

Prizm Content Connect Plus Developer Guide for Windows

Version 5.0

Published Feb 2012

Accusoft believes the information in this publication is accurate as of its publication date. The information is subject to change without notice.

THE INFORMATION IN THIS PUBLICATION IS PROVIDED AS IS. WE MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND WITH RESPECT TO THE INFORMATION IN THIS PUBLICATION, AND SPECIFICALLY DISCLAIMS IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Use, copying, and distribution of any software described in this publication requires an applicable software license.

For the most up-to-date listing of product names, see www.accusoft.com.

All other trademarks used herein are the property of their respective owners.

Attributions, Notices & Copyrights

Apache PDFBox (<http://pdfbox.apache.org/>)
Copyright 2002-2010 The Apache Software Foundation
Download: <http://pdfbox.apache.org/download.html>
License: <http://www.apache.org/licenses/LICENSE-2.0>

Apache FontBox (<http://pdfbox.apache.org/>)
Copyright 2008-2010 The Apache Software Foundation
Download: <http://pdfbox.apache.org/download.html>
License: <http://www.apache.org/licenses/LICENSE-2.0>

Apache JempBox (<http://pdfbox.apache.org/>)
Copyright 2008-2010 The Apache Software Foundation
Download: <http://pdfbox.apache.org/download.html>
License: <http://www.apache.org/licenses/LICENSE-2.0>

Apache POI (<http://poi.apache.org/>)
Copyright 2001-2007 The Apache Software Foundation
Download: <http://www.apache.org/dyn/closer.cgi/poi/>
License: <http://www.apache.org/licenses/LICENSE-2.0>

Apache Commons FileUpload (<http://commons.apache.org/fileupload/>)
Copyright 2002-2008 The Apache Software Foundation
Download: http://commons.apache.org/fileupload/download_fileupload.cgi
License: <http://www.apache.org/licenses/LICENSE-2.0>

Apache Commons IO (<http://commons.apache.org/io/>)
Copyright 2001-2008 The Apache Software Foundation
Download: http://commons.apache.org/io/download_io.cgi
License: <http://www.apache.org/licenses/LICENSE-2.0>

Apache Commons Lang (<http://commons.apache.org/lang/>)
Copyright 2001-2010 The Apache Software Foundation
Download: http://commons.apache.org/lang/download_lang.cgi
License: <http://www.apache.org/licenses/LICENSE-2.0>

Apache Commons Logging (<http://commons.apache.org/logging/>)
Copyright 2003-2007 The Apache Software Foundation
Download: http://commons.apache.org/logging/download_logging.cgi
License: <http://www.apache.org/licenses/LICENSE-2.0>

ImageMagick (<http://www.imagemagick.org>)
Copyright 1999-2010 ImageMagick Studio LLC.
Download: <http://www.imagemagick.org/script/binary-releases.php>
License: <http://www.imagemagick.org/script/license.php>

ffmpeg (<http://ffmpeg.org/>)
Copyright (C) 2000, 2001, 2002 Fabrice Bellard
Source: <install path>\src\ffmpeg\r20545\
Download: http://image_magick.veidrodix.com/image_magick/binaries/ImageMagick-6.6.5-3-Q16-windows-static.exe
License (GPL v3): <install path>\Prizm\licenses\ImageMagick\Notice-1.txt
Implementation/Integration: This open source product has not been recompiled and a call to binary file is directly made from the code, keeping the binaries totally separate from the Prizm Source Code.

dcraw.exe (<http://www.cybercom.net/~dcoffin/dcraw/>)
Copyright (C) 1997-2008 by Dave Coffin.
Source: <install path>\src\dcraw\9.03\
Download: http://image_magick.veidrodix.com/image_magick/binaries/ImageMagick-6.6.5-3-Q16-windows-static.exe
License (GPL v3): <install path>\Prizm\licenses\ImageMagick\Notice-1.txt
Implementation/Integration: This open source product has not been recompiled and a call to binary file is directly made from the code, keeping the binaries totally separate from the Prizm Source Code.

hp2xx.exe (<http://www.gnu.org/s/hp2xx/>)
Copyright (C) 1998 - 2000 M. Kroeker, 1992 - 1994 H. Werntges.
Source: <install path>\src\hp2xx\3.4.2\
Download: http://image_magick.veidrodix.com/image_magick/binaries/ImageMagick-6.6.5-3-Q16-windows-static.exe
License (GPL v2): <install path>\Prizm\licenses\ImageMagick\hp2xx_gpl-2.0.txt
Implementation/Integration: This open source product has not been recompiled and a call to binary file is directly made from the code, keeping the binaries totally separate from the Prizm Source Code.

Java Advanced Imaging API (<http://java.sun.com/javase/technologies/desktop/media/jai/>)
Copyright (c) 2006 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.
Download: http://download.java.net/media/jai/builds/release/1_1_3/
License: http://download.java.net/media/jai/builds/release/1_1_3/LICENSE-jai.txt

Java Advanced Imaging Image I/O Tools
(<http://java.sun.com/javase/technologies/desktop/media/>)
Copyright (c) 2006 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.
Download: <http://download.java.net/media/jai-imageio/builds/release/1.1/>License:
http://download.java.net/media/jai-imageio/builds/release/1.1/LICENSE-jai_imageio.txt

JavaMail 1.4.3 (<http://www.oracle.com/technetwork/java/javamail/index.html>)
Copyright © 2009 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.
Download: <http://www.oracle.com/technetwork/java/javamail/index-138643.html>
License: http://download.oracle.com/otn-pub/java/licenses/javamail-1.4.3-oth-JPR_license_1.html

JDOM

This product includes software developed by the JDOM Project (<http://www.jdom.org/>).
Copyright (C) 2000-2004 Jason Hunter & Brett McLaughlin. All rights reserved.
Source: <http://www.jdom.org/downloads/source.html>
Download: <http://www.jdom.org/downloads/index.html>
License: <install path>\Prizm\licenses\jdom\LICENSE.txt
(<http://www.jdom.org/docs/faq.html#a0030>)

JRE 1.6.0.22 (<http://java.sun.com/products/archive/j2se/6u22/index.html>)
Copyright © 2006, 2010, Oracle and/or its affiliates. All rights reserved.
Download: <http://www.oracle.com/technetwork/java/javasebusiness/downloads/java-archive-downloads-javase6-419409.html#jre-6u22-oth-JPR>
License: <http://www.oracle.com/technetwork/java/javase/terms/license/index.html>

ODF Converter (<http://odf-converter.sourceforge.net/>)
Copyright (c) 2006-2008, Clever Age, DIaLOGiKa, Sonata Software Ltd All rights reserved.
Download: <http://sourceforge.net/projects/odf-converter/files/>
License: <http://odf-converter.sourceforge.net/#license>

OpenOffice.org Portable (http://portableapps.com/apps/office/openoffice_portable)
Copyright 2002,2008 Sun Microsystems, Inc.
Source: <http://sourceforge.net/projects/portableapps/files/Source%20%28OpenOffice.org%29/OpenOffice.org%203.2.0%20Source/>
Downloads: http://sourceforge.net/projects/portableapps/files/OpenOffice.org%20Portable/OpenOffice.org%20Portable%203.2.0/OpenOfficePortable_3.2.0_English.paf.exe/download

http://sourceforge.net/projects/portableapps/files/OpenOffice.org%20Portable/OpenOffice.org%20Portable%203.0/OpenOffice.org_Portable_3.0_en-us.paf.exe/download

Implementation/Integration: This open source product has not been recompiled and a call to binary file is directly made from the code, keeping the binaries totally separate from the Prizm Source Code.

String Search (<http://johannburkard.de/software/stringsearch/>)
StringSearch - high-performance pattern matching algorithms in Java
Copyright (c) 2003-2010 Johann Burkard
Download: <http://johannburkard.de/software/stringsearch/>
License: <http://johannburkard.de/software/stringsearch/copying.txt>

The Legion of the Bouncy Castle
Copyright (c) 2000-2009 The Legion Of The Bouncy Castle (<http://www.bouncycastle.org>)
Download: http://bouncycastle.org/latest_releases.html
License: <http://www.bouncycastle.org/licence.html>

Touch.exe (http://www.codeproject.com/KB/applications/touch_win.aspx)
Copyright 2002 by Jörgen Sigvardsson
Download: http://www.codeproject.com/KB/applications/touch_win.aspx
License: http://www.codeproject.com/KB/applications/touch_win.aspx

JTNEF (<http://www.freeutils.net/source/jtnef/>)
The JTNEF package used in this product is copyright (c) 2003-2010 by Amichai Rothman.
JavaBeans Activation Framework
(<http://www.oracle.com/technetwork/java/javase/downloads/index-135046.html>)
Download: <http://www.oracle.com/technetwork/java/javasebusiness/downloads/java-archive-downloads-java-plat-419418.html#jaf-1.1-fr-oth-JPR>
License: http://download.oracle.com/otn-pub/java/licenses/jaf-1.1-mrel-spec-oth-JPR_license_1.html

SWF Tools (<http://www.swftools.org>)
Source: <install path>/src/SWFTools/0.9.0/
Download: <http://www.swftools.org/swftools-0.9.0.exe>
License (GPL v2): <install path>/Prizm/licenses/SWF Tools/gpl-2.0.txt
Implementation/Integration: This open source product has not been recompiled and a call to binary file is directly made from the code, keeping the binaries totally separate from the Prizm Source Code.

Tanuki Java Service Wrapper (<http://www.tanukisoftware.com>)
Copyright (C) 1999, 2010 Tanuki Software, Ltd. All rights reserved.
The Software Program includes software and documentation components developed in part by Silver Egg Technology, Inc. ("SET") prior to 2001 and released under the following license.

Copyright (c) 2001 Silver Egg Technology
Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sub-license, and/or

sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

GraphicsUtil (<http://www.dncompute.com/blog/2008/07/17/graphicsutil-a-utility-class-for-drawing-arrows.html>)

Copyright (c) 2008 Noel Billig (www.dncompute.com)

Download: <http://www.dncompute.com/blog/2008/07/17/graphicsutil-a-utility-class-for-drawing-arrows.html>

License: MIT (in source)

URL Validator (<http://ctrloptcmd.com/archives/587/actionscript-3-url-validator-class/>)

Copyright 2009 Martin Jacobsen

Download: <http://ctrloptcmd.com/as3/URLValidator.as>

License: (in source)

jQuery (<http://jquery.org/>)

Copyright (c) 2011 John Resig

Download: http://docs.jquery.com/Downloading_jQuery

License: <http://jquery.org/license/>

Lazy Load - jQuery plugin for lazy loading images (<http://www.appelsiini.net/projects/lazyload>)

Copyright (c) 2007-2009 Mika Tuupola

Download: <http://www.appelsiini.net/projects/lazyload>

License: <http://www.opensource.org/licenses/mit-license.php>

jQuery.ScrollTo (<http://plugins.jquery.com/project/ScrollTo>)

Copyright (c) 2007-2009 Ariel Flesler

Download: <http://plugins.jquery.com/node/635/release>

License: MIT (in source)

ScrollView - jQuery plugin (<http://code.google.com/p/jquery-scrollview/>)

Copyright (c) 2009 Toshimitsu Takahashi

Download: <http://code.google.com/p/jquery-scrollview/downloads/detail?name=jquery.scrollview.js&can=2&q=>

License: <http://www.opensource.org/licenses/mit-license.php>

Viewport - jQuery selectors for finding elements in viewport

(<http://www.appelsiini.net/projects/viewport>)

Copyright (c) 2008-2009 Mika Tuupola

Download: <http://www.appelsiini.net/projects/viewport>

License: <http://www.opensource.org/licenses/mit-license.php>

transform: A jQuery cssHooks adding cross-browser 2d transform capabilities to \$.fn.css() and \$.fn.animate()

(<https://github.com/louisremi/jquery.transform.js>)

Copyright 2011 @louis_remi

Download: <https://github.com/louisremi/jquery.transform.js>

License: MIT (<https://github.com/louisremi/jquery.transform.js>)

jQuery UI (<http://jqueryui.com/>)

Copyright (c) 2011 Paul Bakaus

Download: <http://jqueryui.com/download>

License: <http://jquery-ui.googlecode.com/svn/tags/latest/MIT-LICENSE.txt>

jquery.waitforimages (<http://alexanderdickson.com/blog/2011/02/a-new-jquery-plugin-2/>)

Copyright (c) 2011 Alex Dickson

Download: <https://github.com/alexanderdickson/waitForImages>

License: <https://github.com/alexanderdickson/waitForImages/blob/master/README.md>

jQuery Context Menu Plugin (<http://abeautifulsite.net/blog/2008/09/jquery-context-menu-plugin/>)
Copyright A Beautiful Site, LLC
Download: <http://abeautifulsite.net/blog/2008/09/jquery-context-menu-plugin/>
License: MIT (in source)

jqprint (<http://plugins.jquery.com/project/jqPrint>)
Provided by Eros Fratini - eros@recoding.it
Download: <http://plugins.jquery.com/node/8069/release>
License: <http://www.opensource.org/licenses/mit-license.php>

jQuery Patch (<http://www.zachstronaut.com/posts/2009/08/07/jquery-animate-css-rotate-scale.html>)
2009-2010 Zachary Johnson www.zachstronaut.com
Download: <https://github.com/zachstronaut/jquery-animate-css-rotate-scale/>
License: MIT (<https://github.com/zachstronaut/jquery-animate-css-rotate-scale/blob/master/README>)

Google Translate API for .NET (<http://code.google.com/p/google-api-for-dotnet/>)
Copyright (c) 2008-2009 iron9light
Download: <http://code.google.com/p/google-api-for-dotnet/downloads/list>
License: <http://www.opensource.org/licenses/mit-license.php>
Other Terms: <http://code.google.com/apis/language/translate/terms.html>

SWFObject (<http://code.google.com/p/swfobject/>)
Provided by code.google.com
Download: <http://code.google.com/p/swfobject/downloads/list>
License: <http://www.opensource.org/licenses/mit-license.php>

Preface

This document describes how to integrate and use Prizm Content Connect Plus on Windows server. Instructions are also included to set up the Zero Footprint Client, an end-user viewing option optimized for scanned documents including TIFF and PDF.

Intended Audience

The intended audience is IT developers and administrators. Some familiarity with Java, JavaScript, & Windows OS is expected.

Revision History

The following changes have been made to this document.

Revision History	Revision Date Description
Oct 11	Draft for version 4.6.3
Feb 12	Draft for version 5.0

Table of Contents

INTENDED AUDIENCE.....	8
REVISION HISTORY.....	8
TABLE OF CONTENTS.....	9
CHAPTER 1.....	11
HOW DOES PRIZM CONTENT CONNECT PLUS WORK?.....	11
CHAPTER 2.....	13
COMPONENTS & COMMAND LINE SYNTAX.....	13
CONVERT2SWFCLIENT.JAR.....	13
PROXYSERVER.JAR - PRIZM PROXY SERVER.....	17
VIEWERENTERPRISE.SWF.....	19
CHAPTER 3.....	20
DOCUMENT CONVERSION PROXYWEBSERVICE.....	20
CHAPTER 4.....	25
INTEGRATION WITH YOUR APPLICATION.....	25
GET FAST PAGE COUNT FILE (GETFASTPAGESURL).....	27
GET TOTAL PAGE COUNT FILE (GETTOTALPAGESURL).....	27
SAMPLE CODE.....	28
CHAPTER 5.....	30
CUSTOMIZING THE VIEWER.....	30
FLASH DOCUMENT VARIABLES.....	30
HOME TAB BUTTONS.....	32
PRINT SPECIFIC VARIABLES.....	32
CUSTOM TAB VARIABLES.....	32
SEARCH VARIABLES.....	33
ANNOTATION PARAMETERS	33
ANNOTATION VARIABLES	34
CHAPTER 6.....	36
JAVASCRIPT EVENTS TO AND FROM THE VIEWER.....	36
 <u>PRIZM CONTENT CONNECT IS BUILT IN SUCH A WAY THAT IT CAN BE TRULY INTEGRATED AND EMBEDDED INTO YOUR APPLICATION. EVENTS ARE JAVASCRIPT AJAX CALLS THAT THE VIEWER CAN GENERATE WHEN CERTAIN ACTIONS OCCUR. DEVELOPERS CAN ALSO SEND JAVASCRIPT AJAX EVENTS TO THE VIEWER FROM THEIR CODE AND HAVE THE VIEWER PERFORM CERTAIN ACTIONS WITHOUT RELOADING THE WHOLE PAGE.</u>	
 <u>SENDING EVENTS TO THE VIEWER</u>	
<u>TO SEND EVENTS TO THE VIEWER, FOLLOW THESE STEPS:.....</u>	<u>36</u>
<u>RECEIVING EVENTS FROM THE VIEWER.....</u>	<u>37</u>
ANNOTATION EVENTS TO/FROM VIEWER.....	39

SENDING EVENTS	39
RECEIVING EVENTS	41
CHAPTER 7.....	43
GENERATING THUMBNAILS	43
THUMBNAIL RELATED ARGUMENTS:.....	43
GENERATING THUMBNAILS USING CONVERT2SWFCLIENT.....	43
GENERATING THUMBNAILS USING THE WEBSERVICE.....	43
CHAPTER 8.....	44
HOW ANNOTATIONS WORK.....	44
CHAPTER 9.....	46
TRANSLATIONS.....	46
CHAPTER 10.....	50
LOCALIZING THE VIEWER.....	50
CHAPTER 11.....	52
IMAGE CONVERSION.....	52
TO CREATE A .TIFF IMAGE OF ALL PAGES OF SAMPLE.DOC: JAVA -JAR CONVERT2SWFCLIENT.JAR SOURCE=SAMPLE.DOC TARGET=SAMPLE.TIFF	52
EXAMPLE 3: (NOTE – WATERMARK FEATURE REQUIRES FULL LICENSE KEY.).....	52
CHAPTER 12.....	54
TEXT EXTRACTION.....	54
EXTRACTING TEXT USING CONVERT2SWFCLIENT.....	54
EXTRACTING TEXT USING WEBSERVICE.....	54
CHAPTER 13.....	55
CLIENT SIDE FLASH DETECTION.....	55
CHAPTER 14.....	56
ERROR CODES & EXCEPTION HANDLING.....	56
VIEWER ERROR CODES.....	56
CONVERT2SWF ERROR & EXCEPTION CODES.....	56
VIEWER JS EVENTS FOR HANDLING ERROR.....	57
SHOW AN ALERT AND REDIRECT ON SERVER ERROR.....	57
SAMPLE SERVER ASP .NET CODE SENDING	57
CHAPTER 15.....	58
FINE TUNING PRIZM CONTENT CONNECT	58
CHAPTER 16.....	61
SETTING UP THE TEMPCACHE & PRIZM CACHE MANAGER.....	61
PRIZM CACHE MANAGER	61
CHAPTER 17.....	62
TROUBLESHOOTING	62

How Does Prizm Content Connect Plus Work?

The Prizm Content Connect AJAX based client uses a combination of Flex, Flash, and AJAX technology to render documents. The Zero Footprint Client uses HTML instead of Flash to optimize rendering of scanned documents. Here are steps which show in detail how the Viewer works:

Step 1 – A request is sent from the client browser to view a document along. Start page and document viewing options may also be included.

Step 2 – Server returns a .swf or .png file

Step 3 – Viewer makes an AJAX call for Fast Page Count in Document.

Step 4 – Viewer then makes an AJAX call for Actual Total Page Count in Document.

Step 5 – Fast Page Count of document is calculated on server

Step 6 – Server returns Fast Page Count of Document

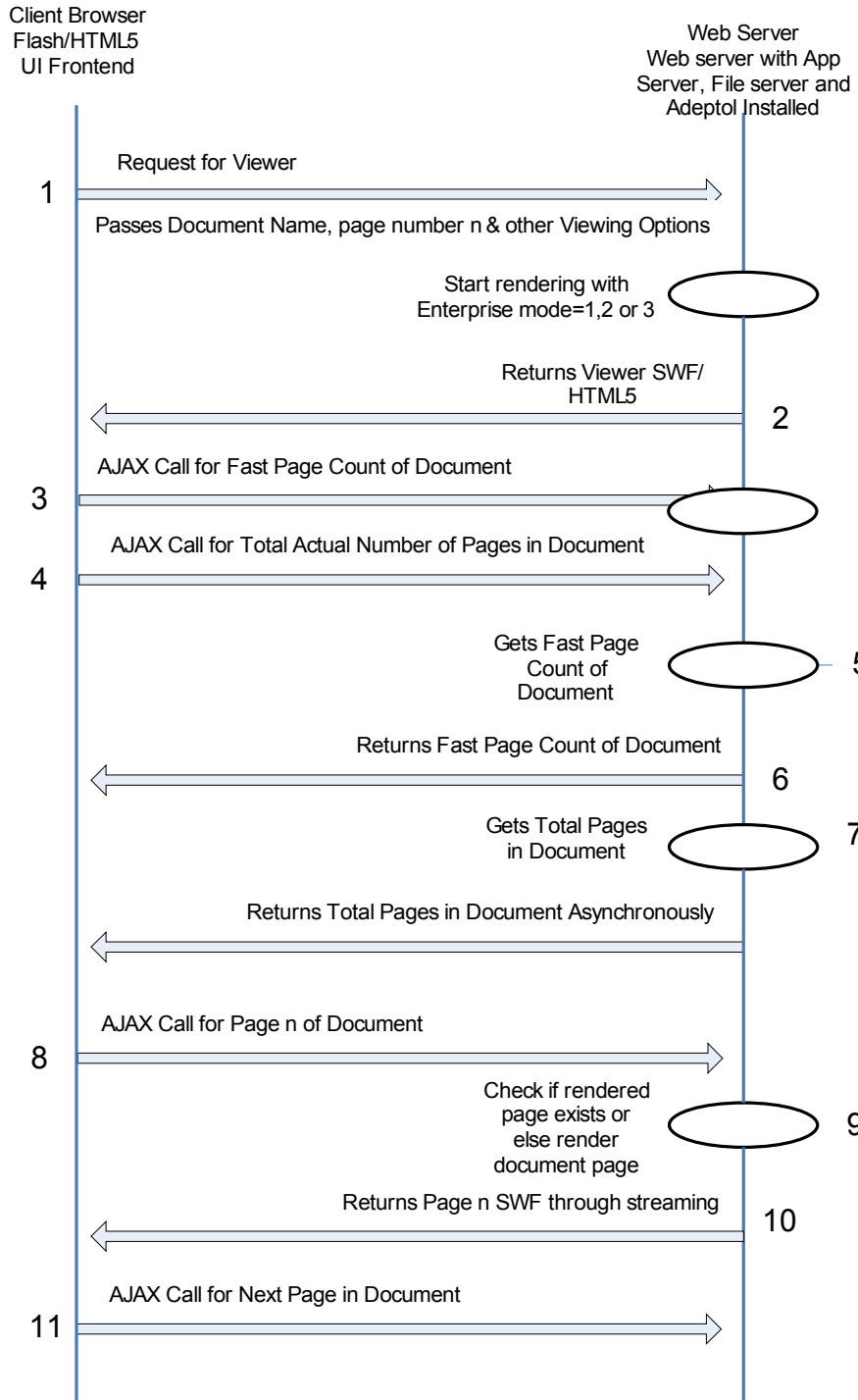
Step 7 – Total Page Count of document is calculated on server and returned asynchronously. (Fast Page is calculated synchronously to reach step 8 quickly)

Step 8 – Viewer makes an AJAX call for page n of the document

Step 9– Conversion File gets the document name and page number and converts page in the document.

Step 10 – Conversion File returns the generated file in a stream for viewer to display

Step 11 – Viewer makes an AJAX call for next page of the document.



Components & Command Line Syntax

Prizm Services installs various components & utilities which work together to perform document conversion.

Here are some of the main components and & files which perform specific functions:

Components/Utilities	Description	Location
convert2swf.jar	Performs document conversion	Installation Directory C:\Prizm
convert2swfclient.jar	Makes a call to convert2swf.jar for conversion. *Can be on a different machine in 3-tier installation mode	Installation Directory C:\Prizm
proxyserver.jar	Manages conversion and performs load balancing	C:\Prizm\bin
convert2swf_proxy.properties	Proxy Server properties file required by proxyserver.jar	C:\Prizm\conf
jrunner.exe	Utility to setup & install Prizm Services	C:\Prizm\bin
jrunner.properties	Properties file required by utility jrunner.exe	C:\Prizm\conf
proxyserver.log	Proxy Server log file generated by proxyserver.jar	C:\Prizm\logs
Service Start Up\Install Scripts	Call jrunner.exe. Provided for easier start\stop of Prizm Services	C:\Prizm\scripts
ViewerEnterprise.swf	Viewer file which contains viewer logic and makes AJAX calls to other files	C:\Prizm or C:\Prizm \SampleCode
settingsenterprise.xml	Settings file used by ViewerEnterprise.swf, contains installation location, temp directory location etc	C:\Prizm or C:\Prizm \SampleCode

convert2swfclient.jar

convert2swfclient.jar is a Java-based .jar file that provides methods to convert documents to the .png format to be used by the viewer client. This .jar file can only be run if Proxy Server is running.

Note- convert2swf.jar is depreciated and is left for backwards compatibility only. For new implementations, **use convert2swfclient.jar**

To run this utility simply type *java -jar convert2swfclient.jar*

Usage: `java -jar convert2swfclient.jar argument1=value1 argument2=value2 ...`

Argument list:

ooserver	OpenOffice.org server hostname:port
proxyserver	Convert2SWF Proxy server hostname:port
source	source file path
target	target directory or target file path if target is empty, the result is saved to the source directory
log	log file path, if not specified all logging goes to a terminal
pages	indicates the range of pages to be printed, semicolon separated ex.: to print all pages, beginning from 2nd: 2- to print 1st, 3rd, and 5th page: 1;3;5 to print first 10 pages: 1-10 to print 1st, 2nd and a range from 10 to 20: 1;2;10-20 to print 2nd, and the rest from 10th: 2;10
openpass	password that allows the user to open the PDF file, enclose the value in double-quotes if you want to use space(s) ex.: openpass=hj1uLWI openpass="Best Converter 2 PDF and PNG"
optimize	specifies the optimization level (0, 1, 2)
embedfonts	embeds fonts in png for a better search in png (Default No:0) (Values= 0 or 1)
ignoreswferrors	forces swf conversion (Default No: 0) (Values= 0 or 1)
totalpages	returns the number of the pages in document (returns accurate total number of pages but requires more processing time)
fastpgcnt	returns the number of pages in the document (faster but less accurate - use totalpages for actual page count)
pagesize	Used when converting tiff image, possible values: a4 - resize the result pages to A4 (210 x 297 mm) (default) letter - resize the result pages to Letter (8,5 x 11") original - keep the original size of the pages
modulesdir	directory to be used for modules and interprocess communication (by default this directory exists in the installation directory)
pagetype	used when converting multi-page tiff images, possible values: a4 - resize the result pages to A4 (210 x 297 mm) letter - resize the result pages to Letter (8,5 x 11") original (default) - keep the original size of the pages
pdfdensity	used when converting encrypted pdf documents (Default: 100)
fidelity	the factor which will make docx, xlsx and pptx documents appear exactly same as original; setting fidelity as 'high' means more time spent for conversion (default: high)
convtimeout	maximum time to wait for the conversion to be done (in seconds)(used for large files). Use 0 to wait for infinite time, default: 660 seconds
linktownd	use 1 to open the hyperlink in the same window
linktarget	sets the target window name of a hyperlink
linkcolor	sets the color of a hyperlink button (format: RRGGBBTT), where: RRGGBB = the color in HTML notation. TT = color transparency value (00-FF)
linkdisable	use 1 to disable hyperlinks

flashver	sets the flash version of the converted .swf (Default: 9) (Viewer supports 9+)
wtmtext	watermark text. Adds watermark on each page (Note – Watermark feature requires full license key. It does not work with trial evaluation key)
wtmfont	watermark font, default: Helvetica
wtmsize	watermark size, default: 130
wtmalpha	watermark opacity (1-100), default: 10
thumbnail	specifies thumbnail image width and height, e.g.: 150x200. Only used for creating thumbnails in png format of document pages
customerid	customer id used for licensing and activation
regkey	registration key used for licensing and activation
monochrome	create grayscale TIFF images (monochrome= 1)
getattachments	get attachment list for msg formats (getattachments= 1)
extractattachments	extract attachments from msg formats (extractattachments= 1)
xlsfidelity	suppress the XLS pre-processing of one page per sheet. (Default: High) (Values: low/high)
showFullscreenNotice	Allows the fullscreen keyboard events notice to not be displayed if set to No. (Default=Yes)
suppressSaveAnnotationNotice	Allows Annotation Saved notice to not be displayed when set to Yes. (Default=No)
srcencoding	specifies the text import filter parameters for text files. (only for .txt and .text files) For Korean files srcencoding would be: srcencoding=EUC_KR,CRLF,Times New Roman,ko-KR where: EUC_KR is the encoding, complete list is here: http://docs.python.org/release/2.4.2/lib/standard-encodings.html CRLF is the line ending character (either: CR, LF, CRLF) Times New Roman is the default font used ko-KR is the language encoding
dpi	specifies depth per index ratio of output png and image files Default:100

Example 1:

To convert sample.doc to sample.swf having Proxy Server running on 18580 in Demo Mode:
`java -jar convert2swfclient.jar source=sample.doc`

Example 2:

To convert page 1 of sample.doc to sample.swf:
`java -jar convert2swfclient.jar pages=1 source=sample.doc`

Example 3:

To convert pages 1,5,7 only of sample.doc to sample.swf having Proxy Server running on 18580:
`java -jar convert2swfclient.jar pages=1,5,7 source=sample.doc`

Example 4:

To get total pages in sample.doc
`java -jar convert2swfclient.jar totalpages source=sample.doc`

Example 5:

To get fast page count in sample.doc
`java -jar convert2swfclient.jar source=sample.doc fastpgcnt`
fastpgcnt – gets total pages in the document quickly but might not be as accurate as totalpages

Example 6: (Note – Watermark feature requires full license key.)

To convert sample.doc to sample.swf and add watermark “Confidential”:

```
java -jar convert2swfclient.jar source=sample.doc wtmtext=Confidential wtmfont= Helvetica  
wtmsize=100 wtmalpha=10
```

Example 7:

To create a thumbnail of page 1 of sample.doc

```
java -jar convert2swfclient.jar source=sample.doc thumbnail=100x100 pages=1
```

Example 8:

To create a thumbnail of all pages of sample.doc

```
java -jar convert2swfclient.jar source=sample.doc thumbnail=100x100
```

Example 9: (Note – Watermark feature requires full license key.)

To create a thumbnail of page 6 of sample.doc, specify target location, and add watermark “Approved” on each thumbnail:

```
java -jar convert2swfclient.jar source=c:\tempcahe\sample.doc target=c:\tempcache\  
thumbnail=100x100 wtmtext=Approved wtmfont=Helvetica wtmsize=50 wtmalpha=70
```

Example 10: To convert sample.doc to separate swf files for each page having Proxy Server running on 18580

```
java -jar convert2swfclient.jar source= c:\tempcahe\sample.doc enterprise=1
```

Note: If the registration information is not valid or empty, the library runs in demo mode. Some features are limited.

Note: For unregistered products or in trial mode, the Convert2SWF runs in trial mode and produces a DEMO watermark on converted documents.

Zero Footprint Client Examples:

Example 1:

To convert sample.tiff to sample.png having Proxy Server running on 18580 in Demo Mode:

```
java -jar convert2swfclient.jar source=sample.tiff target=sample.png
```

Example 2:

To convert page 1 only of sample.pdf to sample.png:

```
java -jar convert2swfclient.jar source=sample.pdf target=sample.png pages=1
```

Example 3:

To convert pages 1,5,7 only of sample.tiff to sample.png having Proxy Server running on 18580:

```
java -jar convert2swfclient.jar source=sample.tiff target=sample.png pages=1,5,7
```

Example 4:

To get total pages in sample.pdf:

```
java -jar convert2swfclient.jar source=sample.pdf totalpages
```

Example 5: (Note – Watermark feature requires full license key.)

To convert sample.tiff to sample.png and add watermark “Confidential”:

```
java -jar convert2swfclient.jar source=sample.tiff wtmtext=Confidential wtmfont=  
Helvetica wtmsize=100 wtmalpha=10 target=sample.png
```

Example 6:

To create a thumbnail of page 1 of sample.tiff:

```
java -jar convert2swfclient.jar source=sample.tiff thumbnail=100x100 pages=1  
target=sample.png
```

Example 7:

To create a thumbnail of all pages of sample.tiff:

```
java -jar convert2swfclient.jar source=sample.tiff thumbnail=100x100 target=sample.png
```

Example 8: (Note – Watermark feature requires full license key.)

To create a thumbnail of page 6 of sample.tiff, specify target location, and add watermark "Approved" on each thumbnail:

```
java -jar convert2swfclient.jar source=c:\tempcahe\sample.tiff  
target=c:\tempcache\ thumbnail=100x100 wtmtext=Approved wtmfont=Helvetica  
wtm��=50 wtmalpha=70
```

Note: If the registration information is not valid or empty, the library runs in demo mode. Some features are limited.

Note: For unregistered products or in trial mode, Convert2SWF runs in trial mode and produces a DEMO watermark on converted documents.

proxyserver.jar - Prizm Proxy Server

Proxy server is required to be running for convert2swf utility to run. This service is installed and started during the installation process.

Prizm Services basically creates a proxy which handles document conversions and provides load balancing by using various ports on the machine.

convert2swf_proxy.properties contains the parameters and port information needed for proxy server to run and is located in the C:\Prizm\conf directory.

Starting the Proxy Server

Method 1: Starting from the Control Panel

Prizm Services should ideally be started\stopped from the control panel. Simply right click on Prizm services in control panel to Start\Stop the services.

If access to the control panel is not available, services can also be started\stopped from the command line using following commands:

```
net start Convert2SWFSvc  
net stop Convert2SWFSvc
```

Logs are created in C:\Prizm\logs directory

Method 2: Starting as a service manually

runner.exe utility is provided for installation & set up of Prizm Services

jrrunner.exe requires jrrunner.properties & oodir as arguments

If oodir is not mentioned, jrrunner.exe takes the oodir mentioned in jrrunner.properties

jrrunner.properties contains the Prizm Proxy Service setup information and is located in C:\Prizm\conf.

jrrunner Usage:

```
jrrunner <command> <configuration file> [configuration properties] [...]
jrrunner <configuration file> [configuration properties] [...]
  (<command> implicitly '-c')
jrrunner <command>
  (<configuration file> implicitly 'jrrunner.properties')
jrrunner
  (<command> implicitly '-c' and <configuration file> 'jrrunner.properties')
```

where <command> can be one of:

```
-c --console run as a Console application
-t --start start an NT service
-a --pause pause a started NT service
-e --resume resume a paused NT service
-p --stop stop a running NT service
-i --install Install as an NT service
-r --remove Remove as an NT service
-q --query Query the current status of the service
-qs --quersilent Silently Query the current status of the service
-v --version print the wrapper's version information
-? --help print this help message
```

<configuration file> is the jrrunner.properties to use. Name must be absolute or relative to the location of jrrunner

[configuration properties] are configuration name-value pairs which override values in jrrunner.properties. For example: jrrunner.debug=true

Method 3: Starting with provided utility scripts

To set up the service manually or to start the service manually you can use the included scripts to start, stop or install and uninstall the services. These utilities reside in C:\Prizm\scripts and assume that correct 'ooo_installation' parameter is specified in the C:\Prizm\conf\jrrunner.properties file

Make sure that OpenOffice.org installation base directory is specified correctly in the C:\Prizm\conf\jrrunner.properties file

```
# OpenOffice.org installation base directory
ooo_installation=C:\Prizm\App\openoffice
```

Script	Description
install-service	Install the AJAX Document Viewer Services
start-service	Start the AJAX Document Viewer Services
stop-service	Stop the AJAX Document Viewer Services
remove-service	Remove the AJAX Document Viewer Services

ViewerEnterprise.swf

ViewerEnterprise.swf is the Prizm Content Connect Plus Viewer navigation and viewer file containing the UI code. ViewerEnterprise.swf basically acts as a wrapper viewing file and makes AJAX calls to get the document pages in swf format. This file is used with convert2swf utility to produce the resulting swf file with the navigation UI.

settingsenterprise.xml

settingsenterprise.xml file contains parameters used by the viewer. Update the various parameters based on your installation and machine configuration.

Parameter	Value
conversionFileURL	File which will take care of the AJAX calls and perform the conversion
getTotalPagesURL	File which will return the total page count of the document
getFastPagesURL	File which will return the fast page count of the document

Example - settingsenterprise.xml file

```
<settings>
<conversionFileURL> convertpage.asp</conversionFileURL>
<getTotalPagesURL> gettotalpagecount.asp</getTotalPagesURL>
<getFastPagesURL> getfastpagecount.asp</getFastPagesURL>
</settings>
```

Document Conversion ProxyWebService

Prizm Content Connect has a built in HTTP & HTTPS WebServer which serves the document conversion requests and does load balancing and various other tasks.

By default, after complete installation you can check if the HTTP WebServer is running by pointing your browser to:

<http://localhost:18680/convert2swf>

convert2swf WebService by default is setup to run on port 18680 and in http mode.

Usage:

ooserver	OpenOffice.org server hostname:port
proxyserver	Convert2SWF Proxy server hostname:port
source	Source file path
target	Target directory or target file path if target is empty, the result is saved to the source directory
log	Log file path, if not specified all logging goes to a terminal
pages	Indicates the range of pages to be printed, semicolon separated examples: to print all pages, beginning from 2nd: 2- to print 1st, 3rd, and 5th page: 1;3;5 to print first 10 pages: 1-10 to print 1st, 2nd and a range from 10 to 20: 1;2;10-20 to print 2nd, and the rest from 10th: 2;10
openpass	Password that allows the user to open the PDF file, enclose the value in double-quotes if you want to use space(s) examples: openpass=hj1uLWI openpass="Best Converter 2 PDF and SWF"
optimize	Specifies the optimization level (0, 1, 2)
embedfonts	Embed fonts in swf for a better search in swf (Default No:0) (Values= 0 or 1)
ignoreswferrors	SWF conversion might at times result in errors. This flag forces swf conversions (Default No:0) (Values= 0 or 1)
totalpages	Returns the number of the pages in document (Returns accurate total number of pages but requires more processing time)
fastpgcnt	Returns the number of the pages in document based on properties (Faster, but might not be accurate, use totalpages for actual page count)
pagesize	Used when converting tiff image, possible values: a4 - resize the result pages to A4 (210 x 297 mm) (default) letter - resize the result pages to Letter (8,5 x 11") original - keep the original size of the pages
modulesdir	Directory to be used for modules and interprocess communication (by default this directory exists in the installation directory)
pagetype	used when converting multi-page tiff images, possible values: a4 - resize the result pages to A4 (210 x 297 mm) letter - resize the result pages to Letter (8,5 x 11") original (default) - keep the original size of the pages
dpi	for specifying depth per index ratio of output swf and image files

pdfdensity	used when converting pdf document. Only used for encrypted PDF. Default:100
fidelity	the factor which will make docx, xlsx and pptx documents appear exactly same as original; setting fidelity as 'high' means more time spent for conversion (default: normal)
convtimeout	maximum time to wait for the conversion to be done (in seconds) (used for large files). Use 0 to wait for infinite time, default: 660 seconds
linktoward	use 1 to open the hyperlink in the same window
linktarget	sets the target window name of a hyperlink
linkcolor	sets the color of a hyperlink button (format: RRGGBBTT), where: RRGGBB = the color in HTML notation. TT = color transparency value (00-FF)
linkdisable	use 1 to disable hyperlinks
flashver	sets the flash version of the converted swf (default: 9)(Viewer supports only 9+)
wtmtext	watermark text. Adds watermark on each page (Note – Watermark feature requires full license key. It does not work with trial evaluation key)
wtmfont	watermark font, default: Helvetica
wtmsize	watermark size, default: 130
wtmalpha	watermark opacity (1-100), default: 10
thumbnail	specifies thumbnail image width and height, e.g.: 150x200. Only used for creating thumbnails in png format of document pages
customerid	Customer id
regkey	Registration key
enterprise	Running the Viewer in a mode to generate independent swf for each page. Modes can be 1, 2 or 3. 3 being the recommended mode.
monochrome	Create grayscale TIFF images (monochrome=1)
getattachments	Get attachment List for msg & eml formats (getattachments=1)
extractattachments	Extract attachments from msg & eml formats (extractattachments=1)
xlsfidelity	suppress the XLS pre-processing of one page per sheet. Default: high (Values: low/high)
showFullscreenNotice	Allows the fullscreen keyboard events notice to not be displayed if set to No. (Default=Yes)
suppressSaveAnnotationNotice	Allows Annotation Saved notice to not be displayed when set to Yes. (Default=No)
srcencoding	Specify the text import filter parameters for text files. (Gets used only for .txt and .text files) For the Korean files srcencoding would be: srcencoding=EUC_KR,CRLF,Times New Roman,ko-KR where: EUC_KR is the encoding, complete list is here: http://docs.python.org/release/2.4.2/lib/standard-encodings.html CRLF is the line ending character (either: CR, LF, CRLF) Times New Roman is the default font used ko-KR is the language encoding

Example 1:

To convert sample.doc to sample.swf:

<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&target=c:\temp\sample.swf>

Example 2:

To convert page 1 only of sample.doc to sample.swf:

<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&pages=1>

Example 3:

To convert pages 1,5,7 only of sample.doc to sample.swf:

<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&target=c:\temp\sample.swf&pages=1,5,7>

Example 4:

To get total pages in sample.doc:

<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&totalpages>

Example 5:

To get fast page count in sample.doc:

<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&fastpgcnt>

fastpgcnt – gets total pages in the document quickly but might not be as accurate as totalpages

Example 6:

To convert sample.doc to sample.swf with http_port set to 1111 and SSL enabled:

<https://localhost:1111/convert2swf?source=c:\temp\sample.doc&pages=1>

Example 7: (Note – Watermark feature requires full license key.)

To convert sample.doc to sample.swf and add watermark “Confidential”:

<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&wtmtext=Confidential&wtmfont=Helvetica&wtmsize=100&wtmalpha=10>

Example 8:

To create a thumbnail of page 1 of sample.doc

<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&thumbnail=100x100&pages=1>

Example 9:

To create a thumbnail of all pages of sample.doc:

<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&thumbnail=100x150>

Example 10: (Note – Watermark feature requires full license key.)

To create a thumbnail of page 6 of sample.doc, specify target location, and add watermark “Approved” on each thumbnail:

<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&wtmtext=Approved&wtmfont=Helvetica&wtmsize=100&wtmalpha=10&target=C:\tempcache>

Example 11:

To convert sample.doc to independent swf pages and place files in a specific location:

<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&target=c:\temp&enterprise=1>

Example 12:

To convert sample.doc to independent swf pages and place files in a source location:

<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&enterprise=1>

Setup proxy service on port other than 18680

Open C://Prizm/conf/proxyserverconfiguration.config and change proxy_port

After changing the http_port, restart the proxyserver by using following commands

```
cd C://Prizm/scripts
proxyserver.sh stop
proxyserver.sh start
```

Setup proxy service to run on SSL https

Following steps have to be done to achieve this:

1) Modify proxyserver_jar.properties

Stop proxyserver

```
cd C://Prizm/scripts
proxyserver.sh stop
```

```
cd C://Prizm/config
```

Open proxyserverconfiguration.config

```
set http_ssl_enabled=true
```

2) Modify web.xml (Tomcat / JBoss Application - WAR, EAR)

(Only Applicable if you are using WAR or EAR provided in Sample Code)

(Ignore this step if you are not using the provided sample code WAR or EAR)

```
<param-name>proxyserver</param-name>
```

```
<param-value>https://localhost:18680</param-value>
```

3) Start the proxyserver

```
cd C://Prizm/scripts
```

```
proxyserver.sh start
```

Check logs at C://Prizm/convert2swf/logs/proxyserver.log

SSL mode is denoted in proxyserver.log at initialization phase, e.g.:

```
INFO | jvm 1 | 2009/09/10 08:00:26 | http server ssl enabled : true
```

```
INFO | jvm 1 | 2009/09/10 08:00:26 | http server ssl keystore : C:/Program
```

```
Files/proxyserver/bin/proxyserver_ssc.jks
```

```
INFO | jvm 1 | 2009/09/10 08:00:26 | http server ssl password : *****
```

```
:
```

```
INFO | jvm 1 | 2009/09/10 08:00:38 | [ info ] [https-server] starting...
```

```
INFO | jvm 1 | 2009/09/10 08:00:38 | [ info ] [https-server] adding to the pool: worker-0
```

```
INFO | jvm 1 | 2009/09/10 08:00:39 | [ info ] [https-server] binded to: ssl
```

```
socket,host=localhost,port=18680
```

and with each client request, e.g.:

```
INFO | jvm 1 | 2009/09/10 08:00:56 | [ info ] [https-server] [worker-0] handling client request
```

Doing Conversions in SSL Mode

Specify proxyserver parameter

Calling convert2swfclient.jar has to contain proxyserver parameter that specifies the https protocol, host and port, e.g.:

```
java -jar convert2swfclient.jar proxyserver=https://localhost:18680 source=sample.doc
```

or

When using proxyserver conver2swf service

<https://localhost:18680/convert2swf?source=c:\temp\sample.doc&pages=1>

What is proxyserver_ssc.jks?

This file is so called "keystore". It is necessary for SSL handshake phase and data encryption. proxyserver_ssc.jks contains self-signed certificate that is intended to be used in trusted environments (difficult to tamper), such as localhost or intranets.

To print the content of the keystore you may use following command:

```
"Java/jdk1.6.0_16/bin/keytool" -list -v -keystore C://Prizm/convert2swf/bin/proxyserver_ssc.jks  
-storepass "password"
```

Integration with Your Application

Prizm Content Connect supports real time processing of documents and can be integrated with your existing applications.

After you have installed Prizm Content Connect, insert the following files into your code for complete integration:

Viewer File - ViewerEnterprise.swf file

This is the file which calls the ViewerEnterprise.swf and passes document location along with the Viewer display properties.

This is also the file containing the logic for viewing the documents. ViewerEnterprise.swf makes AJAX calls to Conversion File mentioned below.

Settings File- settingsenterprise.xml file

settingsenterprise.xml file is used by ViewerEnterprise.swf and contains installation location, location for a temp directory where swf file will be generated, and conversion file url.

Note- settingsenterprise.xml file can also be passed to viewer as a flash variable XMLSettingsURL.

For asp.net sample code, settingsenterprise.xml would look like this:

```
<settings>
<conversionFileURL>convertpage.aspx</conversionFileURL>
<getTotalPagesURL> gettotalpagecount.asp</getTotalPagesURL>
<getFastPagesURL>getfastpagecount.asp</getFastPagesURL>
</settings>
```

For php sample code, settingsenterprise.xml would look like this:

```
<settings>
<conversionFileURL> convertpage.php</conversionFileURL>
<getTotalPagesURL> gettotalpagecount.php</getTotalPagesURL>
<getFastPagesURL> getfastpagecount.php</getFastPagesURL>
</settings>
```

Conversion File (conversionFileURL)

Conversion file is called from ViewerEnterprise.swf and performs actual conversion. Conversion file accepts document as a **GET parameter** and returns generated SWF file name.

Arguments: *fileName, documentname, pageNumber, instanceid*

Returns: *SWFFile=generatedfile.swf*

Or SWFFile=Error (in case of error or other problems)

Note- Arguments are only available as GET parameter

You can call convert2swf utility from within your application code by applying:

```
'Get the document name from ViewerEnterprise.swf
Dim document As String
document = Request.querystring("fileName")
Dim instanceid As String
instanceid = Request.querystring("instanceid")

Dim pageNumber As String
pageNumber = Request.querystring("pageNumber")

**\Location of temp cache directory on computer**
Dim documentLocation As String = Session("documentLocation")

'documentLocation = "C:\tempcache\"
' Complete Document Path
Dim OriginalDocument As String = documentLocation & document

Dim tempLocation As String = Session("tempLocation")
'tempLocation = "C:\tempcache\"

'Create swf file names
Dim SWFFile As String
SWFFile = document & ".swf"

'Specify locations where final swf file will be stored
Dim targetSwfLocation As String
targetSwfLocation = tempLocation & SWFFile

Dim fso As Object

'Make sure the original file exists

fso = CreateObject("scripting.filesystemobject")
If fso.FileExists(OriginalDocument) Then
    ' Call CONVERT2SWF Service

    Dim serviceurl As String
    Dim writer As New StringWriter

    serviceurl = "http://localhost:18680/convert2swf?singlefile=1&pages=" & pageNumber & "&source="
    + HttpUtility.UrlEncode(OriginalDocument) + "&target=" +
    HttpUtility.UrlEncode(targetSwfLocation)

    Dim request As HttpWebRequest = HttpWebRequest.Create(serviceurl)
    request.Method = WebRequestMethods.Http.Get
    Dim serviceresponse As HttpWebResponse = request.GetResponse()
    Dim reader As New StreamReader(serviceresponse.GetResponseStream())
    Dim tmp As String = reader.ReadToEnd()
    serviceresponse.Close()

    ' Return the requested file
    response.ContentType = "application/swf"
    response.AppendHeader("Content-Disposition", "inline; filename=" + SWFFile)
    response.TransmitFile(targetSwfLocation)
    response.End()
```

```

Else

    Response.Write("Error")
End If

```

Get Fast Page Count File (getFastPagesURL)

GetFastPageCount file is called from ViewerEnterprise.swf and returns the approximate number of pages in the document.

GetFastPageCount file accepts document as a GET parameter and returns the pages

Arguments: *fileName, documentname, instanceid*

Returns: *pages=pagecount*

```

'Get the document name from ViewerEnterprise.swf
Dim document As String
document = Request. querystring("documentname")

'**Location of temp cache directory on computer**
Dim documentLocation As String = Session("documentLocation")

'documentLocation = "C:\tempcache\"
' Complete Document Path
Dim OriginalDocument As String = documentLocation & document

Dim fso As Object

'Make sure the original file exists

fso = CreateObject("scripting.filesystemobject")
If fso.FileExists(OriginalDocument) Then
    ' Call CONVERT2SWF Service

    Dim serviceurl As String
    Dim writer As New StringWriter

    serviceurl = "http://localhost:18680/convert2swf?singlefile=1&source=" +
HttpUtility.UrlEncode(OriginalDocument) + "&fastpgcnt"

    Dim request As HttpWebRequest = HttpWebRequest.Create(serviceurl)
    request.Method = WebRequestMethod.Http.Get
    Dim serviceresponse As HttpWebResponse = request.GetResponse()
    Dim reader As New StreamReader(serviceresponse.GetResponseStream())
    Dim tmp As String = reader.ReadToEnd()
    serviceresponse.Close()

    Response.Write("pages=" & tmp)
Else
    Response.Write("Error")
End If

```

Get Total Page Count File (getTotalPagesURL)

GetTotalPageCount file is called from ViewerEnterprise.swf and returns the actual number of pages in the document.

GetTotalPageCount file accepts document as a GET parameter and returns the pages

Arguments: *fileName, documentname, instanceid*

Returns: *pages=pagecount*

```
'Get the document name from ViewerEnterprise.swf
Dim document As String
document = Request. querystring("documentname")

**Location of temp cache directory on computer**
Dim documentLocation As String = Session("documentLocation")
'documentLocation = "C:\tempcache"
' Complete Document Path
Dim OriginalDocument As String = documentLocation & document
Dim fso As Object

'Make sure the original file exists

fso = CreateObject("scripting.filesystemobject")
If fso.FileExists(OriginalDocument) Then
' Call CONVERT2SWF Service

Dim serviceurl As String
Dim writer As New StringWriter

serviceurl = "http://localhost:18680/convert2swf?singlefile=1&source=" +
HttpUtility.UrlEncode(OriginalDocument) + "&totalpages"

Dim request As HttpWebRequest = HttpWebRequest.Create(serviceurl)
request.Method = WebRequestMethod.Http.Get
Dim serviceresponse As HttpWebResponse = request.GetResponse()
Dim reader As New StreamReader(serviceresponse.GetResponseStream())
Dim tmp As String = reader.ReadToEnd()
serviceresponse.Close()

Response.Write("pages=" & tmp)
Else
Response.Write("Error")
End If
```

Sample Code

Sample code is included to demonstrate how integration can work.

ASP .net Code Files

Sample.doc – Document to be converted

default.asp – Starting Point. Calls ViewerEnterprise.swf and passes Sample.doc filename. Also contains the conversion logic and calls convert2swf and initiates conversion

convertdocument.asp – Returns the converted swf in stream form

settingsenterprise.xml – Contains the settings of installation and other files

ViewerEnterprise.swf – Actual viewer file

How to run the above asp Sample Code

- 1) Copy the files from C:\Prizm\ Samples\ ProjectEnterprise to a directory C:\ProjectEnterprise (Make sure directory name is ProjectEnterprise and nothing else)
- 2) Create a directory named "tempcache" in your C: drive. It should look like C:\tempcache. Give all users read/write permissions to this directory

- 3) Create a Virtual Directory or new site on IIS or Web Server and point to C:\ProjectEnterprise. Make sure you give Write, Execute permissions in the site to all files.
- 4) Browse to default.asp file like this
<http://server:port/default.aspx?document=Sample.doc>

where Sample.doc is a document in C:\ProjectEnterprise

Note- If translation does not work in the provided sample code, make translate directory a new virtual directory under a different "AppPool" in IIS

Chapter 5

Customizing the viewer

Prizm Content Connect Plus is fully customizable. Your custom code simply needs to appear as 'FlashVars' param variables so that it can be passed to the Flash file at run time.

There are several ways to embed Flash into a web page. Here are some examples:

1) Basic Embed using Embed & Object Tags (using AC_RunActiveContent.js)

http://kb2.adobe.com/cps/127/tn_12701.html

2) Using SWF Objects

<http://code.google.com/p/swfobject/>

3) Using JQuery SWF Object Plugin

<http://jquery.thewikies.com/swfobject/>

Given below is an example with code showing SWF Objects.

```
<script src="swfobject.2.2.js" language="javascript"></script>
<script type="text/javascript">
    var params = {
        wmode: 'opaque',
        scale: 'noscale',
        allowFullScreen: true,
        allowScriptAccess: 'always',
        bgcolor: '#ffffff'
    };
    var attributes = {
        id: 'ViewerEnterprise ',
        name: ' ViewerEnterprise '
    };
    var flashvars = {
        documentname: '<%=document %>',
        saveDocumentLocation: 'savedocument.aspx'
    };
    swfobject.embedSWF("ViewerEnterprise.swf?<%=Now & Rnd() %>", "documentviewer", "620",
"800", "10.0.0", false, flashvars, params, attributes);
</script>
<noscript>
    Javascript needs to be enabled to view the document in viewer.
</noscript>
<div id="documentviewer"></div>
```

Flash Document Variables

Name	Description	Default Value	Values
XMLSettingsURL	Pass settings xml file as flash variable		XMLSettingsURL= settingsenterprise.xml
docLoadDelay	Controls the request time between each page	100	10 + any numeric value
documentname	Name of document to be displayed	Name String Value	Any String

		(Required)	
startPage	Page which should load when viewer opens	1 (Required)	1 to any. Cannot have value as 0 or any alphanumeric digits or negative numbers.
toolbarButtonSize	Changes the size of the buttons in the toolbar.	36	Any numeric value
hideToolbarCategories	Turns on/off the category names in the toolbar	Yes	Yes/No
toolbar	Removes toolbar all together	Yes	Yes/No
interfaceColor	Changes the toolbar color	0xff0000	Any hex code
saveDocument (Requires setting of saveDocumentLocation)	Removes the save document options from all tabs	Yes	Yes/No
saveDocumentLocation	Works with save button and points to original document or any other document rendition (such as pdf)		Link to the Original Document or pdf format of Original Document Example: http://www.testsite.com/documents/originaldoc.doc
ignoreExternalLinks	Turns off the external links on the document	No	If set to Yes, when external links are clicked, they will not be opened automatically. (Look at JavaScript events viewerOnExternalLinkClick & viewerOnInternalLinkClick for using in relation to this parameter)
copyText	Disables the option to copy text to clipboard from the viewer	Yes	Yes/No
jsFullscreen	Traps full screen button event. Disables fullscreen event of viewer. Setting jsFullscreen=Yes allows override of the fullscreen event. Set jsFullscreen=Yes and then on JS event viewerOnDocumentFullScreen (documentname) change viewer height/width to needed.	No	Yes/No
searchTab	Turns search tab on/off	Yes	Yes/No
viewTab	Turns view tab on/off	Yes	Yes/No
translationTool	Turns translation on/off	Yes	Yes/No
selectedTab	Tab to select when document first loads	Home	Name of the tab. Example: selectedTab:'Home' selectedTab:'Search' selectedTab:'खोज'

			If using translation, pass the translated tab name to load it on document load.
--	--	--	---

Home Tab Buttons

buttonHomeSave buttonHomePrint buttonHomeZoom buttonHomeFit buttonHomeLeft buttonHomeRight buttonHomeClip buttonHomeFullscreen buttonSearch buttonSearchFullScreen buttonViewFit buttonViewRotate buttonViewThumbs buttonViewFullScreen buttonTranslateFullscre	Allows you to independently turn off buttons on Home tab Example: buttonHomeZoom=No	All buttons are on by default. Default: Yes	Yes/No
---	---	---	--------

Print Specific Variables

Name	Details
printOptionPrintAll	Yes/No Allows you to remove Print All Pages options in the print dialog box
printOptionPrintPageRange	Yes/No Allows you to remove Print Page Range option in the print dialog box
printOptionPrintCurrentPage	Yes/No Allows you to remove Print Current Page option in the print dialog box

Custom Tab Variables

Adding custom tabs with custom buttons:
 (Only 1 custom tab is allowed with up to 3 buttons)

Name	Description
customTabName	Name of custom tab
customTabCategoryName	Category name for custom buttons. All buttons get added to 1 category
customButton1Image	Image to appear on button
customButton1Url	URL to go to when button is clicked

customButton1Target	Target for url like _blank, _top etc
customButton1Tooltip	Tooltip for the custom button

Search Variables

Name	Description	Default Value	Values
searchQuery	Load viewer with search keywords highlighted		Can be any keywords in the document.
highlightsLinksXML	Pass search variables in xml form		xml
highlightsLinksXMLURL	Pass search variables in a url to a xml		Link to xml

Example searchQuery: Loading Viewer with first "Magic" search keyword pre highlighted and then let user jump to next "Magic" keyword in document
Search Variables: searchQuery=Magic

Passing multiple variables to load for search
Search Variables: searchQuery=Magic|this
| is the delimiter

Example highlightsLinksXML or highlightsLinksXMLURL

highlightsLinksXML = "<root><actions><action type='.....'"
highlightsLinksXMLURL = 'highlights.xml'

Sample highlight.xml

```
<root>
<actions>
<action type='addLink'><link documentname="Sample.doc" id="test123" userid="" tooltip=""
mode="ByText" occurrence="all" page="2" allowDelete="true" color="16776960" start="0" end="0"
annotation="0" link="http://www.yahoo.com" editable="0"><![CDATA[the]]></link>
</action>
<action type='addHighlight'>
<highlight documentname=" Sample.doc " id="test123" userid="" tooltip="" mode="ByText"
occurrence="all" page="2" allowDelete="true" color="16776960" start="0" end="0" annotation="0"
editable="0"><![CDATA[this]]></highlight>
</action>
</actions>
</root>
```

Setting editable="0" will not open the highlight options when clicked on the highlighted text or link.

Annotation Parameters

Prizm Content Connect Plus can load optional annotation flash parameters to let you fully embed it, with markup capabilities, as a part of your application.

Given below is an example with code showing various variables.

```

<script src="jquery-1.4.2.min.js" language="javascript"></script>
<script src="jquery.swfobject.1-1-1.min.js" language="javascript"></script>
<script>
documentviewer = $.flash.create(
    {
        swf: 'ViewerEnterpriseAnnotation.swf',
        id:'ViewerEnterpriseAnnotation ',
        height: 600,
        width: 750,
        wmode: 'window',
        scale: 'noscale',
        allowFullScreen: true,
        allowScriptAccess: 'always',
        hasVersion: 10,
        hasVersionFail: function (options) {
            alert("You do not have required flash version");
        },
        encodeParams: false,
        bgcolor: '#ffffff',
        flashvars: {
            documentname: '<%=document %>',
            saveAnnotation: 'No'
        }
    }
);
$(document).ready(
    function () {
        $('#documentviewer').html(documentviewer);
    }
);
</script>
<div id="documentviewer"></div>

```

Annotation Variables

Name	Description	Default Value	Values
reviewTab	Turns review tab on or off	Yes	Yes/No
turnOffClickMenu	Turns off the on click menu when set to Yes. On Click menu shows options such as "Add Link", "Add Highlight", "Copy Text"	No	Yes/No
saveAnnotation	Enables users to save annotations, or disables save	Yes	Yes/No
openAnnotation	Enables or disables opening of annotation files by the users. Example use case: pre-load an annotation (use loadAnnotation) and disable opening other annotations	Yes	Yes/No
loadAnnotation	Pre-loads annotations		
saveAnnotationAs	Forces annotation xml to be saved automatically by the defined name. (Disables the annotation save popup)		

stamps	Sets predefined Stamp values. If no stamp values are set, Stamp selector appears blank.	Required to be set.	stamps= APPROVED DENIED REVIEW REJECTED Pass stamps as text separated by a pipe delimiter " "
printAnnotations	Turns on/off the print annotations option checkbox. (Print Annotation checkbox appears when users click on Print button in Viewer)	Yes	printAnnotations=No

JavaScript events to and from the Viewer

Prizm Content Connect is built in such a way that it can be truly integrated and embedded into your application. Events are JavaScript AJAX calls that the Viewer can generate when certain actions occur. Developers can also send JavaScript AJAX events to the Viewer from their code and have the Viewer perform certain actions without reloading the whole page.

Sending events to the Viewer

To send events to the viewer, follow these steps:

1. Pass a FlashVar to ViewerEnterprise.swf to indicate you will be sending events to Viewer

```
sendViewerEvents=Yes
```

2. Add the following code to the page where you call ViewerEnterprise.swf:

```
<script>
documentviewer = $.flash.create(
    {
        swf: 'ViewerEnterprise.swf',
        id:'ViewerEnterprise',
        height: 600,
        width: 750,
        wmode: 'window',
        scale: 'noscale',
        allowFullScreen: true,
        allowScriptAccess: 'always',
        hasVersion: 10,
        encodeParams: false,
        bgcolor: '#ffffff',
        flashvars: {
            documentname: '<%=document %>',
            sendViewerEvents:'Yes',
        }
    }
);
$(document).ready(
    function () {
        $('#documentviewer').html(documentviewer);
    }
);
</script>
```

3. The sendTextToFlash function is used to interact with the viewer.
2 arguments are required: Command:String and Argument:String or Number

Argument is 0 in all cases except:

For Command MoveToPage where argument is pageNumber

For Command Search where argument is String (the text to be searched)

The following events can be sent:

Event	Details
Next	Move to next page
Previous	Move to previous page

ZoomIn	Zoom In on the document
ZoomOut	Zoom Out on document
ZoomTo	Zoom to a certain specified size
FitToWidth	Set Zoom=100%
MoveDown	Move the page down
MoveUp	Move the page up
MoveLeft	Move the page left
MoveRight	Move the page right
Print	Print the document. Opens print dialog.
PrintAll	Print all pages in the document. Does not open the print dialog.
PrintRange	Print specific pages in document. Does not open the print dialog.
Rotate	Rotate the document by 90 degree
MovetoPage	Move to a specific page in document and pass page number
Search	Start search of the string
SearchResultMoveNext	Move to next search highlighted result
SearchResultMovePrevious	Move to previous search highlighted result
SelectText	Turn on the text selector
getTotalPages	Return total pages in document. Calls viewerTotalPages(page) event
turnOnTextSelection	Mimics the action of clicking the text selection button

Example:

```
<a href=javascript:ViewerEnterprise.sendTextToFlash("Previous")>Previous</a>
<a href=javascript:ViewerEnterprise.sendTextToFlash("Next")>Next</a>
<a href=javascript:ViewerEnterprise.sendTextToFlash("ZoomIn")>Next</a>
```

Calling Viewer Methods

Method	Details
alert	Show an alert box in the viewer with a message
assignHighlightColor	Assign a color through javascript for text selection
loadHighlights	Passing Highlights XML to Viewer through JavaScript
clearHighlights	Clear loaded highlights XML
gotoPage(pageNumber)	Load a particular page in the viewer

Showing an alert box in viewer

```
alert("text to be shown in alert box")
```

Example:

```
<a href=javascript: ViewerEnterprise.alert("text to be shown in alert box")>Show Alert</a>
```

Receiving Events from the Viewer

The Viewer can send events when certain actions are performed.

To receive the events follow these steps :

1) Pass a FlashVar to ViewerEnterprise.swf to indicate you will be sending events to Viewer

getViewerEvents=Yes

2) Add the JavaScript code in your page as shown below

```
<script>
documentviewer = $.flash.create(
    {
        swf: 'ViewerEnterprise.swf',
        id:'ViewerEnterprise',
        height: 600,
        width: 750,
        wmode: 'window',
        scale: 'noscale',
        allowFullScreen: true,
        allowScriptAccess: 'always',
        hasVersion: 10,
        hasVersionFail: function (options) {
            alert("You do not have required flash version");
        },
        encodeParams: false,
        bgcolor: '#ffffff',
        flashvars: {
            documentname: '<%=document %>',
            getViewerEvents:'Yes',
        }
    }
);
$(document).ready(
    function () {
        $('#documentviewer').html(documentviewer);
    }
);
</script>
```

The following events are sent by ViewerEnterprise.swf:

Event	Details
OnDocumentError(documentname, pagenumber)	A custom HTTP Status Error Code 500 is returned from conversion url instead of converted swf
viewerOnDocumentZoom(documentname, zoom)	Zoom is pressed. Returns documentname & zoom size
viewerOnDocumentScroll(documentname)	Document is scrolled
viewerOnDocumentLoad(documentname)	Document is loaded in the viewer
viewerOnDocumentDownload(documentname)	Document is downloaded/Save button was pressed
viewerOnDocumentRotate(documentname)	Document is rotated by 90 degree
viewerOnDocumentPrint(documentname)	Print button was clicked
viewerOnDocumentFullScreen(documentname)	Document is viewed in Full Screen Mode
viewerOnSelectText(documentname, pagenumber, startpos, endpos, selectedtext)	Text is selected on document. Returns Document Name, Page Number, Start Character Position of Text Highlighted, End Character Position of Text Highlighted, Selected Text Contents
viewerOnDocumentTextSelected(documentname)	After text selection is complete
viewerOnInternalLinkClick(pageClicked)	An internal link in document is clicked. Like bookmark or link to another page in the document
viewerOnExternalLinkClick(linkUrl)	An external link in document is clicked.

	Like www.google.com is a link in document and is clicked
onHighlightEvent(eventName , highlightXML)	This is the event passed by viewer when a certain text is selected by used and added as Highlight, Link, Tag or Redaction.
onPagesAllLoaded()	Fired when all pages in the document have been loaded
onThumbView()	Fired when user clicks on thumbnail view button
onFullView()	Fired when user comes out of the thumbnail view
tabChanged (nameOfActivatedTab:String)	Event fired when tab is changed in the viewer

Highlight Events Sent by viewer

JavaScript method that is called : onHighlightEvent (eventName , highlightXML)

eventNames

highlightSaveMenuOpened
highlightAdd
highlightExistingMenuOpened
highlightMenuCancelled
highlightRemove
highlightOpenLink

Example:

```
<script language="javascript">
function viewerOnDocumentPrint(documentname)
{
  alert("document: " + documentname);
}

function viewerOnSelectText(documentname,pagenuumber,startpos,endpos,selecetdtext)
{
  alert(startpos+" "+endpos);
}

function onHighlightEvent(eventName, highlightXML)
{
  alert(eventName + " " + highlightXML);
}
</script>
```

Annotation Events to/from Viewer

Sending Events

To send Annotation Events to the Viewer, follow these steps:

- 1) Pass a FlashVar to ViewerEnterprise.swf to indicate you will be sending events to Viewer

sendViewerEvents=Yes

2) In your page where you call ViewerEnterprise.swf, add the following code

```
<script>
documentviewer = $.flash.create(
    {
        swf: 'ViewerEnterpriseAnnotation.swf',
        id:'ViewerEnterpriseAnnotation',
        height: 600,
        width: 750,
        wmode: 'window',
        scale: 'noscale',
        allowFullScreen: true,
        allowScriptAccess: 'always',
        hasVersion: 10,
        encodeParams: false,
        bgcolor: '#ffffff',
        flashvars: {
            documentname: '<%=document %>',
            sendViewerEvents:'Yes',
        }
    }
);
$(document).ready(
    function () {
        $('#documentviewer').html(documentviewer);
    }
);
</script>
```

Calling Viewer Methods

Method	Details
alert	Show an alert box in the viewer with a message
assignHighlightColor	Assign a color through javascript for text selection
loadHighlights	Passing Highlights XML to Viewer through JavaScript
clearHighlights	Clear loaded highlights XML
loadAnnotations	Passing Annotations XML to Viewer through JavaScript
removeAnnotations	Clear loaded annotations XML
saveAnnotation	Save loaded annotation Save loaded annotation

Showing an alert box in viewer

alert("text to be shown in alert box")

Example:

```
<a href=javascript: ViewerEnterpriseAnnotation.alert("text to be shown in alert box")>Show Alert</a>
```

Assigning text selection color via JavaScript

assignHighlightColor(hexcode of color)

Example:

```
<a href=javascript: ViewerEnterpriseAnnotation.assignHighlightColor (0xFFFF00)>Set Color</a>
```

Passing Highlights XML to Viewer through JavaScript

loadHighlights(XML_TO_ADD)
clearHighlights()

Example:

```
ViewerEnterpriseAnnotation.loadHighlights( "<root><actions><action type='addHighlight">
```

```
<highlight documentname='PowerCfg.odt' id='AE40B90F8A971CF262C3090970DEC151'
userid="" tooltip="" mode='ByText' occurrence='1' page='0' allowDelete='true' color='16776960'
start='0' end='0' annotation='0'><![CDATA[paper]]></highlight></action></actions></root>" );
ViewerEnterpriseAnnotation.clearHighlights();
```

Receiving events

The Viewer can send events when certain actions are performed by the user.

To receive events, follow these steps:

Pass a FlashVar to ViewerEnterprise.swf to indicate you will be sending events to Viewer

getViewerEvents=Yes

Add the javascript code in your page as shown below

```
<script>
documentviewer = $.flash.create(
    {
        swf: 'ViewerEnterpriseAnnotation.swf',
        id:'ViewerEnterpriseAnnotation',
        height: 600,
        width: 750,
        wmode: 'window',
        scale: 'noscale',
        allowFullScreen: true,
        allowScriptAccess: 'always',
        hasVersion: 10,
        hasVersionFail: function (options) {
            alert("You do not have required flash version");
        },
        encodeParams: false,
        bgcolor: '#ffffff',
        flashvars: {
            documentname: '<%=document %>',
            getViewerEvents:'Yes',
        }
    }
);
$(document).ready(
    function () {
        $('#documentviewer').html(documentviewer);
    }
);
</script>
```

The following events are sent by the Viewer

Event	Details
willSaveAnnotations(xml)	Fired when Save Annotations Button is clicked. Request for saving annotations is being sent to server. Argument xml is the annotation xml
hasSavedAnnotations(xml)	Fired when Save Annotations Button button is clicked. After the annotations have been saved on the server. Argument xml is the annotation xml
onAnnotationDrawn(annotationType)	Called when shape is drawn Valid annotationType arguments returned:

	circle, circle_filled, rectangle rectangle_filled, rectangle_trans, line, arrow, text, stamp
--	--

Generating Thumbnails

Prizm Content Connect Plus has a built-in script to generate thumbnail images of the various pages of documents. These thumbnails can be displayed as .swf image files in the default AJAX-based Viewer client, or as .png image files in the Zero Footprint Client, Mobile Client, and various other applications.

For creating a batch process or other custom application, thumbnails can be generated using `convert2swfclient` or by using the `WebService`.

Thumbnail related arguments:

<code>wmttext</code>	adds watermark on each page (Note – Watermark feature requires full license key.)
<code>wtmfont</code>	watermark font, default: Helvetica
<code>wtmsize</code>	watermark size, default: 130
<code>wtmalpha</code>	watermark opacity (1-100), default: 10

Generating thumbnails using convert2swfclient

Example 1:

To create a thumbnail of page 1 of `sample.tiff`:

```
java -jar convert2swfclient.jar source=sample.tiff thumbnail=100x100 pages=1
```

Example 2:

To create a thumbnail of all pages of `sample.tiff`:

```
java -jar convert2swfclient.jar source=sample.tiff thumbnail=100x100
```

Example 3: (Note – Watermark feature requires full license key.)

To create a thumbnail of page 6 of `sample.tiff`, specify target location, and add watermark "Approved" on each thumbnail:

```
java -jar convert2swfclient.jar source=c:\tempcache\sample.tiff target=c:\tempcache\  
thumbnail=100x100 wmttext=Approved wtmfont=Helvetica wtmsize=50 wtmalpha=70
```

Generating thumbnails using the WebService

Example 1:

To create a thumbnail of page 1 of `sample.tiff`:

<http://localhost:18680/convert2swf?source=c:/temp/sample.tiff&thumbnail=100x100&pages=1>

Example 2:

To create a thumbnail of all pages of `sample.tiff`:

```
java -jar convert2swfclient.jar source=sample.tiff thumbnail=100x150
```

<http://localhost:18680/convert2swf?source=c:/temp/sample.tiff&thumbnail=100x150>

How Annotations Work

Annotation tools are available in the Review Tab in the Viewer user interface to give your users the ability to create annotations or markups on documents. This requires the pages specified in the settings.xml to work correctly:

The settingsenterprise.xml file defines the various interaction points needed for annotations to work.

```
<settings>
<conversionFileURL>convertpage.aspx</conversionFileURL>
<getFastPagesURL>getfastpagecount.aspx</getFastPagesURL>
<getTotalPagesURL>gettotalpagecount.aspx</getTotalPagesURL>
<annotationsFilesURL>listmarkup.aspx</annotationsFilesURL>
<annotationsOpenURL>openmarkup.aspx</annotationsOpenURL>
<annotationsSaveURL>savemarkup.aspx</annotationsSaveURL>
</settings>
```

conversionFileURL

This is the file which does the page conversion and returns the binary. This should already be set up as a part of Prizm Content Connect Plus installation.

getFastPagesURL

This is the file which calculates the fast page count in the document and returns it. This should already be set up as a part of Prizm Content Connect Plus installation.

getTotalPagesURL

This is the file which calculates the total pages in the document and returns it. This should already be set up as a part of Prizm Content Connect Plus installation.

annotationsFilesURL: This is the file on the server that the viewer will call to list existing annotations when a user clicks on "load markups" button.

Arguments Passed (POST):

documentname – name of the document specified as a flash variable

Return Values:

xml – xml containing list of annotations related to the document

```
<annotationFiles>
  <annotation name="documenttest-test 1.xml" label="test 1" id="1"/>
  <annotation name="documenttest-test 2.xml" label="test 1" id="2"/>
  <annotation name="documenttest-test 3.xml" label="test 1" id="3"/>
</annotationFiles>
```

name – name of the annotation file

label – label of the annotation file which is shown to the user and could be the name of file itself

id – id of the annotation file which could be anything numeric.

annotationsOpenURL

This is the file which the viewer calls when a user clicks on an annotation label from the list of annotations received from annotationsFilesURL.

Arguments Passed (POST):

documentname – name of the document specified as a flash variable
annotationName - name of the annotation file as returned by xml from annotationsFilesURL
annotationId - id of the annotation file as returned by xml from annotationsFilesURL
annotationLabel- label of the annotation file as returned by xml from annotationsFilesURL

Return Values:

Annotation XML file in binary format.

annotationsSaveURL

This is the file on the server that the viewer will call when a user clicks on "Save" button to save annotations.

Arguments Passed:

documentname – name of the document specified as a flash variable
annotations - the annotation related data in xml form. POST format.
annotationName - the name of the annotation. POST format.

Return Values:

xml specifying the file was saved successfully.

```
<root>  
<saveAnnotationResponse saved='1'/>  
</root>
```

Translations

Prizm Content Connect Plus includes real-time translation functionality driven by a readily available toolbar control and integrated user interface. Use this tool to enable effective multilingual collaboration among users across the globe, with no downloads or copy controls required. The translation tool allows your users to view document content from right within the viewer in any language they choose.

The translation tool provides support for the following languages:

Afrikaans	Danish	Greek	Japanese	Polish	Swedish
Albanian	Dutch	Haitian Creole	Korean	Portuguese	Thai
Arabic	English	Hebrew	Latvian	Romanian	Turkish
Belarusian	Estonian	Hindi	Lithuanian	Russian	Ukrainian
Bulgarian	Filipino	Hungarian	Macedonian	Serbian	Vietnamese
Catalan	Finnish	Icelandic	Malay	Slovak	Welsh
Chinese	French	Indonesian	Maltese	Slovenian	Yiddish
Croatian	Galician	Irish	Norwegian	Spanish	
Czech	German	Italian	Persian	Swahili	

A translation service provider is required.

Translation Variables

Name	Description	Value
translationTool	Turns translation on/off	Yes/No
translationPoweredBy	Allows you to write Powered By text. Serves the legal requirement by some free translation engines like Google.	
langFrom	Sets the language selections. This the set of languages from which translation can occur	langFrom= (any of supported list, comma delimited)
langTo	Sets the language selections. This the set of languages to which translation can occur	langTo= (any of supported list, comma delimited)
translationServiceURL	The url which performs the translation and returns the translated text	translationServiceURL=/translate/default.a spx

Sample Code (Using SWF Object):

```
<script src="swfobject.2.2.js" language="javascript"></script>
<script type="text/javascript">
  var params = {
    wmode: 'opaque',
    scale: 'noscale',
```

```

        allowFullScreen: true,
        allowScriptAccess: 'always',
        bgcolor: '#ffffff'
    };
    var attributes = {
        id: 'ViewerEnterprise',
        name: 'ViewerEnterprise'
    };
    var flashvars = {
documentname: '<%=document %>',
translationTool:'Yes',
langFrom:'English,Afrikaans,Albanian,Arabic,Belarusian,Bulgarian,Chinese,Croatian,Czech,Danish,
Dutch,Estonian,Filipino,Finnish,French,Galician,German,Greek,Hebrew,Hindi,Hungarian,Icelandic,Indo-
nesian,Irish,Italian,Japanese,Korean,Latvian,Lithuanian,Macedonian,Malay,Maltese,Norwegian,Pers-
ian,Polish,Portuguese,Romanian,Russian,Spanish,Serbian,Slovak,Slovenian,Swahili,Swedish,Thai,
Turkish,Ukrainian,Vietnamese,Welsh,Yiddish',
langTo:'Afrikaans,Albanian,Arabic,Belarusian,Bulgarian,Chinese,Croatian,Czech,Danish,Dutch,Engli-
sh,Estonian,Filipino,Finnish,French,Galician,German,Greek,Hebrew,Hindi,Hungarian,Icelandic,Indon-
esian,Irish,Italian,Japanese,Korean,Latvian,Lithuanian,Macedonian,Malay,Maltese,Norwegian,Persia-
n,Polish,Portuguese,Romanian,Russian,Spanish,Serbian,Slovak,Slovenian,Swahili,Swedish,Thai,Tur-
kish,Ukrainian,Vietnamese,Welsh,Yiddish',
translationPoweredBy:'Powered by Google Translate',
translationServiceURL:/' translate/Default.aspx'
    };
    swfobject.embedSWF("ViewerEnterprise.swf?<%=Now & Rnd() %>", "documentviewer", "620",
    "800", "10.0.0", false, flashvars, params, attributes);
</script>
<noscript>
Javascript needs to be enabled to view the document in viewer.
</noscript>
<div id="documentviewer"></div>

```

Example Translation Service (ASP. net) (Using Google API Translate)

Note- If translation does not work in the provided sample code, make translate directory a new virtual directory under a different "AppPool" in IIS

```

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="Default.aspx.vb" Inherits="translate._Default" %>
<%@ Import Namespace="Google.API.Translate" %>
<%
    Dim charlimit As Integer = 1920
    Dim langFrom As String
    langFrom = Request.Form("langFrom")
    Dim langTo As String
    langTo = Request.Form("langTo")
    If langFrom = "" Then
        langFrom = "English"
    End If
    If langTo = "" Then
        langTo = "Hindi"
    End If
    Dim myLanguage,code,langToCode
    myLanguage = langTo
    Select Case myLanguage
    Case "Afrikaans"
        code="af"
    Case "Albanian"
        code="sq"
    Case "Arabic"
        code="ar"
    Case "Belarusian"
        code="be"
    Case "Bulgarian"
        code="bg"
    Case "Catalan"
        code="ca"
    Case "Chinese"
        code="zh-CN"
    Case "Croatian"
        code="hr"

```

Case "Czech"
code="cs"
Case "Danish"
code="da"
Case "Dutch"
code="nl"
Case "English"
code="en"
Case "Estonian"
code="et"
Case "Filipino"
code="tl"
Case "Finnish"
code="fi"
Case "French"
code="fr"
Case "Galician"
code="gl"
Case "German"
code="de"
Case "Greek"
code="el"
Case "Hebrew"
code="iw"
Case "Hindi"
code="hi"
Case "Hungarian"
code="hu"
Case "Icelandic"
code="is"
Case "Indonesian"
code="id"
Case "Irish"
code="ga"
Case "Italian"
code="it"
Case "Japanese"
code="ja"
Case "Korean"
code="ko"
Case "Latvian"
code="lv"
Case "Lithuanian"
code="lt"
Case "Macedonian"
code="mk"
Case "Malay"
code="ms"
Case "Maltese"
code="mt"
Case "Norwegian"
code="no"
Case "Persian"
code="fa"
Case "Polish"
code="pl"
Case "Portuguese"
code="pt"
Case "Romanian"
code="ro"
Case "Russian"
code="ru"
Case "Serbian"
code="sr"
Case "Slovak"
code="sk"
Case "Slovenian"
code="sl"
Case "Spanish"
code="es"
Case "Swahili"
code="sw"
Case "Swedish"
code="sv"
Case "Thai"
code="th"

```

Case "Turkish"
code="tr"
Case "Ukrainian"
code="uk"
Case "Vietnamese"
code="vi"
Case "Welsh"
code="cy"
Case "Yiddish"
code="yi"
End Select
langToCode=code
Dim translatedtext As String
Dim client As TranslateClient = New TranslateClient("test")
Dim text As String
Dim newtext As String
Dim intpos As Integer
Dim endpos As Integer
Dim x As Integer
text = Request.Form("text")
If (text = "") Then
text = "There was some problem in translation. Could not get the text to translate"
End If
translatedtext = ""
intpos = 0
endpos = 0
If text.Length < charlimit Then
translatedtext = client.Translate(text.Replace("Impactfrom", "Impact from"), "en", langToCode, "html")
Else
Dim tlength As Integer = CInt(text.Length / charlimit) - 1
For x = 0 To tlength
If x * charlimit + charlimit <= text.Length Then
endpos = charlimit
Else
endpos = text.Length - x * charlimit
End If
newtext = text.Substring(x * charlimit, endpos)
intpos = endpos
translatedtext = translatedtext & client.Translate(newtext.Replace("Impactfrom", "Impact from"), "en", langToCode,
"html")
Next
End If
Response.Write("<root>")
Response.Write("<translation from=" & langFrom & " to=" & langTo & ">")
Response.Write(translatedtext)
Response.Write("</translation>")
Response.Write("</root>")
%>

```

Localizing the Viewer

To localize Prizm Content Connect Plus, simply pass a Flash Variable with the location of the XML file containing the language translations, as demonstrated below.

For example, to display German, simply pass FlashVar as

locale=german.

where german is the german.xml residing at same location as ViewerEnterprise.swf

XML shown below is a sample xml for locale=english

To generate xml for any other language or change the text, simply replace the xml nodes with local language text. Example for locale=hindi you can have xml node

PreviousPage as <PreviousPage>पिछले पृष्ठ</PreviousPage>

```
<tooltips>
<PreviousPage>Previous</PreviousPage>
<DateFormat>MMMM D, YYYY</DateFormat>
<CurrentPage>Current Page</CurrentPage>
<TotalPages>Total Pages</TotalPages>
<NextPage>Next Page</NextPage>
<ZoomIn>Zoom In</ZoomIn>
<ZoomOut>Zoom Out</ZoomOut>
<FitToWidth>Fit To Width</FitToWidth>
<Rotate>Rotate</Rotate>
<ZoomSlider>Zoom Slider</ZoomSlider>
<CurrentZoom>Current Zoom</CurrentZoom>
<TextToSearch>Text to search</TextToSearch>
<StartSearch>Search / Next result</StartSearch>
<SearchResults>Search Results</SearchResults>
<PreviousSearchResult>Previous search results</PreviousSearchResult>
<NextSearchResult>Next search result</NextSearchResult>
<CloseSearch>Close search</CloseSearch>
<SelectText>Select text</SelectText>
<PrintDocument>Print document</PrintDocument>
<FullScreen>Go fullscreen</FullScreen>
<Save>Save</Save>
<ThumbNailView>Thumbnail view</ThumbNailView>
<HighlightColor>Highlight color</HighlightColor>
<CopyText>Copy text</CopyText>
<CustomBtn1></CustomBtn1>
<CustomBtn2></CustomBtn2>
<CustomBtn3></CustomBtn3>
<TranslateText>Translate Text</TranslateText>
<ChangeLanguage>Change Language</ChangeLanguage>
<Close>Close</Close>
<TranslatedFrom>Translated From</TranslatedFrom>
<To>To</To>
<From>From</From>
<TranslatingPleaseWait>Translating, please wait...</TranslatingPleaseWait>
<PrintThisRange>print this range</PrintThisRange>
<PrintAllPages>print all pages</PrintAllPages>
<PrintCurrentPage>print current page</PrintCurrentPage>
<RangeDescription>Enter a single page, or a range of pages. Examples: 5-12 or 5 or 3,2,5</RangeDescription>
<CancelPrinting>cancel printing</CancelPrinting>
<TranslationSettings>Translation Settings</TranslationSettings>
<FullScreenSearchWarning>Please perform search outside of full screen mode.</FullScreenSearchWarning>
<AnnotationSaveSuccessMsg>Annotations saved!</AnnotationSaveSuccessMsg>
<AnnotationErrorGettingFiles>Error getting annotation files from server :</AnnotationErrorGettingFiles>
<AnnotationErrorSavingFiles>Error saving annotations to server :</AnnotationErrorSavingFiles>
<AnnotationErrorGettingAnnotations>Error getting annotations from server :</AnnotationErrorGettingAnnotations>
<AnnotationsClickFileToOpen>Click on file to open...</AnnotationsClickFileToOpen>
<Cancel>Cancel</Cancel>
<SaveBtn>Save</SaveBtn>
```

```

<AnnotationsSave>Save annotations</AnnotationsSave>
<AnnotationsFileName>Markup name :</AnnotationsFileName>
<AnnotationSaveToDesktop>Save document to your desktop</AnnotationSaveToDesktop>
<AnnotationSaveAnnotations>Save Annotations</AnnotationSaveAnnotations>
<AnnotationSaveCancel>Cancel</AnnotationSaveCancel>
<StampSelectText>Select stamp text :</StampSelectText>
<StampNewStamp>(new stamp text)</StampNewStamp>
<AnnotationRichTextDone>Done</AnnotationRichTextDone>
<HighlightRemoveTag>Remove Tag</HighlightRemoveTag>
<HighlightRemoveHighlight>Remove Highlight</HighlightRemoveHighlight>
<HighlightCancel>Cancel</HighlightCancel>
<HighlightProperties>Properties</HighlightProperties>
<AnnotationRemoveHighlight>Remove Highlight</AnnotationRemoveHighlight>
<PreFilledSearchText>Search...</PreFilledSearchText>
<TabHome>Home</TabHome>
<TabHomeCategoryFile>File</TabHomeCategoryFile>
<TabHomeCategoryZoom>Zoom</TabHomeCategoryZoom>
<TabHomeCategoryNavigate>Navigate</TabHomeCategoryNavigate>
<TabHomeCategoryClipboard>Clipboard</TabHomeCategoryClipboard>
<TabHomeCategoryFullscreen>Fullscreen</TabHomeCategoryFullscreen>
<TabView>View</TabView>
<TabViewCategoryDocumentViews>Document Views</TabViewCategoryDocumentViews>
<TabSearch>Search</TabSearch>
<TabSearchCategorySearch>Search</TabSearchCategorySearch>
<TabTranslate>Translate</TabTranslate>
<TabTranslateCategoryTranslate>Translate</TabTranslateCategoryTranslate>
<TabReview>Review</TabReview>
<TabReviewCategoryFile>File</TabReviewCategoryFile>
<TabReviewCategoryShowHide>Delete/Hide</TabReviewCategoryShowHide>
<TabReviewCategoryDraw>Draw</TabReviewCategoryDraw>
<PrintAnnotations>Print annotations?</PrintAnnotations>
<ReviewSelectText>Select text</ReviewSelectText>
<ReviewCircle>Circle</ReviewCircle>
<ReviewCircleFilled>Filled Circle</ReviewCircleFilled>
<ReviewRectangle>Rectangle</ReviewRectangle>
<ReviewRectangleFilled>Filled Rectangle</ReviewRectangleFilled>
<ReviewRectangleTrans>Transparent Rectangle</ReviewRectangleTrans>
<ReviewArrow>Arrow</ReviewArrow>
<ReviewLine>Line</ReviewLine>
<ReviewColor>Color</ReviewColor>
<ReviewToggleOn>Toggle view on</ReviewToggleOn>
<ReviewToggleOff>Toggle view off</ReviewToggleOff>
<ReviewDelete>Delete</ReviewDelete>
<ReviewStamp>Stamp</ReviewStamp>
<ReviewText>Text</ReviewText>
<HighlightRemoveLink>Remove Link</HighlightRemoveLink>
<HighlightOpenLink>Open Link</HighlightOpenLink>
<HighlightRemoveRedaction>Remove Redaction</HighlightRemoveRedaction>
<HighlightLinkInputInstructions>Please input a link location:</HighlightLinkInputInstructions>
<selectAddTag>Add Tag</selectAddTag>
<selectHighlight>Add Highlight</selectHighlight>
<selectLink>Add Link</selectLink>
<selectCopyText>Copy Text</selectCopyText>
<selectCancel>Cancel</selectCancel>
<searchNoAdditionalResults>No additional results found.</searchNoAdditionalResults>
<selectAddTag>Add Tag</selectAddTag>
<selectHighlight>Add Highlight</selectHighlight>
<selectLink>Add Link</selectLink>
<selectCopyText>Copy Text</selectCopyText>
<selectCancel>Cancel</selectCancel>
<fullscreenNoticeText>You have entered full screen mode. Please note that keyboard controls are not available while in this mode.</fullscreenNoticeText>
<fullscreenNoticeSupressCheckbox>Do not show this warning again</fullscreenNoticeSupressCheckbox>
<fullscreenNoticeOKButton>OK</fullscreenNoticeOKButton>
</tooltips>

```

Image Conversion

Prizm Content Connect has a built-in script to generate images (.jpeg, .png, .tiff or .bmp) of various pages of documents. These images can be displayed within a Prizm Content Connect viewer client, or used to create applications like a thin client viewer or mobile viewer.

Related arguments include

source: the source file for conversion

target: the target folder and target file. Target can be image (.jpeg, .png, .tiff or .bmp)

dpi: specifies depth per index ratio of output .swf and image files

Generating images using convert2swfclient

Example 1:

To create a .png image of page 1 of sample.doc:

```
java -jar convert2swfclient.jar source=sample.doc target=sample.png pages=1
```

To create a .bmp image of page 1 of sample.doc:

```
java -jar convert2swfclient.jar source=sample.doc target=sample.bmp pages=1
```

Example 2:

To create a .png image of all pages of sample.doc:

```
java -jar convert2swfclient.jar source=sample.doc target=sample.png
```

To create a .tiff image of all pages of sample.doc:

```
java -jar convert2swfclient.jar source=sample.doc target=sample.tiff
```

Example 3: (Note – Watermark feature requires full license key.)

To create an image of all pages of sample.doc. and add watermark “Approved” on each image:

```
java -jar convert2swfclient.jar source=C:\temp\sample.doc target=C:\temp\sample.png  
wtmtext=Approved wtmfont=Helvetica wtmsize=50 wtalpha=70
```

Generating images using Webservice

Example 1:

To create a .png image of page 1 of sample.doc:

[http://localhost:18680/convert2swf?
source=C:\temp\sample.doc&target=C:\temp\samplecode\sample.png&pa
ges=1](http://localhost:18680/convert2swf?source=C:\temp\sample.doc&target=C:\temp\samplecode\sample.png&pages=1)

To create a .bmp image of page 1 of sample.doc:

[http://localhost:18680/convert2swf?
source=C:\temp\samplecode\sample.doc&target=C:\temp\sample.bmp&pa
ges=1](http://localhost:18680/convert2swf?source=C:\temp\samplecode\sample.doc&target=C:\temp\sample.bmp&pages=1)

Example 2:

To create a .png image of all pages of sample.doc:

[http://localhost:18680/convert2swf?
source=C:\temp\samplecode\sample.doc&target=C:\temp\sample.png](http://localhost:18680/convert2swf?source=C:\temp\samplecode\sample.doc&target=C:\temp\sample.png)

To create a .tiff image of all pages of sample.doc: [http://localhost:18680/convert2swf?](http://localhost:18680/convert2swf?source=C:\temp\samplecode\sample.doc&target=C:\temp\sample.tiff)

[source=C:\temp\samplecode\sample.doc&target=C:\temp\sample.tiff](http://localhost:18680/convert2swf?source=C:\temp\samplecode\sample.doc&target=C:\temp\sample.tiff)

Example 3: (Note – Watermark feature requires full license key.)

To create an image of all pages of sample.doc. Also add watermark “Approved” on each image

[http://localhost:18680/convert2swf?
source=C:\temp\samplecode\sample.doc&wtmtext=Approved&wtmfont=Helvetica&wtmsize=100&
wtmalpha=10&target=C:\temp\temp\test.png](http://localhost:18680/convert2swf?source=C:\temp\samplecode\sample.doc&wtmtext=Approved&wtmfont=Helvetica&wtmsize=100&wtmalpha=10&target=C:\temp\temp\test.png)

Text Extraction

Prizm Content Connect Plus has a built-in script to extract text from any type of document.

Related arguments include:

source: the source file for conversion
target: the target folder and target file

Extracting text using convert2swfclient

Example 1:

To extract text of all pages of sample.doc and place in same directory as source:
java -jar convert2swfclient.jar source=sample.doc target=sample.txt

Example 2:

To extract text of page 1 of sample.doc and place in same directory as source:
java -jar convert2swfclient.jar source=sample.doc target=sample.txt pages=1

Example 3:

To extract text of page 1 of sample.doc and place in a different directory:
java -jar convert2swfclient.jar source=sample.doc target=c:\test\sample.txt pages=1

Extracting text using WebService

Example 1:

To extract text of all pages of sample.doc and place in same directory as source:
<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&target=c:\temp\sample.txt>

Example 2:

To extract text of page 1 of sample.doc and place in same directory as source:
<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&target=c:\temp\sample.txt&pages=1>

Example 3:

To extract text of page 1 of sample.doc and place in a different directory:
<http://localhost:18680/convert2swf?source=c:\temp\sample.doc&target=c:\otherfolder\sample.txt&pages=1>

Client Side Flash Detection

Prizm Content Connect Plus requires the client browser to have Flash Player version 9 plugin installed, as a minimum. This chapter provides instructions for detecting the installed version of Flash Player using Client-Side Scripting.

This method uses JavaScript to check for the existence of a Netscape plug-in or an ActiveX control, and provides the logic for either displaying Flash content or initiating an installation of the correct player version. Use script-based detection when deploying Flash content to modern browsers and operating systems. Script-based detection can determine version and configuration information from end users' computers and browsers, undetectable by other methods.

Client-side detection method sample files

<http://www.adobe.com/devnet/flashplayer/articles/swfobject.html>

Here is an example of detecting flash version using JavaScript SWF Object:

```
<script src="swfobject.2.2.js" language="javascript"></script>
<script type="text/javascript">
var playerVersion = swfobject.getFlashPlayerVersion();
var output = "You have Flash player " + playerVersion.major + "." + playerVersion.minor + "." +
playerVersion.release + " installed"; alert(output);
</script>

<script type="text/javascript">
var params = {
  wmode: 'opaque',
  scale: 'noscale',
  allowFullScreen: true,
  allowScriptAccess: 'always',
  bgcolor: '#ffffff'
};
var attributes = {
  id: 'ViewerEnterprise',
  name: 'ViewerEnterprise'
};
var flashvars = {
  documentname: '<%=document %>',
  saveDocumentLocation: 'savedocument.aspx'
};
swfobject.embedSWF("ViewerEnterprise.swf?<%=Now & Rnd() %>", "documentviewer", "620",
"800", "10.0.0", false, flashvars, params, attributes);
</script>
<noscript>
Javascript needs to be enabled to view the document in viewer.
</noscript>
<div id="documentviewer"></div>
```

Error Codes & Exception Handling

Prizm Content Connect Plus can throw exceptions at two different levels – Viewer & Convert2SWF.jar

Viewer Error Codes

Error Code	Description of Error
10000	Document could not be loaded. Please specify the 'documentname' variable in your html code
10001	Settings XML File Not Found. Make sure settings.xml file exists in same location as viewer.png
10002	Input Output Fast Page Count Error. getFastPageCount file not found or contains error
10003	Security Fast Page Count Error. getFastPageCount file not accessible
10004	This document has only n pages. Wrong start page given
10005	Input Output Total Pages Error. getTotalPages file not found or contains error
10006	Security Total Pages Error. getTotalPages file not accessible
10007	Internal Argument Error
10008	Container Security Error
10009	External interface not available
10010	Input Output Page Conversion Error. Conversion file not found or contains error
10011	Security Page Conversion Error. Conversion file not accessible
10012	Input Output Page Load Error. Generated png file on server not accessible or cannot be loaded
10013	Security Fast Page Load Error. Generated png file on server not accessible
99999	Unknown Error

Convert2SWF Error & Exception Codes

FlexiDocException signals that some exception has occurred in OpenOffice.org background process:

```
public FlexiDocException(java.lang.String message,
                        int errorId,
                        java.lang.Exception runtimeException)
```

Constructs a new FlexiDocException with a message, error id, and Exception object.

Parameters:

Message: a string containing the error message

errorId: a number containing error id

runtimeException: an Exception object to be stored inside new FlexiDocException object

Exception Summary
ERROR_CALC_SHEET - an error has occurred manipulating a document in calc (201)
ERROR_CONNECTION_INIT - error while connection initialization (1)
ERROR_CONVERT_INIT - error while conversion initialization (2)
ERROR_EXCEPTION - reserved for general exception (9999)
ERROR_OK - no error (0)
ERROR_WRITER_IMAGE - an error has occurred manipulating an image in writer (103)
ERROR_WRITER_OPENDOC - an error has occurred while opening document in writer(101)
ERROR_WRITER_SAVEDOC - an error has occurred while saving document in writer (102)

Viewer JS Events for Handling Error

The Viewer fires a JavaScript event when an error is encountered from the server

OnDocumentError(documentname, pagenumber)	A custom HTTP Status Error Code 500 Internal Server Error is returned from conversion url instead of converted swf
---	--

Show an alert and redirect on Server Error

Send an HTTP Status Error Code 500 from server for this event to trigger

```
<script language="javascript">
function OnDocumentError(documentname,pageNumber)
{
  ViewerEnterprise.alert("Some error occurred");
  location.href="error.aspx";
}
</script>
```

Sample Server ASP .net code sending

```
Status Error Code 500 Internal Server Error
Response.Status = "500 Internal Server Error";
Response.StatusCode = 500;
```

Fine Tuning Prizm Content Connect

Prizm Services creates a proxy which handles document conversions and provides load balancing by using various ports on the machine. The program proxy server is required to be running for convert2swf utility to run. This service is installed and started during the installation process.

The proxy server will need be fine-tuned based on the load you are expecting on your server. By default proxy server runs as a service on port 18580 and uses several ports. You can add more ports as your server load increases.

The proxy server can be started from the command line using the following syntax:

```
java -jar bin\convert2swf.jar proxyconfig=conf/ proxyserver_jar.properties
```

run_proxy script can be also be used to start the proxy directly from the command line

proxyserver_jar.properties contains the parameters and port information needed for the proxy server to run

jrunner.properties contains the proxy server setup information

convert2swf_proxy.properties & jrunner.properties are located in \conf directory.

To set up the service manually or to start the service manually you can use the included utilities. These utilities reside in C:\Prizm\scripts.

Script	Description
install-service	Install the Prizm Services
start-service	Start the Prizm Services
stop-service	Stop the Prizm Services
remove-service	Remove the Prizm Services

proxyserver_jar.properties

convert2swf proxy needs proxyserver_jar.properties to run and you can change the proxy server configuration by changing the parameters in proxyserver_jar.properties file.

Parameter	Value
http_host	HTTP server listen host or IP (host for Webservice)
http_port	HTTP server listen port
http_workers_ini	HTTP server initial number of workers
http_workers_max	HTTP server maximum number of workers
http_socket_timeout	HTTP server socket timeout
http_response_timeout	HTTP server response timeout
proxy_host	Proxy listen host or IP
proxy_port	Proxy listen port
ooo_installation	Location where open office is located in installation directory (C:\Prizm\App\openoffice)
Customerid	Registration info
Regkey	Registration Key
proxy_host	Location where proxy server is running. Default Value is Localhost
work_directory	work directory

	(contains proxy workers user profiles and temporary files) Default Value is <code>..\work</code>
<code>ooo_worker_host</code>	OpenOffice.org workers base host or IP Default Value is <code>localhost</code>
<code>ooo_instances</code>	Number of OpenOffice.org instances (workers) to be started Each worker listens on <code>ooo_base_host:[ooo_base_port+instance_number]</code> , where <code>instance_number = {0, 1, .., (ooo_instances-1)}</code> <code>ooo_instances=2</code> You can start more instances based on load over your server. Each instance on average requires about 150MB dedicated RAM to run. Default value is 2
<code>ooo_startup_delay</code>	Number of seconds to wait for a worker instance to start. This parameter is important during startup. If any instance, of a worker thread does not respond within this interval such situation is treated as 'fatal error' and the proxyserver exits. Default value is 60
<code>ooo_usage_count</code>	Number of 'uses' after which worker instance will be restarted once the worker thread hits this limit the threads are restarted. Default value is 20
<code>ooo_usage_count_rand</code>	Random attribute for usage count to avoid load peaks after certain point of time Default value is 5
<code>sleeping_delay</code>	Number of seconds how long the proxy should put worker in 'sleeping mode' before it will be assigned another task (helps garbage collector) Default value is 2
<code>shutdown_delay</code>	Number of seconds how long the proxy should wait for the shutdown of a worker thread Default value is 1
<code>worker_timeout</code>	Number of seconds how long the single worker thread is allowed to run Default value is 300
<code>log_level</code>	Logging levels NONE shows no output at all ERROR shows only errors and fatal errors INFO shows information messages WARNING shows warnings DEBUG shows debugging information (very verbose!) Default Value is INFO <i>Logs are created under log directory</i>
<code>jvm_daily_restart</code>	JVM daily auto restart schedule for cleaning and Garbage Collection Set this to time during the day when you get low traffic Default Value is 6AM - 6:00 You can also specify multiple values <code>6:00,11:00,22:00</code>

jranner.properties

jranner.properties contains the Prizm Services installation & startup parameters.

Parameter	Default Value
<code>jranner.java.command</code>	Java Application. (Do not change this) <code>java</code>
<code>jranner.java.mainclass</code>	Java Main class. (Do not change this) <code>com.ilfiron.JRunner</code>
<code>jranner.java.classpath.1</code>	Add class path elements as needed starting from 1(Do not change this) <code>proxyserver.jar</code>
<code>jranner.working.dir</code>	working directory that is used after the jranner is initialized(Do not change this) <code>./</code>
<code>jranner.app.parameter.1</code>	Application parameters. Add parameters as needed starting from 1(Do not change this) <code>proxyconfig=./conf/proxyserver.jar.properties</code>
<code>jranner.java.initmemory</code>	Initial Java Heap Size (in MB) Default Value is 30
<code>jranner.java.maxmemory</code>	Maximum Java Heap Size (in MB) Default Value is 1024
<code>jranner.shutdown.timeout</code>	Maximum timeout to wait for the process shutdown Default Value is 120
<code>jranner.jvm_exit.timeout</code>	Maximum timeout to wait for JVM to shutdown Default Value is 120
<code>jranner.console.format</code>	Logging Properties Format of output for the CONSOLE. The format consists of the tokens

	<p>'L' for log level 'P' for prefix 'D' for thread 'T' for time 'Z' for millisecond time 'M' for message</p> <p>If the format contains these values then it will be included in the format. The order of the tokens does not affect the way the log appears, but the 'M' token should usually be placed last as it is the only column without a uniform width. If the property is missing or commented out, then the default value 'LPTM' will be used.</p> <p>Setting the property to a blank value will cause file logging to be disabled. Default value LPZM <i>Log are created under logs directory</i></p>
jranner.console.loglevel	<p>The Valid log levels are:</p> <ul style="list-style-type: none"> NONE - no output messages at all FATAL - show fatal error messages only ERROR - show all error messages STATUS - show all state changes INFO - shows all JVM output and informative messages DEBUG - shows detailed debug information <p>The default value is INFO <i>Log are created under logs directory</i></p>
jranner.logfile	<p>Log file to use for jRunner output logging. Either relative to jranner.working.dir or full path. Default Value is ../logs/proxyserver.log</p>
jranner.logfile.maxsize	<p>Maximum size that the log file will be allowed to grow to before the log is rolled. Size is specified in bytes. The default value of 0, disables log rolling. May abbreviate with the 'k' (kb) or 'm' (mb) suffix. For example: 10m = 10 megabytes. Default Value is 0</p>
jranner.logfile.maxfiles	<p>Maximum number of rolled log files which will be allowed before old files are deleted. The default value of 0 implies no limit.</p>
jranner.syslog.loglevel	<p>Log Level for sys/event log output. Default value is NONE</p>
jranner.console.title	<p>Title to use when running as a console Default value 'Convert2SWF Proxy Server Console'</p>
jranner.ntservice.name	<p>Name of the service Convert2SWFsvc</p>
	<p>Display name of the service jranner.ntservice.displayname=Prizm Service</p>
jranner.ntservice.description	<p>Description of the service Run Convert2SWF Proxy Server Service helper for converting documents to PNG format</p>
jranner.ntservice.dependency.1	<p>Service dependencies. Add dependencies as needed starting from 1 Default Value is blank</p>
jranner.ntservice.starttype	<p>Mode in which the service is installed. AUTO_START or DEMAND_START AUTO_START</p>
jranner.ntservice.interactive	<p>Allow the service to interact with the desktop. Default value is false</p>

Setting up the tempcache & Prizm Cache Manager

Prizm Content Connect uses a temporary file system cache to store the files as they are being converted and served. The cache also acts as file-system-based temporary storage for converted files. When requests for previously converted files come in, this temporary cache comes in handy and can be used to serve the files previously rendered, thus resulting in faster response time and saving on CPU cycles for conversions.

If you configured the sample project, tempcache would have been set at C:/tempcache

Prizm Content Connect comes with a Windows-based tool called CacheManager which allows you to control the temporary cache, and prevent it from growing beyond a reasonable size. CacheManager can be configured as required and allows rule-setting for maintaining and deleting files from the temporary cache.

CacheManager Install Location: C:/Prizm/CacheManager

Prizm Cache Manager

There are various settings options:

- Directory - where the viewer stores the local cache files
- Extensions - file extensions that Cache Manager should delete
(For .png files enter *.png, for .pdf file types enter *.pdf, for all file types enter *.*)
- Size Limit - directory size that should be maintained
- Delete Files Older Than - time period for files to be kept in the directory
- Run Every - run time can be set from every few minutes to every hour, to a specific time during the day

Example

Maintain [C:/tempcache](#) at size 1GB and run service every 30 min to maintain this size.

Delete older than 6 months to get size to 1GB.

Directory [C:/tempcache](#)

Extensions *.*

Size Limit:10GB

Delete Files Older Than: 30 min

Run Every :30 min

Troubleshooting

1) My files are not getting deleted, though size of folder is larger than set size

One of the conditions has to match for files to be deleted. The condition can be file creation date. Check the settings for Delete Files Older Than.

2) I click on CacheMgrTool and nothing happens

If you are on Vista or Win 2008 or Win 7, right click on CacheMgrTool.exe and click on Run as Administrator to run the tool.

3) I click on Register or Start service and an exception or error occurs

If you are on Vista or Win 2008 or Win 7, right click on CacheMgrTool.exe and click on Run as Administrator to run the tool.

Click on cleanup.bat and run it. On Vista or Win 2008 or Win 7 you might want to run this as Administrator. Once cleanup has occurred, try again to run CacheMgrTool.exe as Administrator.

Troubleshooting

Why does installation fail during setting up or starting services?

This happens because you do not have Administrator rights on the machine to install the software properly. Be sure you are logged in as Administrator.

How do I login as Administrator on Windows Vista?

Unlike previous versions of Windows, there are differences in Vista between accounts with "computer administrator" privileges and the Administrator account. For instance, the Administrator account does not have User Account Control enabled.

You won't find the Administrator account in the User Accounts Control Panel. But the MMC-based Computer Management section of the Administrative Tools Control Panel does give you access to the Administrator account. By default, the account is disabled, but you can enable it there.

You may be thinking that all you need to do is enable the Administrator account, restart Windows and then log into the Administrator account. But there's actually an added step: you have to not only enable the Administrator account, but you also have to disable all other accounts with computer-administrator privileges.

Why does a DEMO watermark appear on my documents?

A DEMO watermark is added to documents in evaluation or trial license.

Installation Fails During Setting up or Starting Services

This happens because you do not have Administrator rights on the machine to install the software properly. Be sure you are logged in as Administrator.

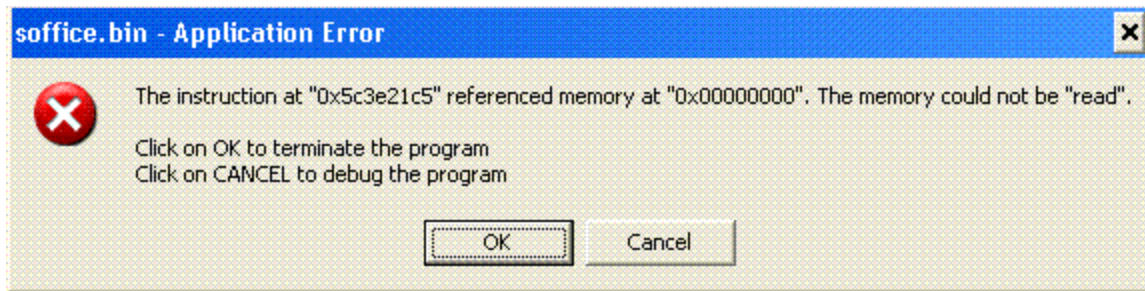
How to login as Administrator on Windows Vista?

Unlike previous versions of Windows, there are differences in Vista between accounts with "computer administrator" privileges and the Administrator account. For instance, the Administrator account does not have User Account Control enabled.

You won't find the Administrator account in the User Accounts Control Panel. But the MMC-based Computer Management section of the Administrative Tools Control Panel does give you access to the Administrator account. By default, the account is disabled, but you can enable it there.

You may be thinking that all you need to do is enable the Administrator account, restart Windows and then log into the Administrator account. But there's actually an added step: you have to not only enable the Administrator account, but you also have to disable all other accounts with computer-administrator privileges.

I get this error when running the convert2swf:



This error can occur for several reasons, but one of the primary reasons is that your server does not have enough memory available to run conversion threads. Reduce the number of conversions threads or it is time to increase server RAM. *Refer to Fine Tuning Prizm Content Connect Chapter for details.*

I keep getting Error: 10012. Input Output Page Load Error

This happens when IIS is not able to stream the converted SWF back to the page. This specifically occurs due to the param useUnsafeHeaderParsing in web.config. Make sure that the parameter is set to true.

```
<settings>
<httpWebRequest useUnsafeHeaderParsing="true" />
</settings>
```

If you still find this as an issue, set this parameter to True programmatically in your code. You will need to make this change in convert.aspx if you are using the sample code.

.net VB Code

Add a reference in the project to System.Configuration.
Imports System.Reflection

```
Dim a As New System.Net.Configuration.SettingsSection
Dim aNetAssembly As System.Reflection.Assembly = Assembly.GetAssembly(a.GetType)
Dim aSettingsType As Type = aNetAssembly.GetType("System.Net.Configuration.SettingsSectionInternal")
Dim args As Object()
Dim anInstance As Object = aSettingsType.InvokeMember("Section", BindingFlags.Static Or BindingFlags.GetProperty Or
BindingFlags.NonPublic, Nothing, Nothing, args)
Dim aUseUnsafeHeaderParsing As FieldInfo = aSettingsType.GetField("useUnsafeHeaderParsing",
BindingFlags.NonPublic Or BindingFlags.Instance)
aUseUnsafeHeaderParsing.SetValue(anInstance, True)
```

.net VC++ code

(Add System.Configuration as a reference to your project.)

```
public static bool SetAllowUnsafeHeaderParsing()
{
    //Get the assembly that contains the internal class
    Assembly aNetAssembly = Assembly.GetAssembly(typeof(System.Net.Configuration.SettingsSection));
    if (aNetAssembly != null)
    {
        //Use the assembly in order to get the internal type for the internal class
        Type aSettingsType = aNetAssembly.GetType("System.Net.Configuration.SettingsSectionInternal");
        if (aSettingsType != null)
        {
            //Use the internal static property to get an instance of the internal settings class.
            //If the static instance isn't created already the property will create it for us.
            object anInstance = aSettingsType.InvokeMember("Section", BindingFlags.Static | BindingFlags.GetProperty |
BindingFlags.NonPublic, null, null, new object[] { });
            if (anInstance != null)
            {
                //Locate the private bool field that tells the framework is unsafe header parsing should be allowed or not
                FieldInfo aUseUnsafeHeaderParsing = aSettingsType.GetField("useUnsafeHeaderParsing", BindingFlags.NonPublic
| BindingFlags.Instance);
                if (aUseUnsafeHeaderParsing != null)
                {
                    aUseUnsafeHeaderParsing.SetValue(anInstance, true);
                    return true;
                }
            }
        }
    }
}
```

```
}  
}  
return false;}
```

Resizing the viewer height/width dynamically using JavaScript

Javascript calls can dynamically resize the viewer as required

```
function resetviewersize(){  
var flash = document.getElementById("Viewer");  
  
flash.setAttribute("width","1610");  
flash.setAttribute("height","1147");  
  
}
```

Setting height/width of viewer to height/width of browser:

Add the JavaScript code given below to top of your page

```
var viewportwidth;  
var viewportheight;  
// the more standards compliant browsers (mozilla/netscape/opera/IE7) use window.innerWidth and window.innerHeight  
if (typeof window.innerWidth != 'undefined')  
{  
viewportwidth = window.innerWidth,  
viewportheight = window.innerHeight  
}  
// IE6 in standards compliant mode (i.e. with a valid doctype as the first line in the document)  
else if (typeof document.documentElement != 'undefined'  
&& typeof document.documentElement.clientWidth !=  
'undefined' && document.documentElement.clientWidth != 0)  
{  
viewportwidth = document.documentElement.clientWidth,  
viewportheight = document.documentElement.clientHeight  
}  
// older versions of IE  
else  
{  
viewportwidth = document.getElementsByTagName('body')[0].clientWidth,  
viewportheight = document.getElementsByTagName('body')[0].clientHeight  
}  
// Adding adjust 50 pixels to fit to all browsers  
// You can adjust this as required  
viewportwidth =viewportwidth -50;  
viewportheight =viewportheight -50;  
document.write('Your viewport width is '+viewportwidth+'x'+viewportheight+'');  
');
```

and then you can pass viewportwidth,viewportheight like this in flash code

```
<script src="swfobject.2.2.js" language="javascript"></script>  
<script type="text/javascript">  
var params = {  
wmode: 'opaque',  
scale: 'noscale',  
allowFullScreen: true,  
allowScriptAccess: 'always',  
bgcolor: '#ffffff'  
};  
var attributes = {  
id: 'ViewerEnterprise',  
name: 'ViewerEnterprise'
```

```

    };
    var flashvars = {
        documentname: '<%=document %>',
        saveDocumentLocation: 'savedocument.aspx'
    };
    swfobject.embedSWF("ViewerEnterprise.swf?<%=Now & Rnd() %>", "documentviewer", viewportwidth ,
viewportheight, "10.0.0", false, flashvars, params, attributes);
</script>
<noscript>
Javascript needs to be enabled to view the document in viewer.
</noscript>

<div id="documentviewer"></div>

```

This will load flash viewer to load to the size of browser size.

How to prevent caching of .png on end user browser:

You can set cache=no when you stream your .png to viewer after conversion in your convertPage.aspx or convert.php

ASP.NET Code

```

Response.Buffer = TRUE
MovieName = "convertedfile.png"
PNGFile = Server.MapPath(PNGName)
Set objFSO = Server.CreateObject("Scripting.FileSystemObject")
Response.Buffer = False
Response.ContentType = "application/png"
Response.AddHeader "content-disposition", "inline;filename=" + PNGName
Response.CharSet = "UTF-8"
Response.Expires = 0
Response.CacheControl="private"
Response.ExpiresAbsolute=#January 2, 1981 00:00:00#
Response.AddHeader "Pragma", "no-cache"
Response.AddHeader "Cache-Control", "no-cache, no-store, must-revalidate"
Set objFile = objFSO.GetFile(PNGFile)
Set objStream = Server.CreateObject("ADODB.Stream")
objStream.Open
objStream.Type = 1
objStream.LoadFromFile(PNGFile)
Response.BinaryWrite(objStream.Read)
objStream.Close
Set objStream = Nothing
Set objFile = Nothing
Response.Flush()
Response.Close()

```

PHP Code

```

$filename = "test_cache.png";
header('Content-type: application/x-shockwave-flash');

header("Expires: Thu, 01 Jan 1970 00:00:00 GMT, -1 ");
header("Cache-Control: no-cache, no-store, must-revalidate");
header("Pragma: no-cache");

$content = file_get_contents($filename);
echo$content;

```

Setting firewall settings in proxyserver.config

If you are running proxyserver behind a firewall on machine or LAN, you can set the firewall in proxyserver

For Java JAR deployments, you can simply do this:

Specify proxy in convert2swf.war

In web.xml you may also specify the HTTP / HTTPS proxy as follows:

```
<context-param>
<description>http and https proxy host:port</description>
<param-name>httpProxy</param-name>
<param-value></param-value>
</context-param>
<context-param>
<description>http and https proxy user</description>
<param-name>httpProxyUser</param-name>
<param-value></param-value>
</context-param>
<context-param>
<description>http and https proxy password</description>
<param-name>httpProxyPassword</param-name>
<param-value></param-value>
</context-param>
```

Please find the nodes above in web.xml that is distributed with the package.

Specifying proxy for jrunner / proxyserver environment

Open jrunner.properties and add following at the end of the config file

```
jrunner.java.additional.1=-Dhttp.proxyHost=YOUR_HOST
jrunner.java.additional.2=-Dhttp.proxyPort=YOUR_PORT
jrunner.java.additional.3=-Dhttp.proxyUsername=YOUR_USER_NAME
jrunner.java.additional.4=-Dhttp.proxyPassword=YOUR_PASSWORD
```

Viewer flickers in IE on load

This is due to the fact that browsers at times cannot clear the cache automatically.

Just add a random variable with Viewer, so that it does not load the older file from cache and loads it fresh every time. That should take care of your problem.

<%= time() %> or <?php echo time ?> should be passed for viewer to load fresh every time.

```
<script>
    swf: 'ViewerEnterprise.swf<%=time() %>',
    id:'ViewerEnterprise',
    height: viewportheight,
    width: viewportwidth,
    wmode: 'window',
</script>
```

Error Handling when annotations fail to load or save

JavaScript Events for handling annotation errors:

onAnnotationGetError(documentname,statusCode,errorString) - error trying to load annotation file

onAnnotationSaveError(documentname,statusCode, errorString) - error trying to save annotation file

onAnnotationGetFilesError(documentname,statusCode, errorString) - error trying to get list of annotation files

onSettingsError(documentname,statusCode,errorString)- error trying to load settings enterprise xml

Arguments

Documentname - document name

statusCode - HTTP Status code, if available, if not will be 0

errorString - the error or fault details