any building into a small city must be accompanied by a demand for a delivery or pickup at that city, and a requirement that that delivery must be fulfilled; a lock icon is displayed next to such deliveries. If you also want tossed loads to be warehoused, enable Warehousing and in the Warehousing turns field enter -1.

VARIANTS - LIGHT TRAINS +1

Enable this to allow a train to move one more milepost per turn per empty onboard load slot.

VARIANTS - LIGHT TRAINS +2

Enable this to allow a train to move two more mileposts per turn per empty onboard load slot. Enable both this and Light Trains +1 to instead get three more mp.

VARIANTS - MY-TURN SOUND

Enable to choose a .WAV audio file that EBP will play as a prompt when it becomes your turn during the match, or if an event requires you to toss or pick up a load outside of your normal turn. Especially handy for Web-based.

VARIANTS - NO DISCARDING

Enable to disallow players from pitching their contracts and drawing new ones. Enabling this is not recommended for use with AI players since the AI can sometimes get itself into an untenable position.

VARIANTS - OPEN CONTRACTS

When Open Contracts is enabled, and a player discards contracts, EBP will designate those contracts as open, that is, in play for all. The first player to deliver any demanded load of an Open Contract completes that contract, and it is then removed from play. EBP allows up to four Open Contracts at a time and discards excess ones. EBP displays Open Contracts below the contracts of the players; to see them you may need to scroll down, or use the Game, Contracts pull-down menu.

VARIANTS - RESTARTING ALLOWED

Enable this to allow players to restart during the match. Disabling this is not recommended for use with AI players since the AI can sometimes get itself into an untenable position.

VARIANTS - SOUND EFFECTS

Disable this to turn off all audio sound effects in EBP and the maps.

VARIANTS - SUDDEN DEATH

Enable this to extend play of the match until all contracts are exhausted. The player with the greatest amount of cash and who connects the required number of big cities wins.

VARIANTS - SWITCHBACK START

Enable this to allow the build turns at match start to alternate in turn and then reverse-turn order.

GAME REMARKS

In this field, you can enter a brief comment about this match. This comment will be displayed in the File, Open Game window.

Registering

You are welcome to try EBP at no charge for up to 30 days. If you enjoy EBP, we ask you to support our efforts by registering your copy for \$25. Registered users of an older version can upgrade to a new one at a discount, see the registration form. By registering you'll be able to:

- 1) use EBP past the 30-day initial period,
- 2) play on alternate game maps,
- 3) get a bonus map: a copy of the EB7 USA+Mexico alternate map (described below),
- 4) receive discounts on other EBP items (see below) obtained at the same time,

Registration is easy: we recommend sending the handy, printable registration form by mail or fax. Or, for faster service, copy the form into an e-mail and include your credit card information. If you telephone us, be sure to have your pre-registration number handy. Your pre-registration number can be obtained from the Help, Registration Numbers pull-down menu in the game. We need that number to look up the passcode to send you in reply.

Each registered copy of EBP entitles you to execute the program on one computer (you may not install and execute a given registered copy on more than one computer). When you register, submit the pre-registration number from the primary computer on which you want to use EBP. To preserve your registration, after entering your registration passcode, make a backup copy of the directory in which you installed EBP.

If you'd like to register EBP on more than one computer of yours, list the additional copies on the "secondary EBP registrations" line of the registration form. During your free trial period before registering, all EBP features (including Web Play) are active and available to try. EBP is supplied AS IS: by registering EBP you are agreeing that you are satisfied with how it operates on your computer, and agree to abide by the license terms herein and as elucidated at our Web site.

The EBP Web site is at <http://www.railgamefans.com>.

REGISTRATION BONUSES

Registering enables play on alternate maps, including the "EB7" registration bonus map. The Empire Builder EB7 map is similar to USA but includes Mexico. When you register, we'll tell you how you can download a copy of the EB7 map from our Web site. If you don't wish to download it, we can send it to you on CD for a shipping/handling fee. On your registration form you do not need to list that you want the EB7 game map because it comes as your free bonus.

MORE GAME MAPS

Additional alternate maps are normally \$15, but at the time you register, you can get our professionally designed alternate maps at the discounted price of just \$12 each. As you probably realize, these maps are not board games, but rather computer versions that work with EBP. Choose from:

ebAUS or ebAU2 - Australian Rails - Crayon rails in the land down under. Unusual topography, such as deserts and dry rivers gives Australia a unique feel. After riding the ferry to Tasmania,

should you build along the coast or cross-continent? Lots of fun with 45 cities and 27 load types. ebAU2 corresponds to the second edition of Australian Rails.

ebCHN - China Rails - play in China. Container ferries and the Party Congress event introduce new fun.

ebEUR or ebEU4 - Eurorails - gives the game a European flavor as it spans the continent from Spain to Russia. The British Isles are connected via ferries. Should you build to Spain for oranges, Italy for tobacco, or Warsaw for ham? Lots of fun with 60 cities and 30 load types. ebEU4 corresponds to the updated edition of Eurorails released in 2009.

ebGB1 or ebGB3 - British Rails - covers England, Wales and Scotland. Lots of hilly terrain makes this a race to lock up the best rights of way. ebGB3 corresponds to the third edition of British Rails.

ebIND - India Rails - sweeps across the Indian subcontinent from Pakistan to Bangladesh; trains can carry pilgrims to major cities. Note that some events differ slightly from those in the board game.

ebJPN - Nippon Rails - depicts Japan; its narrow corridors make it a good map for 2 or 3 players.

ebMAR - Martian Rails - science fiction literature inspires you to build on the ruddy surface of the planet Mars. Note that a few mileposts and events differ slightly from those of the board game.

ebMOO - Lunar Rails - portrays the mountainous lunar surface in two halves, with teleports to connect around the edges. Note that a few mileposts and events differ slightly from those of the board game.

ebNYC - New York City - depicts the New York City metro area. Track building costs are high, but the payoffs are large and there are many load types to monopolize. The quickest map, takes only about half the play time of most other maps: you can win in under 30 rounds.

ebRUS - Russian Rails - illustrates Russia during the period of the fall of communism and introduces Special Demands. Note that some events differ slightly from those in the board game.

ebAFR, ebCAL and ebSAM - Africa, California, South America - are fresh maps designed by Jeff Marr that respectively depict the indicated areas. Note: California contains load types some may consider to be adult content.

Maps can be purchased individually (on the form, list the "ebXXX" names of the ones you want) or as part of various discounted packages described below. Check our Web site to learn about other new maps as well. Maps are typically about 250K each in ZIP form, as they will be supplied if you choose delivery via email. Note that a few of these maps have slight play differences (typically events or milepost locations) from their board game counterparts.

EBPEDIT MAP EDITOR

Ever wanted to change a game map a bit? Add a mountain here, adjust the coastline there, add a ferry? That's where EBPEdit, our visual map editor program, comes in. If you know how to drag

and drop with your mouse, you can create your own game maps. You can edit all EBP map items visually (except for bitmapped images like the background and icons, or sound effects). This program is a must if you want to easily edit existing maps, or are serious about making your own from scratch. EBPEdit is normally \$25, but only \$14 if you order it at the same time you register EBP.

Those who register both EBP and EBPEdit can obtain upon request a free copy of EBPHP, our high performance version of EBP that is intended for testing maps via [Continuous Play](#). It operates about twice as fast as standard EBP (the exact speed boost depends on your computer).

PACKAGE DEALS

When you pay to register EBP, at an additional but discounted cost you can add any of several map packages. *Note these maps are not the board games themselves, but rather counterparts that work with EBP.* The **Express** contains the Eurorails and Australian Rails maps plus the map editor. The **SuperExpress** contains the Eurorails, Australian Rails, Nippon Rails, New York City, British Rails maps plus the map editor. The **Boardgamer Special** consists of 9 maps from the Empire Builder series: Australian Rails, British Rails, China Rails, Eurorails, India Rails, Lunar Rails, Martian Rails, Nippon Rails, Russian Rails and the map editor. **Marr Maps** contains the Africa, California and South America maps. Some maps exist in multiple versions that correspond to multiple editions of the board games; the packages above give you the most recent version of the most recent edition available. If you wish to know specifically which edition map is included in a package, check RailGameFans.com.

For the serious Empire Builder fan, the **Ultra Package** provides all the maps listed above (the 9 board game maps, the 3 Marr Maps, New York City), plus 4 maps corresponding to older board game editions (ebEB5, ebEUR, ebAUS, ebGB1) and two more free (ebEB7, Colorado). That's 19 maps in all plus the map editor at our best price. Note that when sent as an email attachment, the Ultra Package is roughly 5 megabytes in size. See the printable [registration form](#) for pricing.

LOST REGISTRATION

After you enter the passcode with which we reply, to preserve your registration be sure to back up the directory containing EBP. It can be lost if your hard drive fails, you reload your operating system, etc.

If you lose your registered copy of EBP or get a new computer, contact us to re-register. Run EBP on the computer, choose the Help, Registration Numbers pull-down menu, and send us the pre-registration number shown. We'll reply with your new passcode. Registered users of a given version of the program are entitled to one free passcode per 12 months. If less than 12 months have elapsed, or if the version of the program is newer than one you last paid to register, you can get a new passcode for a small fee: order an upgrade copy, and send us the pre-registration number.

NEW VERSIONS / UPGRADING

Check for the availability of upgrades via the File, Download Update feature. This feature requires that your computer is Internet-ready. In the window that opens, click the Check For Upgrade button to check our Web site for the current version.

You'll be told if your version is the most recent, as well as if a newer version exists and how much (if any) it will cost to upgrade (outside the USA there may be a surcharge). You will then be given a choice to automatically download and install the upgrade. In case there is a problem, your old version will be kept, automatically renamed to contain a version number (for example, the old program may be renamed to EBP125.EXE).

If there is a fee for upgrading, after the download you will need to contact us to pay and obtain a new passcode (order the "EBP upgrade from older to a newer version" on the [registration form](#)). Upgrades are available only to registered users of a prior version. If you do not wish to use the automated upgrade, or if there are other problems, visit our Web site to download manually.

If you get no response upon choosing File, Download Update, or get run-time error 372 or 339, your version of the Windows internet drivers is likely outdated or missing. Refer to the driver information in the [Hardware](#) topic.

FORM

When ready, proceed to the [registration form](#) .

Registration Form for EBP - Print this form or copy/paste it into email. [Terms](#)

Name _____

Address _____

City, ST Zip _____

Country _____

E-mail or Phone _____

Pre-registration # _____ Required!

Obtain it from the Help, Registration Numbers pull-down menu.

Send my items via (pick one): ___ e-mail (free S&H), or ___ CD (add S&H fee below).

EBP Registration (\$25) \$_____

Secondary registrations for your other computers (\$15 each) _____

EBPEdit map editor (\$25, or just \$14 at EBP registration) _____

Game maps (list names) _____

(\$15 each later, or just \$12 each at EBP registration time) _____

Map package deals (avail only when you pay to reg EBP at same time):

Express Package: adds EU4 + AU2 + map editor (\$34) _____

SuperExpress: adds EU4+AU2+JPN+NYC+GB3+editor (\$64) _____

Boardgamer Special: adds 9 EB series maps + editor (\$98) _____

Marr Maps: adds AFR + CAL + SAM (\$30) _____

Ultra Package: all 17 maps + 2 free + map editor (\$152) _____

EBP upgrade from older to a newer version (\$15) _____

EBPEdit map editor upgrade to a newer version (\$15) _____

Total \$_____

All orders outside USA, add 10% (defrays our extra costs) _____

S&H: \$0 for e-mail, or \$5 in USA, \$10 to other locations _____

In Maryland, please add sales tax _____

Grand Total \$_____

Referred by (if any) _____ Enclose a check or money order payable in US dollars to **Intersystem Concepts, Inc.** Or, to pay with your Visa or MasterCard credit card, have your EBP pre-registration number ready and call 410 531-9000, or mail or e-mail your info to intersys@insystem.com. Below write info from credit card: cardholder name, expiration date and cardholder signature. Prices expected good through June 30, 2010; compare to order forms at RailGameFans.com to confirm.

Thank you! Return to: Intersystem Concepts, Inc.; P.O. Box 477; Fulton, MD 20759; USA

Rules

A summary of standard Empire Builder rules is given below. For specific details and special notes pertaining to individual maps, please consult the rules that come with copies of the board games.

OVERVIEW

This is a strategy game of building railroad networks. Upon the game's map, players attempt to connect mileposts into an efficient network of track so as to enable swift deliveries of demanded goods, called "loads". Players earn cash by picking up loads from a city at which they are supplied, using their train to transport the loads along track, and delivering the loads to where demanded to collect a payment. The winner is the first player who can accumulate \$250 million or more in cash while interconnecting the required minimum number of big (hexagonal) cities with his track network. Commonly, this required minimum is one less than number of big cities present on the map.

START

Each player starts the match with \$50 million, three load demand contracts, a Freight engine that has room to carry 2 loads, and no track. Each of the three contracts lists three different cities, each of which demands a particular type of load and offers a particular cash payoff amount. The player may choose to satisfy (deliver the demanded load) any one, and only one, of the three demands on a contract. Players observe which loads are demanded by their contracts, and where load supplying cities are on the map. Most game maps depict loads via small, representative icons. *Tip: hover your mouse over a contract's load name and EBP will blink the cities that supply it, plus list their names above the map.*

In order to deliver a load and collect the payoff, players need railroad track that connects the supply and demand cities; during the build phase of a turn a player can build this track. In many cases, it is best to build track to connect the demand city with the closest supply city. When a player satisfies a contract by delivering to one of the three listed cities the load that city demands, he collects a payment, and discards that contract for a new one.

BUILDING TRACK

Play begins with two "build-only" rounds during each of which each player may build up to \$20 million worth of track. The cost of track varies with the terrain: building to clear mileposts (plain dots) costs \$1 million, to mountains (triangles) \$2m, across rivers an additional \$2m, into small (red circle) or medium (red square) cities an additional \$2m, etc. Players may only build track from either their existing track, or from big cities (red hexagons). Note that building into a big city costs \$5m but building out from it (to a normal milepost) costs only \$1m. Such inexpensive build outs are limited to 2 per turn. *Tip: to draw track in EBP, zoom into the map, point to a milepost, click and hold the left mouse button, and drag the mouse to adjacent milepost(s). EBP will display the total build cost. Undo by pressing Backspace. When satisfied, click the OK (done) button.*

MOVEMENT

After the initial build-only rounds, during his turn, the player starts his engine at any city on the map, picks up loads, and then moves. Typically this movement proceeds from the supply cities to the demand cities. He may travel (move his train milepost-to-milepost along previously constructed track on the map) from one location to another up to the maximum amount allowed by the speed of his engine. A Freight engine moves 9 per turn. A player does not need to consume his entire allowed distance: he may stop early.

For travel, a player may use any track desired, provided that he does not reverse direction of movement except at a city or ferry port. If during a turn the player rides upon any track of an opponent, he must pay that opponent \$4 million, and must have that money available prior to moving. There is no fee for moving upon one's own track.

PICKING UP LOADS

When his train is at a city, a player may pick up at no charge one or more loads supplied by that city, up to the carrying capacity of his train (2 or 3). If he no longer wants to carry a particular load, he may toss it at any time. The total quantity of each type of load is limited (usually 3 or 4), and if all available are already aboard trains, the player may not pick up another of that type. Though any player can pick up any type of load, generally players pick up loads that are listed on their contracts and then travel to the delivery city to collect the payoff indicated. *Tip: EBP automatically opens the Loads window when you move to a city that supplies a load you need, or you can open it manually via the Turn, Loads pull-down menu.*

Each train is limited as to the maximum number of loads it can carry. The train with which each player begins can carry two loads. Certain upgraded trains can carry three loads.

BUILDING/UPGRADING

After a player has moved, he may construct up to \$20m more track if he has sufficient money. His track establishes a "right-of-way" between the mileposts the segment connects, and no other player may build parallel track directly between the same two mileposts.

Instead of building, a player may exchange his Freight engine for a Fast Freight (\$20m) which moves 12, or a Heavy Freight (\$20m) which moves 9 but has room to carry 3 loads. From either of those engines, a player may later exchange for a Super Freight (moves 12, carries 3) for \$20m.

DELIVERING LOADS

When a player moves to a city that, according to a player's own contracts, demands a load type aboard the player's train, the player can pause movement, make the delivery (removing the load from his train in the process and discarding that contract) and collect the payoff indicated. He then obtains a new contract, can pick up loads, and can move any of his allowed distance remaining. Payoffs are fixed amounts, and are generally proportional to the length plus build cost of the shortest possible route between the closest load supply city and delivery city. *Tip: details of how to make a delivery in EBP are in the Loads topic.*

EVENTS

The deck of contracts also contains events. When a player gets a fresh contract upon delivery, it may instead turn out to be an event. Events include storms, derailments, labor strikes, etc. that

temporarily impact play and track in various ways. Follow the instructions of the event. If an event is drawn, keep drawing until the player gets a contract to replace the one discarded as part of the delivery he just made. *Tip: EBP handles this process for you, and on the map displays event areas in an amber color; events can be turned off (prevented from occurring) via EBP's Game Options window.*

DISCARDING CONTRACTS

Instead of taking his turn, a player may choose to discard all of his contracts and draw new ones. This is typically done when the set of contracts does not offer lucrative payoffs or efficient trips; experienced players discard about 1 to 4 times per match. A player may not selectively discard just one or two contracts.

USE FEES

Typically, most train movement is done on the player's own track, but players can choose to move their trains along the track of opponents. At completion of a turn during which an opponent's track was rented, the player pays that opponent \$4 million.

FERRIES

Some maps have ferries. To access a ferry, a player builds track to one of its ports, and then out from its opposite port. The cost of building to the ferry is displayed within the circle along the ferry's route. To use a ferry, the player moves his train to the port, and loses the remainder of his movement. On his next turn, he "teleports" his train to the connected port, where he begins counting his movement, but only moves half the normal amount (rounding up). Each ferry can be built to by up to two players.

BUILD LIMITS

A maximum of two players can build into a small (circular) city. A maximum of three players can build into a medium (square) city. All players must be able to build into big (hexagon) cities. No track may be built that would prevent another player from building into a big city, or other city to which he is otherwise entitled.

WINNING

Play continues until completion of the round in which a player reaches \$250 million or more in cash, and has connected via his track the required number of big cities (usually one less than the total number of big cities on the map). That player is the winner. If more than one player reaches these goals during the same round, the one with the most cash wins. If there is a tie for cash, the game continues with the new winning cash requirement increased by \$50m.

STRATEGY

Efficiency is the key to crayon rails. You want to maximize your payoffs by moving via direct, short routes while not overbuilding track. Try to make long distance trips (i.e. one map edge to the opposite) while carrying multiple loads you can deliver either along way or near other delivery cities. On many maps, routes that directly connect the big cities are helpful because they are often the most frequently traveled rail corridors.

VARIANTS

Perhaps more than with most games, this game lends itself to special house rules or variants. Please consult the Crayon Rail Fanatics Web site for even more information about fun variants.

Saving a Game

EBP lets you save a match to disk during your turn.

You can name your saved games as you wish. EBP automatically appends an .EBZ file name extension.

AUTOMATIC SAVES

If you want, via the Game Options window, you can tell EBP to automatically save the game before each player's turn. This feature is handy if you are encountering odd problems, and want to save the game just before the problem occurs. Automatically saved games have names such as ebpAS###x, where ### is the round number and x is a letter representing the player's turn (a=player 1, b=player 2, etc.).

CONTINUOUS SAVES

It is also possible to save games played solely by the AI; see the continuous play information.

FILE ASSOCIATION

If you wish, within Windows create a file association between the .EBZ saved game extension and EBP.EXE, and then in Windows when you double-click on a saved game, EBP will start and open that game. To learn how to set this up in your version of Windows, do a web search for create file association.

Starting a Game

To play a match, from the Game pull-down menu, choose Start Game. When the Game Setup window appears, select the number and types of players you want. Additional features and popular variants are available via the pull-down menus and Game Options button.

Note that while you may change most of these settings once a game is in progress, doing so is considered cheating, and will have a negative effect on your score.

To play an opponent via a network or the Internet, see the Web Play topic.

Status

To monitor the status of a game, use the Game Status window (found on the Game pull-down menu). You can leave the Game Status window open while a game is in progress.

Via the Display pull-down menu in the Game Status window, you can select any of the following displays:

Cash - graphs the cash holdings of each player over the course of the game

Net Worth - graphs each player's net worth over the course of a game

Summary - displays assorted information in numeric form, suitable for printing

City Deliveries - lists the number of times each city has been a delivered a load

Load Deliveries - lists the number of times each load type has been a delivered

AI Stats - shows cumulative statistics for continuous play games

Max Info - similar to Summary, but with additional information

The data of the text displays can be printed or copied to the clipboard via options on the pull-down menus.

DESCRIPTIONS

Here are descriptions of some of the information the status pages display:

Status/Place - upon completion of the game, this shows the Winner and the finish order of the other players. The finish rank is determined by cash, less a penalty of StartCash *
NumberofBigCitiesConnectedFewerThanMinimumNeededToWin

*Speculative - loads delivered that had been onboard when the player received a contract demanding them; such loads are marked with an asterisk in the list of deliveries

Game Score - EBP's rating of each player's success in the game. The score is described in the Hall of Fame topic.

Win% - winning percentage (Wins/Starts)

DI/S - deliveries per start

Mov/R - distance moved per round

\$/Mov - payoffs collected divided by distance moved

\$/Rnd - payoffs collected divided by number of rounds

\$/Bd/S - amount spent building track per start

Rnd/W - number of rounds played per win

Pch/S - number of times contracts were discarded per start

Fee/S - amount spent on opponent track use fees per start

Csh/S - average cash on hand at game end

Scr/S - average Game Score

Symbols

Below is a list and description of symbols that can appear on game maps. Note that color can vary based both on your color preference settings in Windows and if you customize EBP's Display Settings.

SYMBOL.....	COLOR.....	DESCRIPTION
dot....	black....	clear (normal) milepost
dot, larger.....	brown....	desert
dot, larger.....	dark cyan....	water or snow
triangle, filled....	black....	mountain or hill
triangle, empty.....	black....	alpine
triangles, small pair.....	black+red....	volcano
triangle, downward.....	red....	point (varies by map)
v-shape.....	black....	swamp
J-shape.....	black....	jungle
3 dots atop sticks.....	black....	forest
any above.....	orange....	event impact area
overhang.....	black....	tunnel
circle, filled.....	red....	small city
square, filled.....	red....	medium city
hexagon, large.....	red lines....	big city
star, tiny.....	white....	capital city
box at city mp.....	inverse....	warehoused <u>load</u>
line.....	cyan....	ocean coastline
line.....	blue....	river
line, thicker.....	blue....	lake
line.....	brown....	dry river
line.....	yellow....	border, usually country
line.....	green....	border, miscellaneous
line.....	dark gray....	barrier (no building across)
lines.....	orange....	event impact area
lines in a row.....	player....	player's track under construction (the ties)
lines, paired.....	player....	player's track (the rails)
line.....	gray+black....	<u>ferry</u> line
circle.....	gray....	ferry port or wrap/teleport milepost
C shape.....	gray....	container ferry port
circle with number.....	white....	ferry cost
circle, filled.....	red....	small city
rectangular shapes.....	various....	players' trains
icons.....	various....	<u>loads</u> supplied by city

Some of these symbols are illustrated in the game's Help, Symbol Legend window.

Technical Support

EBP technical support is available only to registered users and then only via e-mail. Contact Intersystem Concepts at intersys@insystem.com. We cannot guarantee a reply within a particular time frame.

LATEST INFORMATION

For the most up-to-date information about EBP, FAQs, etc. visit the Crayon Rail Fanatics Web site at <http://www.railgamefans.com>.

BACKGROUND BITMAP

Windows has a well-deserved reputation for bugs, and perhaps nowhere are Windows bugs more evident than in the handling of the game's background image. If you experience GPF errors, crashes, unusual colors, missing drawings or other odd map displays, try running again after disabling the background image via the Display Settings window. If failures continue, change your Windows video display mode, and retry the game.

OTHER PROBLEMS

If you continue to have problems, see the EBP FAQ at our Web site for a list of suggested remedies.

SAVED GAMES

To investigate a problem, we usually need a saved game that demonstrates the problem. In most cases, bugs cannot be fixed without such a saved game. Send us a saved game by attaching the appropriate .EBZ file to your e-mail message.

SUGGESTIONS

Suggestions for improved or new features in EBP are always welcome. Please e-mail them to intersys@insystem.com. Legal disclaimer: note that suggestions become the property of Intersystem Concepts, Inc.

Turn

The Turn pull-down menu offers various features for the human player.

LOADS

The Loads window opens automatically when you move your train to a city that supplies or demands a load on your contracts. If you close the Loads window and later need to reopen it manually, use the Turn, Loads menu item.

SUGGEST PLAN

Use the Turn, Suggest Plan menu to ask EBP to display what one of its AI bot players would do in your situation. Use does not lower your game score, but some may consider it cheating, and therefore it is noted in the History Box.

UNDO MOVE

Use this to undo train movement before you have performed any other action (such as delivering a load, building track, etc.).

ERASE SEGMENT

While building, use this to erase the last segment of track you are planning to build. Works the same as the Backspace key.

UNDO BUILDING

While building, use this to undo all building and engine upgrades this turn.

GO TO (AUTOMOVE)

Use this to select a city to which to engage EBP's "Automove without building" feature. Cities served by your track will be listed; choose one from the list, and EBP will move your train to it via your track's shortest route. Automove is handy when your next planned destination is distant, and you have no other actions (such as load pickups) to perform along the way.

AUTOMOVE DISENGAGE

Use this to disengage automove before your train reaches the automove destination. If you are unable to access the menus (because EBP is busy), press Ctrl+A instead.

AUTOMOVE REENGAGE

The reengage automove feature is most useful after EBP has automatically disengaged it due to an event.

UPGRADE ENGINE

Use this to change your train's locomotive to a different type, such as a faster one. You'll be asked to confirm.

DISCARD CONTRACTS

Use this to discard / pitch / dump / exchange your contracts for new ones. This can be done only as the first action of your turn. It cannot be done if you have an unfulfilled, locked delivery (honeymoon variant). Some of the best players report they discard their contracts about 1 to 4 times per match on average, but that the rate varies based on the map in use.

LOSE TURN

Use this to forcibly skip your turn; it can be done only as the first action of your turn. If the backtracking variant is enabled, players can use this feature when their train is located outside a city but they wish to reverse their train's direction of travel.

RESTART

Use Restart to escape from an untenable game position, such as being unable to make any delivery, even after repeatedly discarding contracts. Restart restores your game position to that at the start: no track, the starting engine, and the starting amount of cash. (Track of a restarting player is erased, except for portions EBP automatically deems needed by an opponent to connect back to their own track.) Restart is rarely needed by the best players because they avoid getting themselves into a stuck game position. For example, spending all your cash, such that you cannot afford to repair a bridge washout, puts you at risk of having no alternative except restart.

Web Play

You can play EBP versus human opponents live online via the Internet, as well as via your multiple home computers that share a router (even if they don't otherwise have networking enabled). To use this feature, each participant's computer must either be on a network, connected to the same router, or be capable of connecting to the Web; plus all participants must have the same version of EBP. If you want to find new opponents, visit the Crayon Rail Fanatics Web site at <http://www.railgamefans.com> for links to player lists.

QUICK START

If you don't care about details, and just want to play via the Web, here's what to do:

- 1) Decide in advance who will be the GameMaster (any one person will do).
- 2) Make sure your local network or Internet connection is active/ready.
- 3) Run EBP and choose the Game, Start Game menu.
- 4) Put your information (name, etc.) in slot #1. **Every** person uses slot #1 to get started.
- 5) Use the Web pull down menu, and choose GM or player. The Web window will open; if it does not, some drivers on your computer likely need updating (see below).
- 6) If you are a player, when prompted, enter the GM's dot address.
- 7) When everyone is ready to start play, in the Web window, the GM should choose the Match, Begin/Resume pull-down menu.

That's it! Can't figure something out? Details are found below.

THREE WAYS TO PARTICIPATE

In EBP, you can participate in a Web game in any of three ways:

GameMaster (GM) - The GM's computer is the "master" and controls the pace of the match. If your match includes AI players, the GM's computer will operate them. Any person can be GM, and the GM always plays in the match. There is exactly one GM per match.

Player - Like the GM, a player participates in the match, but his computer does little more than communicate with the GM's. Up to five Players can participate in the match at once.

Spectator - A Spectator can watch the match, but not play in it. EBP allows for up to 64 Spectators to watch the match at once.

DETAILS OF WEB PLAY

Up to six human players can compete in the same EBP match. The AI players can fill any slots not occupied by a human. Before starting EBP, use external means (telephone, email, instant message, etc.) to decide who will participate and what time the match will begin. Also, choose exactly one person to act as GameMaster (GM). The GM's computer will be the controlling, master computer.

DETAILS FOR THE GM

1) The GM should run EBP and start a new game. On the Game Setup/Configuration, the GM should select the total number of participants (i.e. the total human participants plus any desired AI players). The GM *must* specify his personal information (name, color, etc.) in the area for *player #1*. Always set the "Type/Style" to Human (do not select Human, Remote).

2) Next, the GM should choose the Web, Make me GameMaster pull-down menu. The Web window will appear (it is an "always on top" type window). If the GM's computer is already connected to the Internet, his IP dot address will appear as the caption of the window. (A dot address resembles "200.123.45.182".) If the dot address does not appear automatically, the GM will be asked if he wishes to connect.

3) Now, the GM must tell his dot address to each of the participants (via telephone, email, instant message, etc.). The participants must know this address in order to connect to the GM's computer. If EBP displays both a local and external dot addresses, the one to use depends on where you opponents are located. If they are on your local network (such as connected via the same router) use the local address, otherwise use the external. EBP determines your external address by performing a Web query to a site that echoes it back; if needed, you can change the site employed by entering its URL in the IPLookup parameter stored in the EBP.INI file.

4) The GM should wait for all participants to connect. The status of the connection(s) will be shown in the lower box of the Web window. As participants connect, EBP will update the Game Setup/Configuration window with the name and chosen color. EBP will automatically assign each player a slot (starting with slot #2 because the GM's info is in slot #1). *If more than one participant chooses the same color, EBP will attempt to swap or substitute colors; it is the responsibility of the GM to override any unreasonable substitutions.* If necessary, the GM can send a message to the participants to help resolve the matter (use the Message menu).

5) Unfilled player slots can be occupied by AI players, as selected by the GM. After everyone connects and is ready to play, the GM should choose the Match, Begin/Resume menu item.

DETAILS FOR THE PLAYER(S)

1) The non-GM players should run EBP and start a new game. On the Game Setup/Configuration window, each non-GM *must* specify his personal information (name, color, etc.) in the area for *player #1*. Always set the "Type/Style" to Human (do not select Human, Remote). The slots for other players should be ignored. Only one human may participate per computer.

2) Next, choose the Web, Make me a Player pull-down menu. The Web window will appear (it is an "always on top" type window); it must remain open for the duration of the match. You will be prompted to enter the GM's dot address. Obtain the GM's dot address (via telephone, email, instant message, etc.).

3) Enter the dot address the GM provided. EBP will then attempt to establish a connection with the GM. The status of this connection will be displayed in the lower box of the Web Play window. If you have trouble connecting, see the Connection Difficulties topic below.

4) Non-GMs should wait while all opponents connect. The GM will start the game when everyone is ready. While waiting, you can send messages via the Message menu. An easy way to reply to a particular individual is to double click on his message in the message box.

5) The match will begin automatically when the GM designates.

The match should play very much like a normal game, however note that to keep the match moving along, some information boxes do not wait for you to click OK to close them. If you'd like an audible notice of when it is your turn, choose File, Game Options, and in the Variants/Misc box scroll to the My-turn sound checkbox. When you enable My-turn sound, a window will open listing WAV sound files. You can navigate to any folder on your computer and choose the WAV sound effect you want as your turn notifier.

If you as a non-GM should become disconnected from the GM during the game, attempt to reconnect via the Connect, Connect me to GM menu. EBP should automatically reload a copy of the game from the GM. If it does not, after the connection has been re-established, choose the Match, Reload pull-down menu.

DETAILS FOR SPECTATORS

You can observe a game being played without actually participating in it. To do so, you need to know the GM's IP dot address. Choose the Web, Make me a Spectator menu option. EBP supports up to 64 simultaneous spectators, or the limits of Windows (whichever comes first).

CONNECTION DIFFICULTIES

Due to the complexities of the Internet, we cannot guarantee that you will always be able to establish and maintain a suitable connection for the purposes of playing EBP. However, if you are experiencing trouble connecting (such as "Connection Refused" or "Timeout" messages), try any or all of the following.

- 1) Try establishing your connection to the Internet *before* you run EBP. That is, connect normally, such as via your browser, then start EBP.
- 2) Sometimes firewalls or other security measures prevent either inbound or outbound player-to-player connections, but not both. Therefore, try swapping roles: choose a different person to act as GM, then try connecting again.
- 3) Your router may need to have certain ports opened or redirected; this is sometimes called port range forwarding. By default, EBP employs port numbers 1103 and 1104 for communication. For example, on many Linksys brand routers, go to the router's admin page, select Applications and Gaming tab, then in the Application field enter `ebp.exe`, in Start enter 1103, in End enter 1104, set Protocol to Both, and IP Address to match the value EBP displays as your local dot address. The value must match otherwise you will not be able to connect! Usually this value is something like 192.168.1.100 or 192.168.1.101; careful: it can change from one day to the next. See the software FAQ at the EBP Web site for more info.
- 4) Adjust your firewall to allow incoming connections. Consult the firewall's documentation to determine the steps necessary. For example, in Windows Vista do the following: go to your Windows Control Panel, look in the Security area, click "Allow a program through Windows Firewall". This opens the Windows Firewall Settings window, Exceptions tab. In the list of programs, look for Empre Builder Pronto or EBP (if it is not already in the list, use the "Add program" feature). Enable an exception by clicking EBP's check box.

5) By default, EBP employs port numbers 1103 and 1104 for communication. For special purposes (such as an attempt to rectify connection difficulties), this can be changed by editing the Port entry in the EBP.INI file. All players in the match must employ the same port number. Contact your ISP or Webmaster to learn which ports are available for a "standard peer-to-peer IP socket connection". Rarely should you need to change this.

6) If you get no response upon choosing a Web play option, or get run-time error 372 or 339, your version of the Windows internet drivers is likely outdated or missing. Refer to the driver information in the Hardware topic.

SUSPENDING AND RESUMING A GAME

If you need to temporarily stop playing a Web match and resume later, here are the steps:

- 1) Play until a human player is either just starting his turn, or has just completed it.
- 2) The GM should save the match to disk (via the File, Save Game menu).
- 3) The players should disconnect.
- 4) To resume later, the GM should reload the saved game (via the File, Open Game menu). Next, the GM should use the Game, Edit Setup pull-down menu and in the window that opens choose the Web, Make me GameMaster pull-down menu.
- 5) The remote players should connect to the GM in the usual fashion (Game, Start Game; enter name in slot 1; click Web, Make me a Player; etc.). After the connection has been established, EBP will automatically obtain a copy of the match from the GM. If there are multiple remote human players in the match, EBP will ask which player slot you wish to occupy. Wait for the GM to resume the match.
- 6) When everyone has connected, the GM should choose the Match, Begin/Resume menu item.

ASSORTED NOTES

Strive to have the same version of the EBP.EXE program as the GM. The Help, About menu item shows the creation date of your copy of the EBP.EXE. If you encounter inexplicable communications problems, compare your EBP.EXE version date and time with that of the GM. You can download the latest version from our Web site.

At the GM's computer only, additional human players can participate in hotseat fashion. They should be added to the bottom of the player list after all remote human players have connected.

If a player becomes disconnected, and appears to be unable to reconnect, the GM can continue the match by substituting an AI player. To do so: 1) use the Game, Edit Setup pull-down menu, and 2) change the player's Type/Style setting from "Human, Remote" to one of the AI players. Upon returning to the map window, the GM may need to click the "OK (done)" button to prod the AI to proceed.

If a human player attempts to join a match already in progress, EBP will alert the GM. The GM can then decide if the person should be allowed to join (and take the place of one of the AI players).

The message "CAUTION: this game appears to have been started with a different version of the map" can occur if the program you employed to unzip/install a file containing an EBP game map does not preserve the last editing date of the .ebm map file; this is a known problem in some versions of Windows. In such cases you can safely ignore the caution message and proceed.

EBP supports IPv6 addresses, but whether the Windows drivers it employs do as well has not been tested as of this writing.

What's New

This topic lists significant changes and new features as they are introduced. Details of minor changes can be found at the version history page at the Crayon Rail Fanatics web site at RailGameFans.com.

What's new in EBP 1.3:

- * As part of a licensing agreement with Mayfair Games, EB Player is now Empire Builder Pronto.
- * support has been added for features introduced with Martian Rails
- * in the separate Contracts window you can choose to display only non-player contracts, that is, just Special Demands and Open Contracts (right click on the Contracts window for a popup menu with feature toggle)
- * In Blitz Play mode there's no waiting for an opponent: all players keep taking turns until someone wins. This new feature is a fast and fun challenge for experienced players: complete an entire match with up to 6 players in about 15 minutes. Blitz can be played vs. both AI and Web opponents.
- * your train symbol gently blinks when it is the operation phase of your turn
- * small popups remind you how far you can move as well as when it is the build phase of your turn
- * support for the Fast Trains variant has been added
- * support for the Open Contracts variant has been added
- * support for the Light Trains variant has been added
- * the Display Settings window allows you to choose from a variety of load icon sets; board-game-style icon sets are now available thanks in part to a licensing deal with Mayfair Games
- * when you flag demands on your contracts (the RR crossing sign), EBP now displays the same symbol in the Loads window to act as a reminder
- * You can adjust independently the size of the text in the separate Contracts window (choose Game, Contract menu to open window, then right click on it to adjust text size). This helps you better fit the window within your screen's dimensions.
- * EBP can employ the multiple processors of multi-core computers to more rapidly gather statistics in AI Continuous Play matches.
- * EBP now automatically switches to the EBP.CHM help file if you are running Windows Vista. If you prefer the EBP.HLP file, delete or rename EBP.CHM, and add the WinHelp driver to Vista; you can download that driver from Microsoft.

* Those who register both new versions of EBP and the EBP Map Editor can obtain upon request a free copy of EBPHP, our high performance version of EBP that is intended for testing maps via Continuous Play. Depending on your computer, it can operate about twice as fast as standard EBP. On one of our test computers EBPHP completes over 100,000 AI player-matches per day.

* upon a single click on a saved game's file name, the File, Open Game window displays basic information about that saved game before you actually open it

* the File window's Sort by Date checkbox setting is preserved across sessions

* features have been added to support Martian Rails

* the registration bonus map is now EB7 rather than EB5; EB7 corresponds to the seventh edition of the Empire Builder board game; those who register EBP 1.3, including prior users, are entitled to a free copy of the EB7 map

* minor cosmetic changes and problem fixes

What's new in EBP 1.2:

* use the new Turn, Suggest Plan menu to learn what the AI would do in your situation

* you can trace backward with the mouse to undo a track build

* Container ports / links / ferries are supported, such as those on the new China map

* the Game, Contracts menu opens a separate window showing all contracts of all players; most useful for those with widescreen or dual monitors; resize this window taller than wide and EBP will show two players per column

* Find City and Find Loads features on the Information menu ease those tasks

* Turn, Go To menu offers another way to engage automove

* Automove is automatically disengaged upon any event; use Turn, Automove Reengage if desired

* Borrowing/Loans variant is supported; see the BorrowMax setting in the Options window; to borrow, build or rent more track than you can afford; players must pay back twice the amount they borrow

* For a complete change of pace, the Map randomization feature randomizes the locations of cities; it's like playing a totally different map. See Game Setup window.

* AI has been enhanced for improved play and fewer restarts

* assorted user-interface improvements and new features

* the EBPEdit map editor has been updated with corresponding features