# The Evolution of Arbortext APP

**Dynamic publishing consultant,** Chris Western **reviews the evolution of what was once referred to as 'the best kept secret in publishing'.**

## Introduction

Arbortext Advanced Print Publisher (APP), formerly known as the 3B2 Publishing System, has been delivering solutions for complex publishing requirements since it was first released back in 1986. Since then APP has grown extensively from the original WYSIWYG desktop product. It now includes a desktop version, server version, scalable enterprise options and support for a host of publishing standards. It remains one of the most capable systems available for tackling complex publishing challenges.

## What is APP?

APP was developed as a publishing operating system; in other words, a powerful desktop publishing toolbox that can be customised to fulfil almost any kind of publishing challenge. It was originally developed with native handling of the new SGML mark-up conventions as well as the ability to run on different platforms such as Unix using its own GUI, the basis of which still exists today (Figure 1).

APP is suited to conventional as well as highly customised configurations as solutions can be designed to suit the requirements. The APP Desktop version (or direct JavaScript code) is used to create templates which use features from the extensive range of built-in tools and customisation methods available.

These tools cover areas such as:

- Text formatting
- Page layout
- Content structure testing
- Testing the formatting environment
- Automation of manual tasks
- Output generation
- Content manipulation and creation
- UI customisation and interaction

Along with generic tools such as these, APP includes features designed for specific publishing verticals, a few examples of which include:

- Synoptic alignment (the ability to align multiple content streams at the same vertical position on the page); added for multi-language, multi-content stream documents. It is a requirement of some governments and for publishing bibles, from where it takes its name.
- Complex tables including: sub column decimal alignments, nested, rotated, content aligned and full CALS support.
- TeX and MathML equation support.
- Complex Footnotes: grouping options and free positioning.
- Advanced floating image and table positioning controls.
- Complex running header controls.
- Unicode CJK capabilities for multi-lingual documents.

## Past & present

3B2 was originally developed by Advent Publishing Systems in the UK with the aim to deliver functionality and operability far beyond that of all other market offerings. It has since been used all over the world in many different publishing applications.

In 2005, Arbortext acquired the product and the following year Arbortext became part of Parametric Technology Corporation (PTC). As with any change of ownership, products go through a period of realignment and need to find their feet again in the larger product line. 3B2 was renamed APP and further developed to integrate with the core products from the Arbortext line. The aim was to position APP as

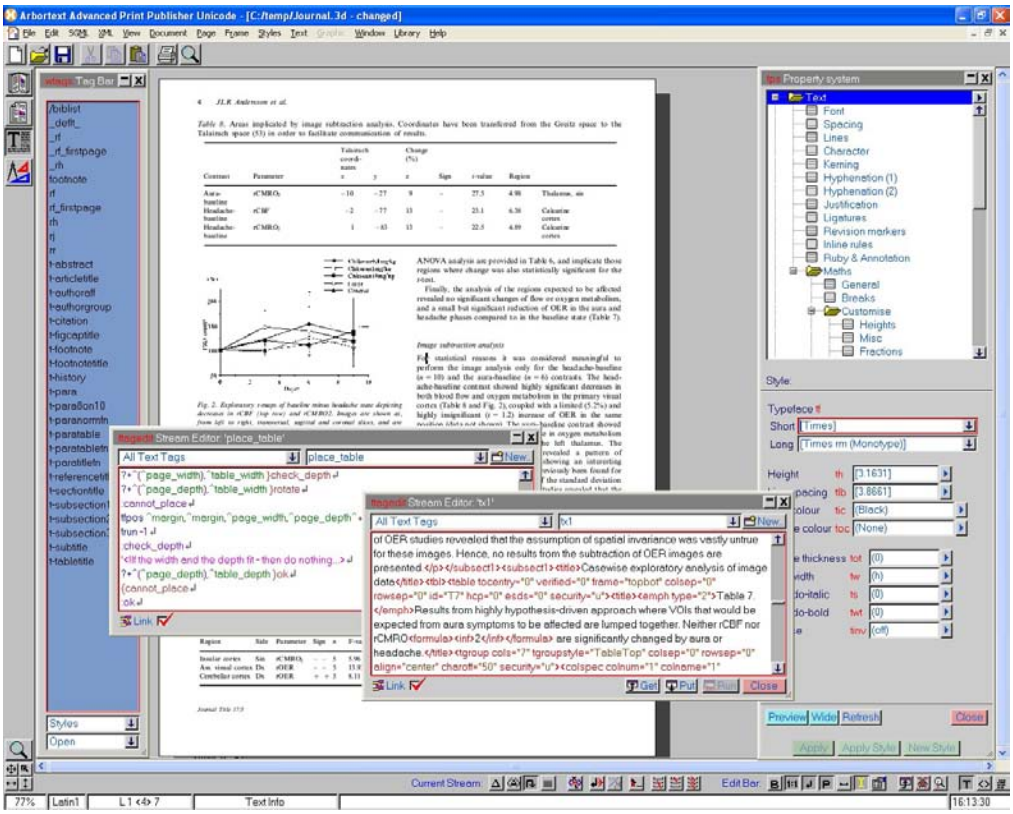

Figure 1: APP Desktop GUI example.

the default pagination engine and supersede the FOSI stylesheet technology which had been used in Arbortext solutions for many years.

The release of APP version 10 in 2009 brought the long anticipated integration with Arbortext Publishing Engine and Arbortext Styler. Publishing Engine is a server-based, single system which handles multi channel publishing requirements of which APP capabilities are a part. Styler provides a means to use APP inside the Arbortext Publishing Engine without needing to create conventional APP templates from scratch. However, users can also add APP code to their Styler stylesheets in order to access more of APP's formatting capabilities. This can be done either through source code edits in the Styler environment, or by associating an APP template with their stylesheet. Templates exported from Styler, or specifically created, can also be used within Arbortext Publishing Engine.

APP Version 10 also brought the new developers coding interface option based on JavaScript and a Formatting Object Model or FOM. This new development language provides a method of developing APP solutions with a more commonly accessible skill set, in combination with traditional APP coding or as standalone JavaScript code.

## In the workflow

The position of APP in any workflow depends on how the user works and wishes to use the product, whether it is in its desktop version, enterprise server version or a mixture of both (to use the post composition editing ability).

APP is available in two main standalone versions outside of the Arbortext Styler and Publishing Engine environment.

- APP Desktop; Used in template development, for manual composition and post auto composition edits.
- APP Enterprise; Is a server based, unattended and scalable APP composition service with automatic failure detection.

Figure 2, is a simple illustration of what you might see in a common single-source workflow and the position of APP within it.

## Getting started

APP could never really be considered as a 'shrink-wrapped' or 'off the shelf' product. One of its biggest benefits is the ability to customise the product and tailor it to a solution, which can take it beyond the capabilities of other more mainstream products.

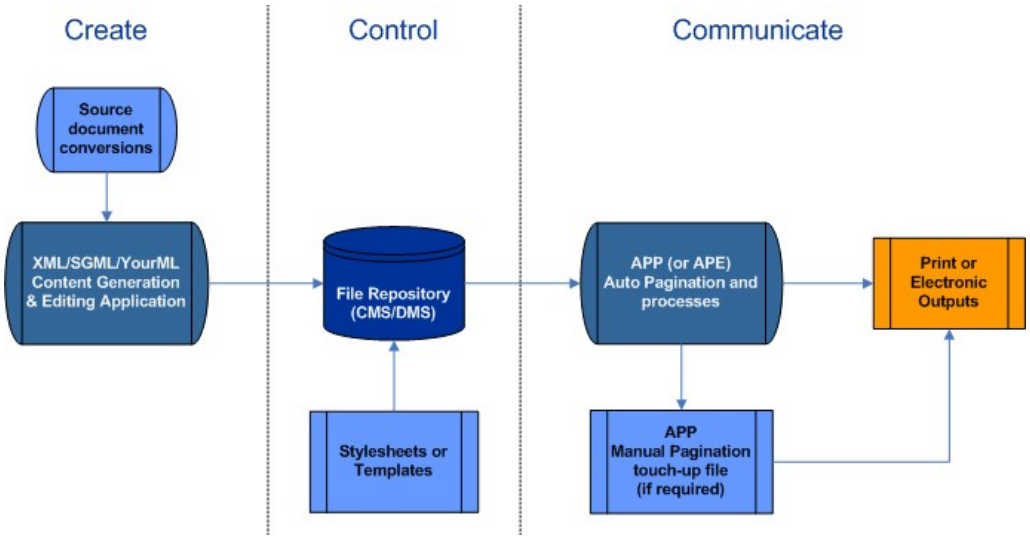


Figure 2: Example of a common single-source XML workflow with APP in place.

The way a customer wishes to use APP will determine how the template development should be approached as well as the required depth of product knowledge. For example, a template used for desktop typesetting will be configured differently to one used purely for enterprise 'black-box' composition. The tools used for many core areas such as text formatting and page handling, would commonly remain the same. The differences would be in the tool application methods, template architecture and the interaction setup.

When a template is being developed prior to being used in production, APP could be considered a programming environment in which the composition solutions are designed and implemented. As with many programming environments, developers are free to design solutions and code as they wish. This can prove to be a great advantage for some and a disadvantage for others. It depends greatly on the knowledge of the technologies involved and how to apply them whilst maintaining the solution architecture and following best coding practices. Good support and knowledge transfer during these stages is an important factor to help achieve the best outcome, especially if a new user is embarking on a more advanced project.

## Who and why

APP has been in use around the world for over 24 years and in that time the product has evolved to suit many different applications. Its markets include:

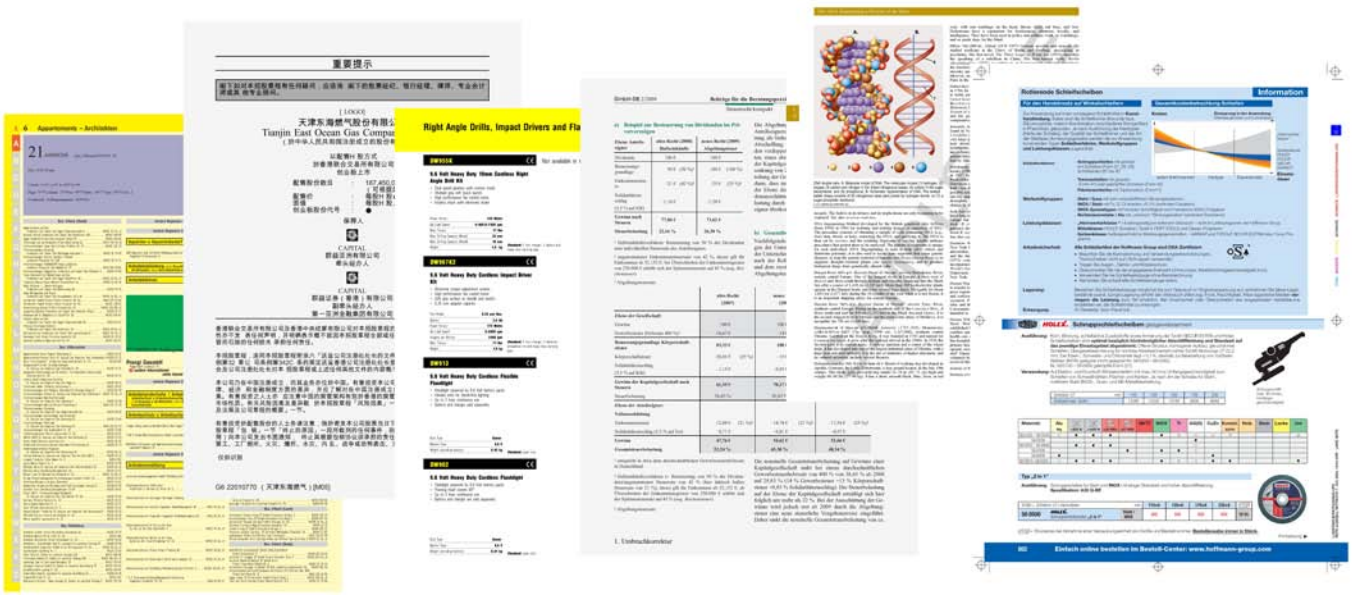

Figure 3: Selection of APP automated document layout samples.

aerospace, publishing, automotive, STM, financials, catalogues, directories, legislative and regulatory bodies, amongst others.

When APP first started it was seen as a more technically capable, code driven competitor to desktop applications of the day like Quark and PageMaker. APP is now focused on automation capabilities and superior XML handling with DTP coming second, while applications such as Quark and InDesign are primarily DTP focused with automation coming second. As APP initially grew more into automation the competitor list also grew to include products like FrameMaker, Datalogics and XPP.

There are advantages and disadvantages to every product which are normally subjective depending on the user's requirements. These requirements commonly depend on factors such as how a customer wishes to use the product and the industry sector they are in. Of all the solutions and products that have been implemented to deliver dynamic automated publishing, it is extremely rare for any two requirement specifications to be the exactly same. This gives highly customisable products an advantage in being able to quickly deliver a solution without compromise.

Companies who choose APP over other products are generally looking for specific capabilities or want to push their overall system to provide 100% automation of challenging layouts and workflows (Figure 3). The diversity of applications capable with APP is wide and is illustrated by its extensive list of customers past and present.

## Future

The next major version of APP is due for release in early 2011 and will see enhancements to a number of key areas including further expansion of the FOM and PDF Import/Export. In addition, version 11 will be one focus of the next 'APP World' international users meeting to be held in May 2011.

## Terminology

APP: Advanced Print Publisher
CJK: Chinese, Japanese & Korean
DTP: Desktop publishing
FOM: Formatting Object Model
FOSI: Formatting Output Specification Instance, stylesheet language
PTC: Parametric Technology Corporation
STM: International Association of Scientific, Technical and Medical Publishers

## Info

Chris Western has worked with dynamic publishing technologies and the APP product for over 16 years. He is the director and principal consultant at tformat.

E: cwestern@tformat.com
W: www.tformat.com

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