

# BlueBrick

## An essential tool for your display

Text and pictures by Jetro

The world of virtual bricks isn't limited to designs and rendering in a CAD like environment. Tools like those included in the LDraw system of tools or the design software launched by LEGO® itself under the name LDD are very useful when you want to document or design a MOC, but there are certain tasks related to the design process for which they are not very well suited. When you want plan a layout, especially if it includes a railway track (whether for a train or monorail) these tools are not easy to use, nor do they provide the specific information you will be interested in for these cases, like how much space will it will take up and which parts will be needed. Anyone who has participated in some LUG or TC [1] event knows that it's also very interesting to be able to make some sort of map in order to make collaboration easier and have a work document that can easily be modified.

In order to cater for this need there already existed a tool which, despite it's relative age, is still used by many. This tool is Track Designer (TD[2]). It was created by Mathew Bates, was originally designed for Windows 95 (!) and allows you to easily create track circuits. However, the software hasn't been updated in many years. In 2003, Cary Clark presented TrackDraw, and for some time it looked like this new application would replace TD. However, the project never got out of the Beta version.

Towards the end of 2007 Alban Nanty started working on what would turn out to be BlueBrick. As Alban himself put it: "Even if Track Designer is a great software, I was annoyed by its limitations, i.e. the lack of undo, the limited level of zoom in, and the lack of possibilities to add annotation texts or area delimitations, which are very convenient and often used by the AFOL to prepare their layout with different people. Usually the AFOL was exporting the Track Designer layout in picture and add all these information in Photoshop, which makes the process a bit painful when there are a lot of changes during the show preparation."

### What can BlueBrick do?

Working with BlueBrick is easy. The application doesn't require any installation, although it requires .Net Framework 2.0 to work. From version 1.2

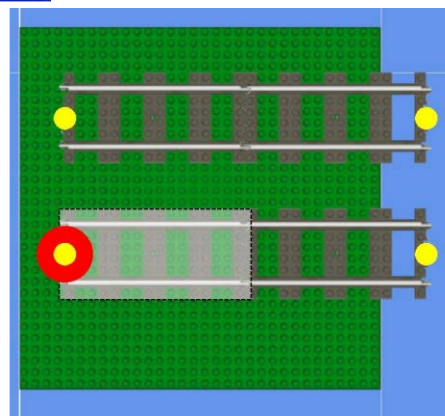
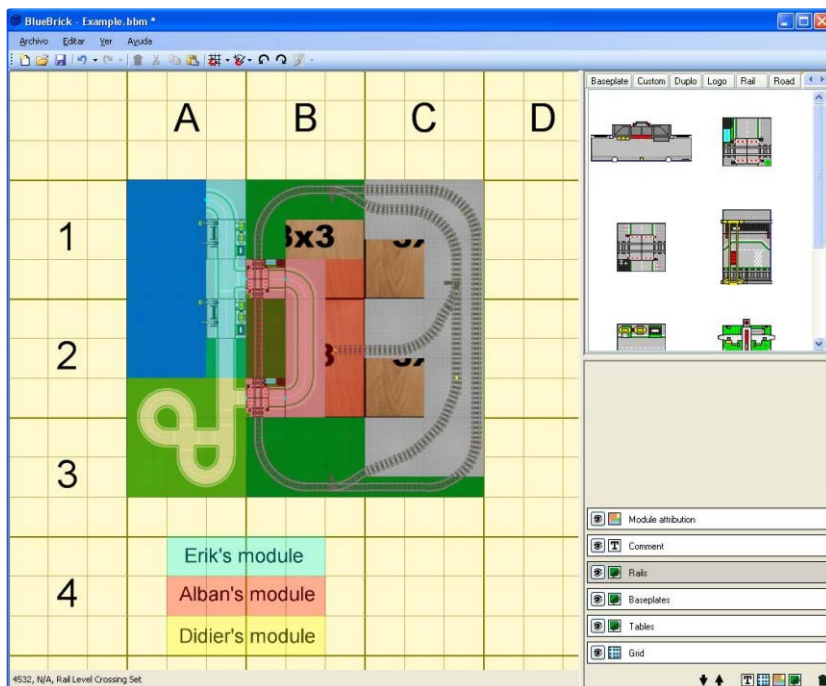
BlueBrick is translated into French, German, Dutch, Portuguese and Spanish. Among the characteristics that stand out is the fact that Bluebrick by default opens with a grid based on the size of 32x32 baseplate and a larger division of 3x3 baseplates, although this division can be freely configured from the general options menu.

Placing tracks in BlueBrick is also a simple task. From the toolbar you can select the grid snapping step as well as the rotation step angle and the parts you need can then simply be dragged from the library onto the workspace. If the parts have the right angle they will automatically connect because the program uses a system which identifies the connection points of track parts. But laying out a track can be even easier. After inserting the first track part, BlueBrick will automatically add the next part you click on and connect it to the left of the part that was selected. In the case of bends you simply need to indicate the direction of the first part and rest will automatically be added in the same direction. But there's an even simpler way of laying out tracks. By default a number of keyboard shortcuts have been configured with which you can insert a part by pressing the associated key, in much the same way as when you click on the piece in the library.

In order to make it easy to include different types of elements, BlueBrick uses a system of layers. Each layer can contain a specific type of data and in this way it is easy to separate a track design from the baseplates it will be placed upon. You can also create a text layer for annotations or an area layer to indicate which AFOL is in charge of a particular part of the layout.

If you still have tracks designed with TD, no problem! as long as the file is version 2.0, Bluebrick can open the file and convert it to the BlueBrick format. If it contains any element that is not available in, a red X will appear in its place to help you substitute it with another part from the library BlueBrick provides.

These parts have an open file format: the parts are gif files. In order to give the part the right size you should take into account that a 256x256 pixel files translates into a 32x32 stud part. In the case of those parts that need to have connection points



defined (train and monorail tracks) there is also an xml file to indicate the type of part and location of the connection points. The xml files that accompany the BlueBrick parts are well documented and it is relatively easy to create a new part in this way.

Finally, once the track and all the accompanying elements have been designed you will want to know the total size of the layout. BlueBrick can show you a list of parts as well as detailed information about the size of the layout in studs, meters and feet.

#### More?

BlueBrick has a lot of other functions and is still being developed further. There are still a number of things that need to be included in the program, among which are the new flexible tracks.

Although BlueBrick was designed for .Net Framework 2.0, it also works under Mono. This has however not been fully tested. Feedback from users who work with MacOs or Linux and want to test drive BlueBrick is most welcome.

For the time being there are no help files for BlueBrick, although the website for the program offers some explanations about how to use it. Alban Nanty appreciates any collaboration towards the writing of a tutorial and the translation into more languages.

- [1] LUG = LEGO® User Group, TC = Train Club. To find a LUG or TC near you, check out <http://www.lugnet.com/map/> or <http://www.google.com/info/beta1>
- [2] [http://www.nglrc.org/train\\_depot/td.htm](http://www.nglrc.org/train_depot/td.htm)

#### Bibliography:

Railbricks #3  
<http://railbricks.com/>

BlueBrick Website  
<http://bluebrick.lswproject.com/>

Lugnet/CAD  
<http://news.lugnet.com/cad/?n=15265>