

# Development-PDF Generation

## Overview

You might want to also review the [Returning a File](#) example.

(5-2-2013) JasperReports was added to Wonder last year. Kieran Kelleher has a wonderful (forgive the pun) presentation from 2010 Integrating and using JasperReports in your WebObjects App. Available in the WebObjects podcasts.

## Zak Burke's Example

It is important to add "-Djava.awt.headless=true" to the "Additional Arguments" list to suppress a console window running WOBootstrap that will try to pop up and then fail to close, which seems to prevent the thread from returning, which causes the app to hang.

```

private ByteArrayOutputStream pdf()
{
    // binary container for PDF
    ByteArrayOutputStream out = null;

    try
    {
        // assume these exist
        String xsl, xml;

        TransformerFactory transformerFactory = TransformerFactory.newInstance();

        // configure FOP, apache's XML->PDF transformer
        Fop fop = new Fop(MimeConstants.MIME_PDF);
        out = new ByteArrayOutputStream();
        fop.setOutputStream(out);

        // configure XSLT transformer
        Source xsltSrc = new StreamSource(new StringReader(xsl));
        Transformer transformer = transformerFactory.newTransformer(xsltSrc);

        // pipe XSL transformation through to FOP
        Result res = new SAXResult(fop.getDefaultHandler());

        // grab XML input stream
        Source src = new StreamSource(new StringReader(xml));

        // Start the transformation and rendering process
        transformer.transform(src, res);
    }
    catch (Exception e)
    {
        // actually, catch the following, one by one:
        // TransformerConfigurationException
        // FOPEException
        // TransformerFactoryConfigurationError
        // TransformerException
    }

    return out;
}

public void appendToResponse(WOResponse response, WOContext context)
{
    ByteArrayOutputStream out = pdf();

    // without data, show the PDF page, which is just an error message.
    if (out == null)
        super.appendToResponse(response, context);

    // assume this exists
    String filename;

    response.setHeader("application/pdf", "Content-Type");
    response.setHeader("" + out.size() + "", "Content-Length");
    response.setHeader("attachment;filename=" + filename, "Content-Disposition");
    response.setContent(new NSData(out.toByteArray()));
}

```

## Related Links

- [FyTek Exe/DLL PDF Libraries](#)
- [Java PDF Libraries](#)
- [Apache FOP](#)
- [Deirdre Saoirse Moen's FOP Example](#)
- [JClass](#)
- [Etymon PJ](#)

- [PDFLib](#)
- [PD4ML](#)
- [iText](#)
- [Hugi Karlmann's iText Example](#)
- [XSL:FO Examples](#)
- [ReportMill](#)