Bell Conductor Manual

v. 1.0 / April 2015

Introduction

The purpose of the program Bell Conductor is to help to harmonize a team of bell ringers. It is achieved through visualization of ringing sequence. Each bell of a choir is assigned to a column with a note value and a label. In the column a falling block indicates when the ringer should ring their bell (for hand bells) or pull the rope (for tower bells) and that is when the block will land on the bottom line. The computer screen should be visible to all the bell-ringers.

Quick start

The installation package comes with two example configurations: 8 tower bells and 12 hand bells (Illustration 1). The program accepts music files in midi format and in text files. A music file with a sample melody in midi format can be found on the website http://BellConductor.co.uk/.
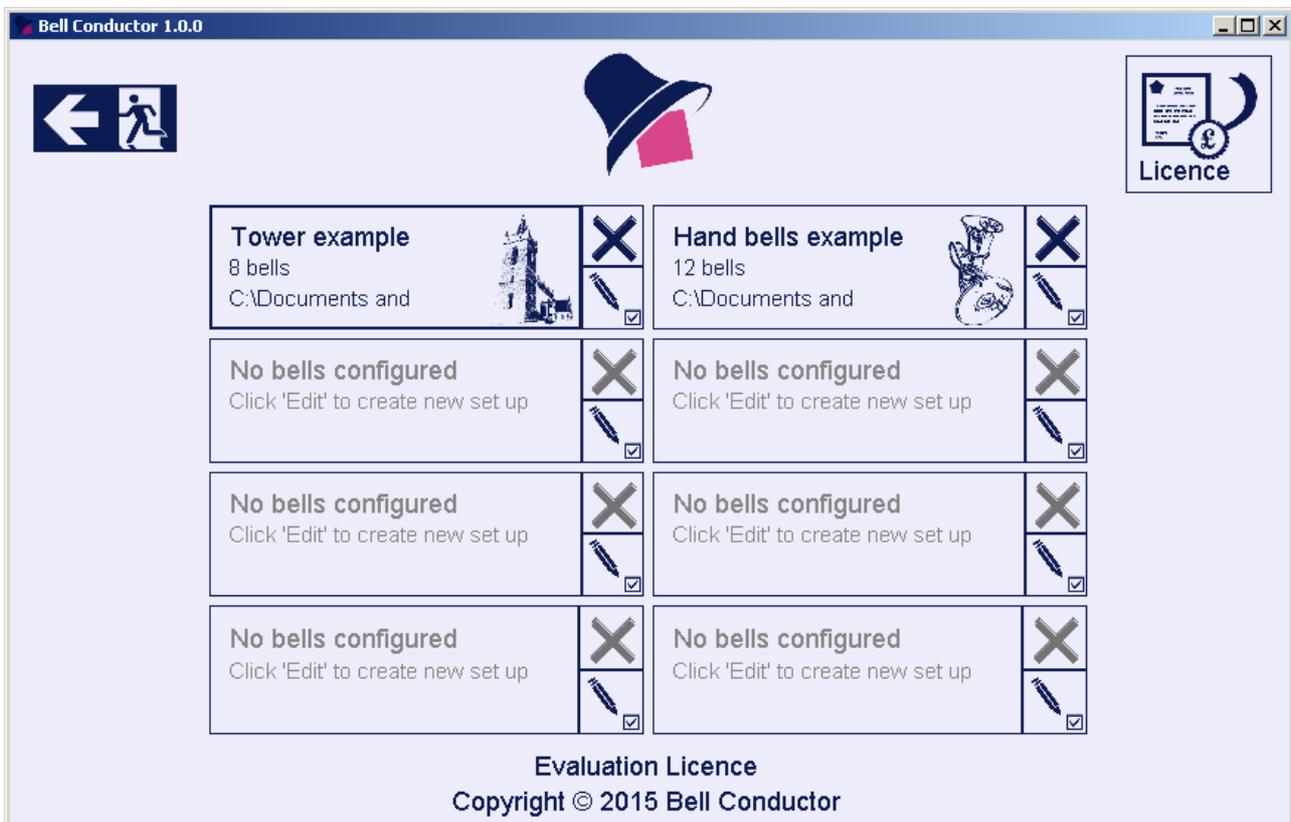

Illustration 1, Front screen

Any melody or change ringing scorecard can be loaded and played by the program as long as each note/sound from the file corresponds to a bell in the configuration.
The player screen can be accessed via one of eight buttons (example buttons: Illustration 1). They become active if a bell choir has been set up for them. The configuration screen can be accessed via edit button with a pencil icon.

Player screen

Music files or ring change scorecards can be loaded from the hard drive using the **Load** button. For the ease of revisiting recently-used files the **Recent** section has been provided.
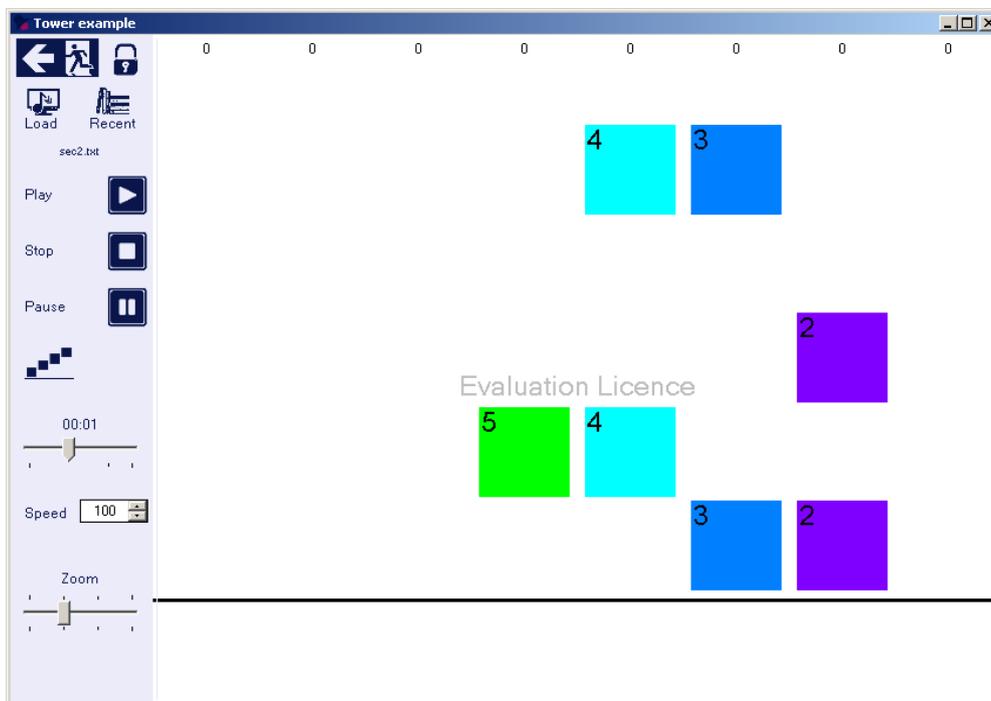

Illustration 2, Player screen

Music files in midi format and in text files can be loaded.

The midi file is a digitalized record of a music score and a lot of examples can be found on the Internet. The program automatically transposes the melody to match available bells if possible or it will fail to load the file.

The text file method uses the bell's display label to link the bell with the label in the file. A unit of time has been defaulted to 1/3 of a second. The program will try to interpret new lines as an indication of time progression. If two identical bell numbers are detected in one line (file Version 1, bell #2), then the program will interpret spaces as an indicator of time progression.

Version 1	Version 2
=======	=======
3/2 4,5 2	3 2
	4 5
3-4	2
	3 4

The above examples have the same meaning and will result in a visualization of an identical ringing sequence (Illustration 2).

The **Play/Pause/Stop** buttons control the activity of the player. For convenience Space+Shift keyboard buttons can be used to trigger Play/Pause/Stop – one click for switching between Play and Pause, double click of space bar to Stop)

The **Speed** value determines how fast the melody is played (the speed of falling blocks).

The **Zoom** allows resizing of the visible portion of the ringing sequence.

A **Padlock** function is to prevent the control panel from sliding when the sequence is being played.

Configuration screen

Configuration is accessed through the front screen edit button (with a pencil icon). The user can store unlimited configuration files on the computer disk, however only a maximum 8 can be linked to the front screen buttons.
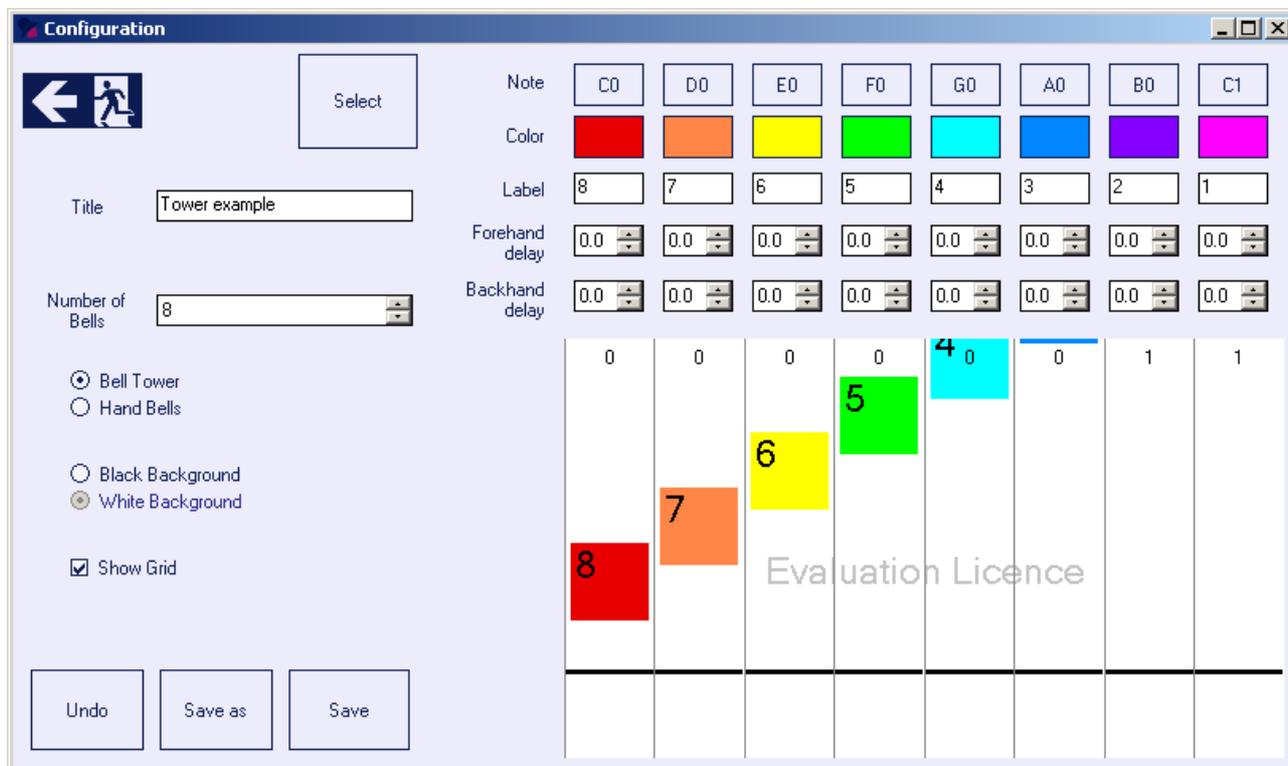

Illustration 3, Configuration screen

The **Select** button allow loading and assigning of previously defined configurations.

Each configuration file can be labelled with a title to distinguish it from other set-ups.

At the moment a maximum of 16 bells can be created in the choir. A 32 bell version of the program may be developed in the future.

Bell Tower or **Hand Bells** options result in different functions of the program. The bell-ringer has no ability to control the sound of the bell when playing a tower bell, therefore each note from the music file will always result in the same time length. A hand-bell ringer can control the length and add effects and techniques. At the moment only note lengths are reflected by the program in the Hand Bell configuration.

The second difference is the existence of a delay between the pull of the rope and the sound of the tower bell. The Bell Tower configuration allows assigning each bell a **forehand and backhand delay**. If all bells have the same delay then a zero value can be used. If only one bell has a different delay than other bells, it is enough to input that difference into that bell's delay parameter. This delay value will shift that bell's note in time making the bell-ringer pull the rope sooner or later. Delay value is stored as seconds with one decimal place accuracy. A letter "f" and "b" is added to the display label to distinguish strokes.

The note block falling can be labelled with any text and this text will be used to match entries from a music score provided in a text format.

The **colour** of the block as well as the bell's **note value** is available to set by the user.

Technical requirements

Operating system: Windows XP minimum and .Net 2.0 framework minimum. Dot Net 2.0 framework is a Windows library providing services to applications like Bell Conductor. It has been a standard library for over a decade. Window 7 and 8 comes with a pre-installed framework. However XP machines need to be upgraded with Service Pack 2 or 3 and then .Net 2.0 framework can be installed. The program will be installed in the Program Files directory and each Windows user will have their own access to the program.

Licence

Bell Conductor is a shareware application. The user can download and install fully functional, 90-days evaluation copy to assess its usefulness. During that 90 day trial period the licence file can be purchased at any time. Just visit http://BellConductor.co.uk/buy.

Have fun and be a blessing to the local community.