

# PDF Now Also Means Perfectly Displayed Forms

By Chris Hardekopf

The BBJ Form Printing article in the last issue of the *BASIS International Advantage* discussed how the BBJForm API allows a BBJ® programmer to use object syntax to build printer forms such as invoices or data entry forms. With new enhancements, the BBJForm API that builds these printer forms now can create PDF (Portable Document Format) forms directly from BBJ. In contrast to formats such as HTML, PDF encodes both the contents and exact look of a document in a device and operating system-independent manner. BBJ now merges these two technologies, giving BBJ programmers a new and very useful tool for their repertoire.

The standard use of the BBJForm API involves getting a BBJPrinter object from BBJAPI and then creating a BBJForm for that printer. However, a PDF file clearly does not have an associated printer, as it is simply a file residing on a disk. Therefore, the programmer gets a BBJForm object for a PDF file directly from BBJAPI using the `getBBJPDFForm` method. The programmer must provide a file name for the PDF file and can optionally specify several parameters to control the PDF output using `javax.print.attribute.PrintRequestAttributeSet`. Below is a list of the possible parameters for the attributes set.

Parameter	Controlled by an Instance of
Page size	<code>javax.print.attribute.standard.MediaName</code> Or <code>javax.print.attribute.standard.MediaSizeName</code>
Margins	<code>javax.print.attribute.standard.MediaPrintableArea</code>
Orientation	<code>javax.print.attribute.standard.OrientationRequested</code>

Once developers create the new BBJForm, they can use it just like a standard BBJForm for a printer with a couple of exceptions. First, the “preview” method does not allow a developer to preview the PDF form. Second, the “print” method does not actually print the document to a printer, but instead flushes the document to disk as a PDF file. In addition, only FONT, SIZE, UNDERLINE, and SUPERSCRIPT string attributes work in text fields.

## A Real Purchase Requisition

To illustrate how this works, consider the familiar purchase requisition demo from BASIS TechCon2004. In this demo, BASIS created purchase requisitions using BBJPrintForm capabilities. The actual program that ran that demo appears in **Figure 1**. Automating the creation of purchase requisitions with BASIS technology was a great first step, but we had bigger plans. In BBJ 6.0, a user can prepare this form and send it electronically to the appropriate person for approval, regardless of where in the world the approver may be. In the form demo, only a few lines of code required modification to produce the new end result – a PDF file ready for print or electronic distribution. The code sample below uses the new `getBBJPDFForm` method.

*continued...*

```
REM Create the page object
myPDF$ = dir("") + "/PurchaseRequisition.pdf"
erase myPDF$,err=*NEXT
doc!=myAPI!.getBBJPDFForm(myPDF$,requestAttributes!)
page!=doc!.createPage()
```

PDF is an industry standard file format developed by Adobe Systems Incorporated for the portable representation of documents. Free PDF readers for many different platforms are available for download on the Internet.

The screenshot shows a window titled "BBJ Form Demo" with a form for a purchase requisition. The "Header Information" section contains the following fields:

- Cost Center: 200
- Vendor: Dell Computers
- PO Number: 1234
- Purpose: New Computer
- Contact: Michael Dell
- Phone Number: 888-560-8324

The "Item Detail" section is a table with the following data:

Item Description	Qty	Unit	Price
Dell Dimension XPS	1		1754
Pentium® 4 Processor HT Technology 3.2GHz Extreme	1		795
Microsoft® Windows® XP Professional	1		70
Microsoft® Plus! Digital Media Edition	1		20
1GB Dual Channel DDR SDRAM at 400MHz	1		120
800GB RAID 0 (2 x 400GB SATA HDDs)	1		810
Dual Drives: 48x CD-RW Drive + 8x DVD+RW Drive	1		119
Altec Lansing THX ADA995 Surround Sound 5.1 Speake	1		230
19 in 1901FP Dell Ultrasharp Digital Flat Panel Display	2		549

A "Print Form" button is located at the bottom right of the window.

Figure 1. TechCon2004 form demo



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