

Impression Newsletter

Number 2

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Introduction

This newsletter is for users of Impression-X, the RISC OS desktop publisher and may also be of use to users of the free version, Impression Style version 3.13.2019. The first newsletter explained the historical development of Impression (shown below) but I shall now concentrate on recent developments.

Risc OS Developments Ltd

Originally developed by Computer Concepts, the Impression family was taken over during 2019 by RISC OS

Developments Ltd (from its more recent owners X-Ample Technology). Richard Keefe continues to work on the software and has been doing so for a few years now in order to make it 32-bit compatible. This is a big job and is an even greater task with the source code for some original components missing, meaning they will have to be rewritten from scratch.

Meanwhile Impression-X runs under Aemulor or under Virtual Risc PC so that the remaining 26 bit components can still be supported.

A Brief History of Impression

Version	Date	Price	Features
1	Dec-1989	£171	200 page manual, needs dongle
1.03	Apr-1990	-	reviewed in Archive 3:7
1.05	Aug-1990	-	bug fixes, etc.
Junior		£103	no dongle, replaces version 1.xx
2	Oct-1990	£194	significant improvements, needs dongle
2.04	Dec-1990	-	
2.10	Jun-1991	-	crop marks, vertical rules
2.16	Mar-1992	-	RISC OS 3 compatible
2.18	Mar-1993	-	ArtWorks compatible
3 Style	Mar-1994	£116	replaces Impression II
4 Publisher	Jul-1994	£198	significant improvements
5 Publisher+	Dec-1994	£330	incorporates Business Supplement
3.09	Apr-1996	£92	StrongARM compatible
4.09		£151	
3.13	10-Dec-1996	£92	last version by Computer Concepts
4.13		£151	
5.13		£269	Publisher Plus now dongle free
5.75	24-Oct-2014	£50†	First 32bit release by R.Keefe, includes all Publisher Plus features plus dynamic areas, artworks integration, 32bit support is 45% complete
5.76	22-May-2015	£60†	longer filenames (14 char), DELETE key PC style, bugs fixed, 46%
5.761	17-Jun-2015	£60†	bug fixes: ruler bar, maps font names and character maps on import
5.77	22-Feb-2016	£60†	new JPEG loader
5.78	28-Oct-2017	£60†	DELETE key configurable, improved JPEG handling
Note: † - price covers a total of four releases or a 12 month period, whichever is the greater, renewal is only required to receive further updates			

What next for Impression-X?

When 5.75 was issued in 2014, improvements were anticipated for long filenames; JPEG support via ArtWorks files; JPEG support embedded in Draw files; DELETE key reverse support and bug fixing in the Indexing process.

With one exception (embedded JPEG objects in Draw files) these have now all been added and JPEG handling improved.

At the London show in October 2019, Richard Keefe had the latest beta version of the software available (5.78). He was anticipating the release of a new version some time after the show with some new Postscript-related features added.

Bug fixes

Computer Concepts documented a number of relatively minor bugs, some 800 in total, which had been fixed in version 3.13/4.13/5.13 but the necessary changes to the source code have been lost. Richard is therefore working through these slowly in parallel with adding features that reflect the changes to both RISC OS and the hardware on which it runs since December 1996. Release 4c will bring this up to 230/800 complete.

Release 5 - work in progress

- » *JPEG rendering for JPEGs embedded in an imported Draw file (75%);*
- *GIF/PNG/TIFF file importers (30%, one at a time according to demand);*
- *SVG (vector graphic) importer via ArtWorks (15%);*
- *Export of original graphic (currently stored within a Draw file);*
- *Full colour printer interface support;*
- *Direct JPEG rendering in Postscript output (15%);*
- » *Dictionary update (32 bit and multiple word lists) (60%);*
- *Dictionary encoder/decoder (45%);*
- » *ArtWorks v3 full interface (currently minimal implementation) (30%);*
- *Full version history;*
- *Protected printing and password protection;*
- *Advanced Encryption Standard (AES) support (AES supersedes DES defined in 1977) (90%);*
- *Printed manual;*
- *Memory scratch increas to prevent overflows;*
- *MS doc, docx and RTF importer/exporter;*
- *Additional fonts.*

Release 4c

The next release is planned for 16 February 2020, taking Impression-X to version 5.79. This will be the last release for those who subscribed in October 2014 so renew now! It will contain bug fixes so that Artworks imported colours will be rendered correctly and a Duplex printing option added to Postscript printing.

User Manual

The original printed User Manual was some 330 pages (plus contents list and a 13 page index). This has been updated to 347 pages and now identifies the Publisher features that are not available in the now free Impression Style version.

The updated User Manual will be provided with the next update (release 5) in PDF form. It can also be obtained by non-subscribers by sending £15 to RISC OS Developments.

Where next? Release 5

The list of new features under development is shown below. An estimate is given for most items of their state of completion as at February 2020. Those marked '»' should be ready for release 5 along with more 5.13 bug fixes.

Impression Style

Impression Style is a robust, full feature product lacking only some esoteric features such as colour separations, guide and irregular frames, typesetting options and colour tables. It includes the features added when Impression II was released.

Named styles could be applied to selected regions of text and could be nested and/or overlapped. The named style could be used anywhere in the document and its features could be edited in the style editor and would then be applied automatically wherever that style was used.

Each chapter had a master page associated with it which specified the page size, column layout, header and footer frames so that an empty chapter would appear with blank, text, graphic and guide frames already laid out.

An effects menu was provided for local application of some of the features which could be applied by the style editor: text font, size and colour; line spacing; kerning; paragraph alignment; 'keep together' (avoids orphaned lines) and text features such as bold, italic, underline, super- and sub-script.

Graphics could be panned, cropped and rotated within their frame using the mouse. A toolbar made use of the software intuitive and showed the text font and size at the cursor as well as providing icons for frequently used menu options. The style menu icon would show the named styles which were in force at the cursor position. The current margin and tab settings could also be displayed.

Object linking and embedding (OLE) was supported so that certain applications, including Equasor, FamTree and TableMate, could save their output in a

form which would load into Impression as a graphic or into themselves as their native format for editing. Such files actually meet the specification for Draw files but with extra tags to provide this functionality and filetypes linked to their parent application.

The advantage of such files is that the graphic will, when CTRL-double-clicked from Impression, load itself into the parent application (in which it had been created) for editing and can be saved directly back from there into Impression.

Impression Style is available as a free download from !Store, the RISC OS application store. It offers a good introduction to Impression-X but is no longer being developed and will remain a 26-bit application requiring Aemulor on 32 bit machines.

It comes with a Tutorial but will not load documents that have been created using Impression-X as it does not support some of the new features. Documents created using Impression Style can, however, be loaded into Impression-X.

Aemulor

Impression Style will remain 26 bit whereas Impression-X will continue to be developed into a native 32 bit application.

Aemulor provides a 26 bit environment on 32 bit computers by restricting 'application memory' (set by the WimpSlot) to 28Mbytes for all 26 bit applications. Whilst Aemulor is running, all applications are limited to a maximum WimpSlot of 28Mbytes (or 52Mbytes with version 2.52 of Aemulor) to retain access to modules, which are used by any application and are available at all times, whichever application is running.

Features added in Publisher

From July 1994 Impression Publisher offered some evolutionary advances: improved typographical controls and graphics handling and frames could now be irregular, not just rectangular.

Publisher Plus added the OPI (Open Pre-press Interface) to allow low resolution photographs to be used in the document but to be replaced during commercial printing by high resolution equivalents. The need for the OPI interface has largely disappeared as memory capacity on current machines is more than adequate for the high resolution versions to be embedded directly into the Impression document.

Using the 'save as application' option, only the current chapter is loaded into memory: this technique and use of dynamic areas helps keep within the 28Mbyte limit. A more detailed explanation of memory management will be included in the next newsletter.

Publisher Plus also has support for named colours, has a word count utility and can alter the page origin for printing (offset each page by a specified displacement in both directions).

The Style, Publisher and Publisher Plus version numbers were now in the 3.xx, 4.xx and 5.xx series respectively. Documents saved from one of these versions can only be loaded into one of the same or higher series. Thus a file saved from Impression Publisher Plus cannot be loaded into Impression Style but all versions can be loaded into Impression-X.

Version 5.13 (10-Dec-1996) was the last version released by Computer Concepts. Many users persevered with this version for the next eighteen years, using it on modern hardware, Iyonix, Beagleboard, Pandaboard, Raspberry Pi, ARMX6, IGEPv5 and Titanium under Aemulor so

that it could run on 32 bit systems.

X-Ample Technology started the conversion to 32 bit-safe in 2003 and named the new product Impression-X. Conversion proved difficult but was eventually taken over by Richard Keefe and in 2014 the next update was released. Impression-X includes all the features of Impression Publisher Plus and is also numbered in the 5.xx series.

Summary

Impression-X is a powerful word processor and a fully-featured, extremely fast, DTP package - a comprehensive document processor. A 370 page manual is available for Impression, covering Impression Style through to Impression-X.

Impression is based on frames - a master page for each 'chapter' shows the default frames, which may contain either text or a graphic, and local frames may be added to individual pages. Text flows from one page to the next and 'wraps around' any graphic.

Text may contain styles and can be saved as a 'story' with the various style definitions embedded so that a story can be dropped into any empty or text frame and all the styling and effects will be included. Style definitions can be applied to one or more paragraphs or parts of paragraphs and the styles in use on any part of the document can be viewed on the style menu. It is truly WYSIWYG and uses the Acorn outline fonts.

It is supported by other applications such as Equasor (which produces formulae), TableMate (which produces tabular information) and WordWorks (a combined thesaurus and dictionary).

To run on 32 bit systems it requires Aemulor which can now be downloaded free of charge. The software is being actively developed and the developer is listening to feedback from users.

Changes in RISC OS and hardware

The principal changes to RISC OS over the last twenty years are much greater memory space, higher resolution images, new sprite formats and much greater use of JPEGs rather than sprites for graphics.

Impression-X has been developed to take advantage of these significant improvements and its evolution over the last six years is described below.

Version 5.75

The first release of Impression-X on 24-Oct-2014 included all the features of Publisher Plus 5.13 plus dynamic areas and ArtWorks integration, with 32-bit support about 45% complete.

It was the first release compiled from the sources which have survived (some have had to be reverse engineered). All features in Impression Publisher Plus have been included.

Dynamic areas - where an application can use memory outside the 'WimpSlot' for holding data - was introduced in version 5.75. This helps with larger documents that will not fit into the application slot. Other memory saving techniques, such as loading only one chapter at a time, were already available in earlier versions.

Version 5.76 & 5.761

The second release on 27-May-2015 was quickly followed by release 2a and 2b (18-Jun-2015). Version 5.13 had limited the leafname of an Impression file to ten characters. Version 5.76 increased this limit to 14 characters and accommodated embedded spaces such as may be found in DOS filenames.

The DELETE key was changed so that it became Style Guide-compliant, i.e. worked as in DOS as a delete-right rather than as in the BBC computer as a delete-left or backspace key. A large number of bug fixes were included and 32 bit

support was now 46% complete.

Updates 2a and 2b improved the operation of the !CCShared application to accommodate differences between RISC OS 4 and 5 and fixed problems with the ruler bar. Mapping of font names and character maps when importing and exporting documents was also improved via the new !CCMapper utility.

Version 5.77

Many small fixes and improvements were in the third release on 22-Feb-2016, and a new JPEG loader introduced native JPEG handling using features added to RISC OS in version 3.60 in 1995. Importing of JPEGs up to now was only possible by importing them to ArtWorks and then importing the ArtWorks file into Impression. The native JPEG loader allows better print and image quality and improves the quality of PDFs created from Impression documents.

Version 5.78

Release 4 was issued on 28-Oct-2017. Scaling of images is now permitted down to 1% vice 5% to accommodate higher resolution images. The delete key can now work as per style guide (delete-right) or as per original Acorn behaviour (backspace) via a new option flag in Choices.

Structural changes include more options on the printer set-up screen, not yet fully implemented; the build method can now produce Impression-X or a 5.13 equivalent and the licensing structure has been changed so that the next build can be produced as a single build suitable for all subscribers rather than as a bespoke version for each individual.

An updated version of !TransJPEG (called !TransJPG2) is supplied which improves the handling of JPEG files as you drag them onto an Impression window.

Subscription model

Impression-X version 5.75 was released by Richard Keefe at the London show in 2014 (as reported in Archive magazine 23:10). It was supplied on a USB stick complete with all components. Since then it has also been possible to download updates from !Store, (the latest of which is currently version 5.78, released in October 2017). Four updates (or a year's subscription) cost you £60 whether from Richard direct or from !Store. Although described as a subscription you can continue to use the software when your subscription ends but to continue receiving updates you would need to renew.

Wish List

Sometimes I find that a strange font has crept into a document from some imported text or graphics. It would be really helpful if the 'Compile font usage' menu option would record not just each font used or substituted but also the first page in the document on which it appears. Then it would be a simpler matter to find and eradicate the use of a particular font.

When a document is saved in 'application format' the content of each graphic frame is included as a separate Draw or ArtWorks file. It would be nice if the Graphic Information window (shown

below) could include some extra information: fonts used; leafname of file originally imported; the filename used when the graphic content is saved (e.g. Chapter27.Story15).

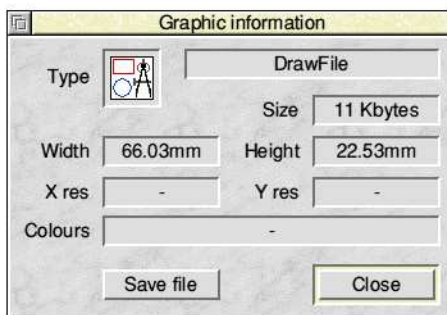
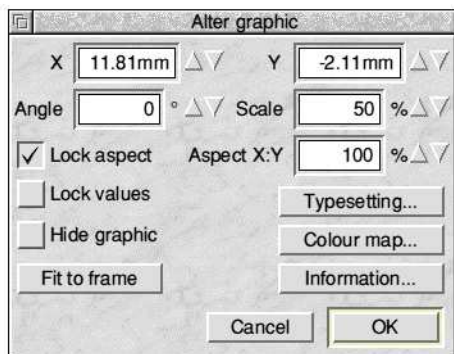
Another thing I would like is if Impression-X could, as an option, save a document in a format that could be loaded by Impression Style. Features such as irregular frames would have to be excluded but it would mean that documents could then be loaded by users of the free version.

Over to the user now - can anyone make any more suggestions please?

Object linking & embedding (OLE)

I think it is worth explaining a little about this and a good example is provided when trying to lay out tabular information. It is possible to do this using styles, rule offs etc. but that is not the best way. A generalised interface is provided in Impression which allows a file to be imported which is in Draw file format but of a different file type.

Several applications (e.g. TableMate, Equasor and FamTree) save their data in a format which is based on the Draw file specification but with extra tags which allow their internal data structure to be hidden within the file. When a Draw file is rendered, any unknown tags are ignored.



Double-clicking such a file causes its parent application to be launched so that it can be edited. Dragging such a file to an Impression frame simply causes it to be loaded as a Draw graphic. If its parent application has been seen by the filer, then the action to be taken for that file type will be known as well as how the OLE protocol should deal with such filetypes.

Within Impression, CTRL-double-clicking on such an image in a frame will invoke the OLE protocol to open the image in its parent application for editing. Once the editing is complete, saving the file will save it directly back into Impression. This makes for a very simple and intuitive user interface.

Version 1.10i (06-Oct-1994) of TableMate is provided with both Impression-X and Impression Style and an updated version 5.03d (04-Nov-2001) of TableMate may be obtained from any RISC OS dealer.

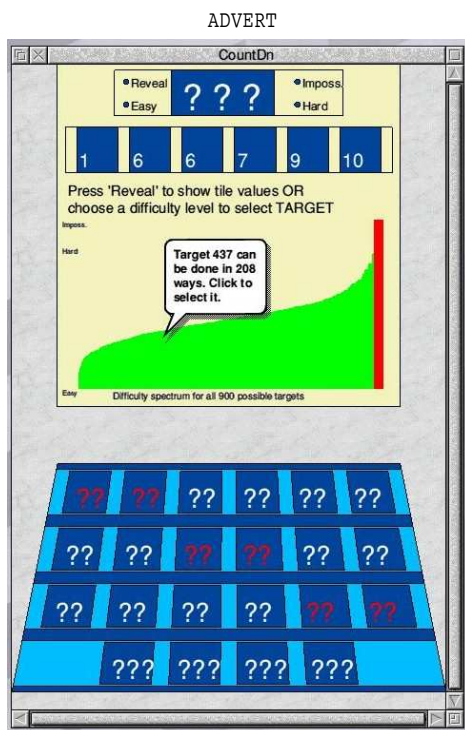
It allows much more control over tabular data than would be possible using styles within Impression and an example is the table on page 1 of this newsletter.

RISC OS Developments

A new RISC OS distribution for the Raspberry Pi is being released at the South West show by RISC OS Developments which will contain open source RISC OS, Aemulor and Impression Style as well as many other applications.

Conclusion

I am a very strong advocate of Impression (desktop publisher), Zap (text editor), TechWriter (word processor), ArtWorks and Draw (vector graphics). I know that some prefer Ovation Pro to Impression and StrongEd to Zap but I think it is important to have choice.



PlingStore allows many different free programmes to be downloaded. This example is CountDn - the numbers game from Channel 4. Once the six tiles have been chosen, it takes 0.3s to work out all 24 million combinations of number and arithmetical operator. It then allows you to choose an easy or difficult target, or anywhere in between, or select a particular target manually from a menu.

FamTree - produces a family tree

Imports:

- directory structure (each sub-directory is a child)
- standard GEDCOM 5.5 files
- any of the output types below

Exports:

- 'TreeData' files (support OLE in Impression)
- 'DiscCat' files
- 'Draw' files (export only)
- 'Zip' files containing directories

Available from PlingStore for £15

Printing to PDF

Batch printing for Draw files and for Impression documents is supported by !MultiTask 7.62. It relies upon a Postscript level 3 printer driver being loaded and set to produce a file 'printout/ps' (this is how PostScript files are produced) in a known location. This location is made explicit by dragging the file 'printout/ps' (named exactly as shown) onto the open window.

Once the location is thus known, the relevant menu options 'Gen PS' and 'Gen PDF' will be available. The following steps will then allow all the Draw files (or Impression files) in a directory to be converted into Postscript files.

Then drag a Draw file (or Impression 'single file format' file, type 'ImpDoc' (&BC5)) onto the window to identify the containing folder. You will see that clicking MENU over the window now provides an 'Analyse' or 'BatchPrint' menu offering the choices 'PrintPS' and 'PrintPDF'.

The 'PrintPS' and 'PrintPDF' choices will show a save window showing a 'DrawFile' or 'ImpDoc' icon: if you drag it to the Postscript printer icon on the icon bar (which would normally cause a file 'printout/ps' to be created from the file

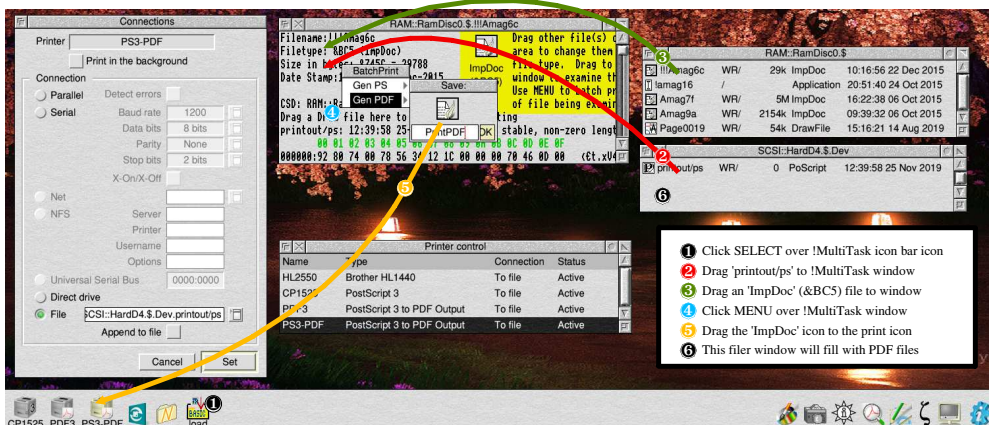
dragged onto it), then MultiTask intercepts this call (so that nothing is printed) but then causes all the Draw files (or Impression documents) in the nominated directory to be sent, one by one, to the PostScript printer driver, as if they had been dragged there from a filer window.

Impression should not be running when you start this process, but Aemulor should be running if required. MultiTask notes when the 'printout/ps' file has been created and then renames it (using the leafname of the file being processed) with a '/ps' extension.

If the 'PrintPDF' option was used, it then calls ps2pdf13 as a WimpTask using the command '*ps2pdf13 \<path>/name.ps \<path>/name.pdf' to convert the '/ps' file into a '/pdf' file.

Batch printing to PDF of Impression documents in the source directory will continue, including both application-type and single file format documents.

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A screenshot showing how to batch-print Impression files.