

## Organizing and Displaying Sheet Music (Windows Solution)

I don't play by ear as a rule unless very familiar with a song. I can sight read reasonably well. Like many I have a large collection of printed sheet music most of which is filed in ring-binders, in music books and some as loose sheets.

### Advantages

- Scores can be read when placed on the keyboard music rest

### Disadvantages

- Total weight of the collection is approaching 50kg and growing
- Difficulty and delays in locating a particular score
- Have to manually turn pages
- Require additional light on pages due to diminishing eyesight

For some time I've considered investing in Apple products and apps but reluctant because of the cost and in any event I need a Windows computer for other work. So here's my list of hardware and software with 2015 pricing (USD), and the methods I employed to overcome this common problem.

### Hardware

- Dell Inspiron 7348 2-in-1 Intel i7-5500U CPU @2.40GHz. 256GB Solid State Drive. 8GB RAM Win 10 64-bit. 13.3" touch screen with wide viewing angle. This unit is a laptop with a keyboard that folds 360° under screen to be used as a tablet. Purchased new from Dell factory Outlet \$560-00.
- PageFlip Firefly Bluetooth/USB Pedal \$110-00 (to turn pages)
- Midi-out to USB cable \$12-00 ( to connect keyboard to tablet)

### Software

- Adobe Acrobat X Standard \$62-00 (to manipulate PDFs)
- MusicReader PDF 4.0 Pro \$59.00 (to organise the music collection)
- Michael P Bedesem's OpenText (Version 1.4.3) is a program that displays a pdf file, or a page in a pdf book, when a registration is selected on a PSR, CVP or Tyros. Free download from PSRTutorial website. My thanks to Michael for this wonderful program.

## Step 1. Convert all sheet music into individual PDF files

If you have music in printed music books these will need to be scanned and saved in PDF format.

### Using Adobe Acrobat

- Optional – Optimize scanned PDF (Adobe Tool) to straighten poorly scanned pages and to enhance contrast.
- Optional - Trim (crop) the excess margins from pages for better visibility when on screen.
- Extract each song and save it as a separate PDF file with song title as filename. Where there is more than one version of the song I name the files as, for example, Amazing Grace, Amazing Grace 2, Amazing Grace 3, etc

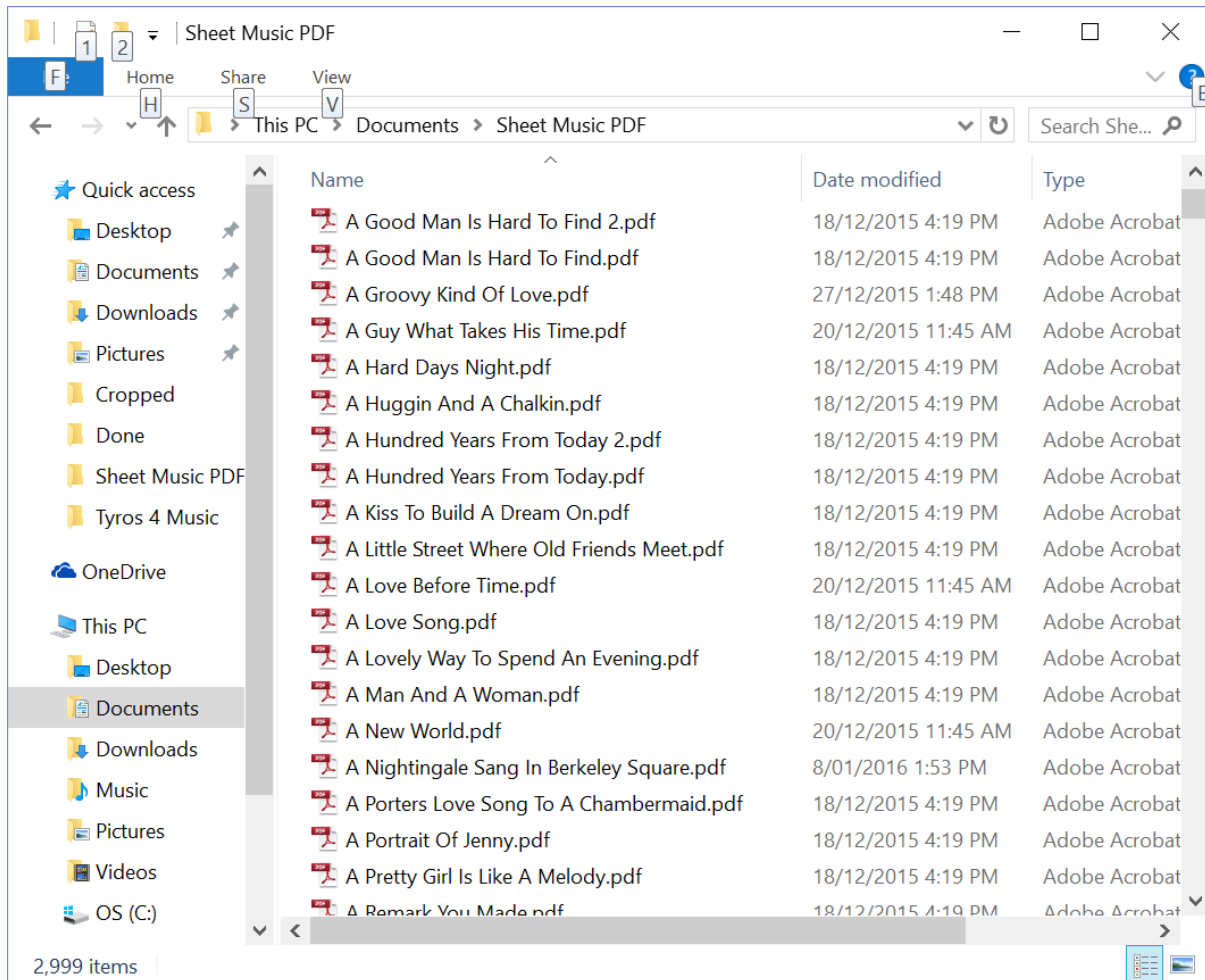
I start with my unprocessed music collection in one folder (eg Music Books)

I take care to save all the individual PDF song files (once they've been processed) into a separate folder (eg Processed Songs). I also move any 'original' song books into another folder (eg Done) when I've finished with it to prevent it being reprocessed.

It takes me somewhere between 30 seconds and one minute to process a file, depending on the number of pages.

## Step 2. MusicReader PDF 4.0

Copy the individual processed PDF song files to MusicReader's folder where they will be automatically indexed. In my case I copy them from my 'Processed Songs' folder to MusicReader's 'Sheet Music PDF' folder.



When MusicReader is started each time it checks for new additions to its 'Sheet Music PDF' folder and gives the user the option to index the additions using the filename as song title, or the embedded title as song title. I choose the former.

The following screenshot shows part of the collection, with one song being previewed.

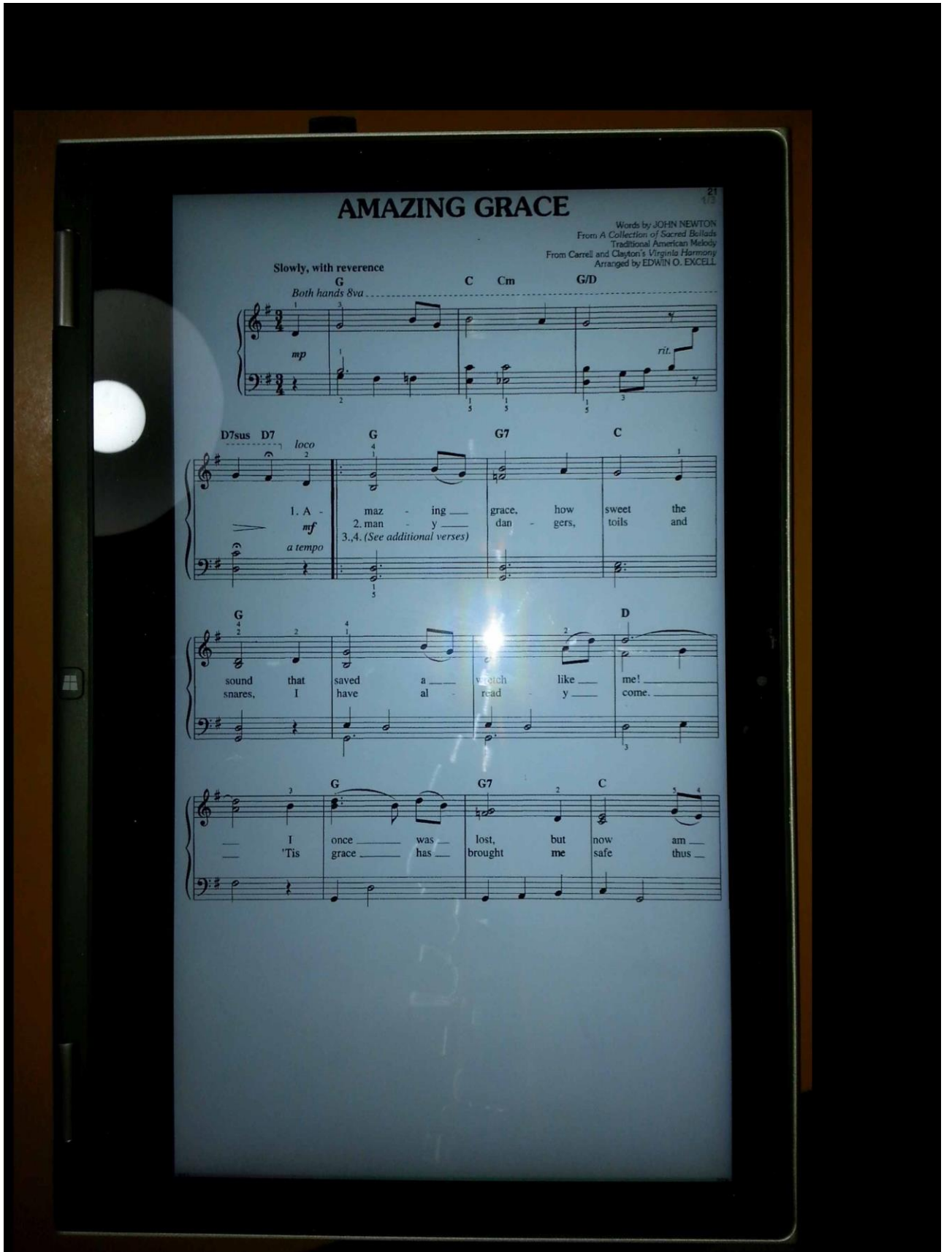
The screenshot shows the MusicReader application interface. On the left side, there is a vertical alphabetical index of songs, with 'Amazing Grace' selected under the letter 'A'. The main area on the right displays the musical score for 'Amazing Grace' in G major, 4/4 time. The score includes piano accompaniment with dynamic markings like 'mp' and 'mf', and lyrics for three verses. The interface also shows a 'Complete Library' button at the bottom left and a page number '21' at the top center.

At this stage I have my entire music collection available in MusicReader. I can create multiple playlists, add annotations to the scores, display the scores in half-pages, full pages and full-screen. There's also options for adding further description, composers, performers, lyricists, genres, tempo and the like.

The user can also quickly search for a particular song by entering the title, or any part of it. This is very useful when the collection becomes large or if there's variations in the way a song is known (for example, is it 'Lady In Red' or 'The Lady In Red'? When I have MusicReader displaying in tablet/portrait mode I no longer have the use of the physical keyboard – it becomes disabled. I do have, however, an on-screen keyboard that can be invoked from the tablet's taskbar for text searches.

I was concerned that a large library of music may be slow to load and access as more songs are added to the database. However, with over 3000 titles I don't detect any delays.

My laptop/tablet rotates the display automatically, and I use MusicReader in portrait mode for maximum readability. With margins previously cropped the readability is equivalent to a printed score on an A4 page and with the added assistance of an illuminated screen scores are easier to read.



In MusicReader pages (on a touch enabled screen) can be turned forwards by pressing on right-hand side of score, and turned backwards by pressing on the left-hand side of score.

I've elected to use the PageFlip Firefly Bluetooth/USB Pedal. I did evaluate others but decided this one would suit me best. It is powered by 2 x AA batteries which seem to last for ever – sometimes I forget to power it off and it's still good days later. It allows for pages to be turned forwards or backwards and is quite responsive. I use the Bluetooth connection to tablet to avoid cabling.



### **Step 3 - Using Keyboard Registration to load and display score (Optional)**

Michael P Bedesem's OpenText program will do this for you. The utility requires songs to be named with a numerical prefix – eg '0001 – Amazing Grace', '0002 – Satin Doll', etc.

I use a freely available graphics program named Irfanview. Available by searching on the 'net. I've used this program as a graphics viewer, editor, resizer and organiser for many years. One of its powerful features allows bulk manipulation of files and filenames (usually images, but other files as well). It will allow a user to take a folder of files and rename them using user-defined masks. So prefixing a folder of files each with a unique numerical prefix is the work of a few seconds.

The OpenText utility will batch-create small midi files for each song. These can be loaded to a USB drive and plugged into a keyboard, or copied to the hard-drive of a keyboard. Now it's a simple matter to create a registration for each song, making sure that Button 1 of the registration references the corresponding midi. With a midi-out to USB cable connecting keyboard to tablet the song score will be displayed automatically the registration is loaded.

Michael has provided with his program a clear explanation of the requirements and workings of OpenText so I'll not provide it again here. OpenText allows the user to specify an external PDF viewer to display the score. I have elected to use Adobe Acrobat, and have configured it to open in full-screen mode.