



User Guide
JavelinPro PDF reader for
MS Windows



Overview

JavelinPro for Windows is a fast and very small PDF reader that can open and view standard PDF files (.pdf) and PDF files that have been secured with our Drumlin Digital Rights Management (DRM) service. These secured files have a file extension of .drmz or .drm. JavelinPro is an enhanced version of our standard Javelin PDF reader for Windows. It has all the functionality of the standard version of Javelin, with the addition of user and device registration. This enables JavelinPro users to open secured PDF files instantly, without requiring entry of an authorization code or online connection. This is achieved using license files that are issued centrally and identify the registered user/device and document. A secured PDF (e.g. myfile.drmz) plus a matching license file (e.g. 8020-119.jvl) is all that is required for registered JavelinPro users to open the secured PDF. The 8020 value in the filename is the unique ID for the associated secured PDF and the 119 value is the ID for this registered copy of JavelinPro.

Online Registration

To register simply start JavelinPro and if it is not yet registered it will immediately prompt you to register. A sample registration screen is shown below. The first three fields must be completed, i.e. First name, Last name and email address (highlighted below). The remaining fields are optional, unless otherwise indicated. Having entered the initial information, most users can simply press the **Register** button to connect to the DRM server and register their copy of JavelinPro. This is called ONLINE REGISTRATION or AUTOMATIC REGISTRATION and after the button is pressed an entry should appear in the Client ID field and the Code field, and the top of the form will show who this copy is registered to. If so, you can then simply press the **Close** button and registration is complete. If not completed, please see the next section.

Not registered!

First name:	<input style="width: 90%; height: 20px;" type="text"/>
Last name:	<input style="width: 90%; height: 20px;" type="text"/>
e-mail:	<input style="width: 90%; height: 20px;" type="text"/>
Organization:	<input style="width: 90%; height: 20px;" type="text"/>
Address:	<input style="width: 90%; height: 20px;" type="text"/>
City:	<input style="width: 90%; height: 20px;" type="text"/>
Country:	<input style="width: 90%; height: 20px;" type="text"/>
Client ID:	<input style="width: 100px;" type="text" value="0"/> <input type="checkbox"/> Off-line registration
Code:	<input style="width: 90%; height: 20px;" type="text" value="00000000000000000000000000000000"/>
00260-00405-10432-AA375	
<input type="button" value="Registration request"/> <input type="button" value="Un-register"/> <input type="button" value="Test Connection"/> <input style="border: 1px solid blue;" type="button" value="Register"/> <input type="button" value="Close"/>	

Offline Registration

The above steps describe online registration. However, in some instances online registration will not be possible, due to communication restrictions and corporate policies. In this case the first three fields should be completed as before, and then the **Off-line registration** check-box should be clicked. The **Registration request** button will then be made available. Click on this button and a simple text file with your details will be displayed on your screen (reginfo.txt). Copy the text shown and email it to the email address provided to you for registration. You can now Close the form and exit JavelinPro until your registration details are emailed back to you.

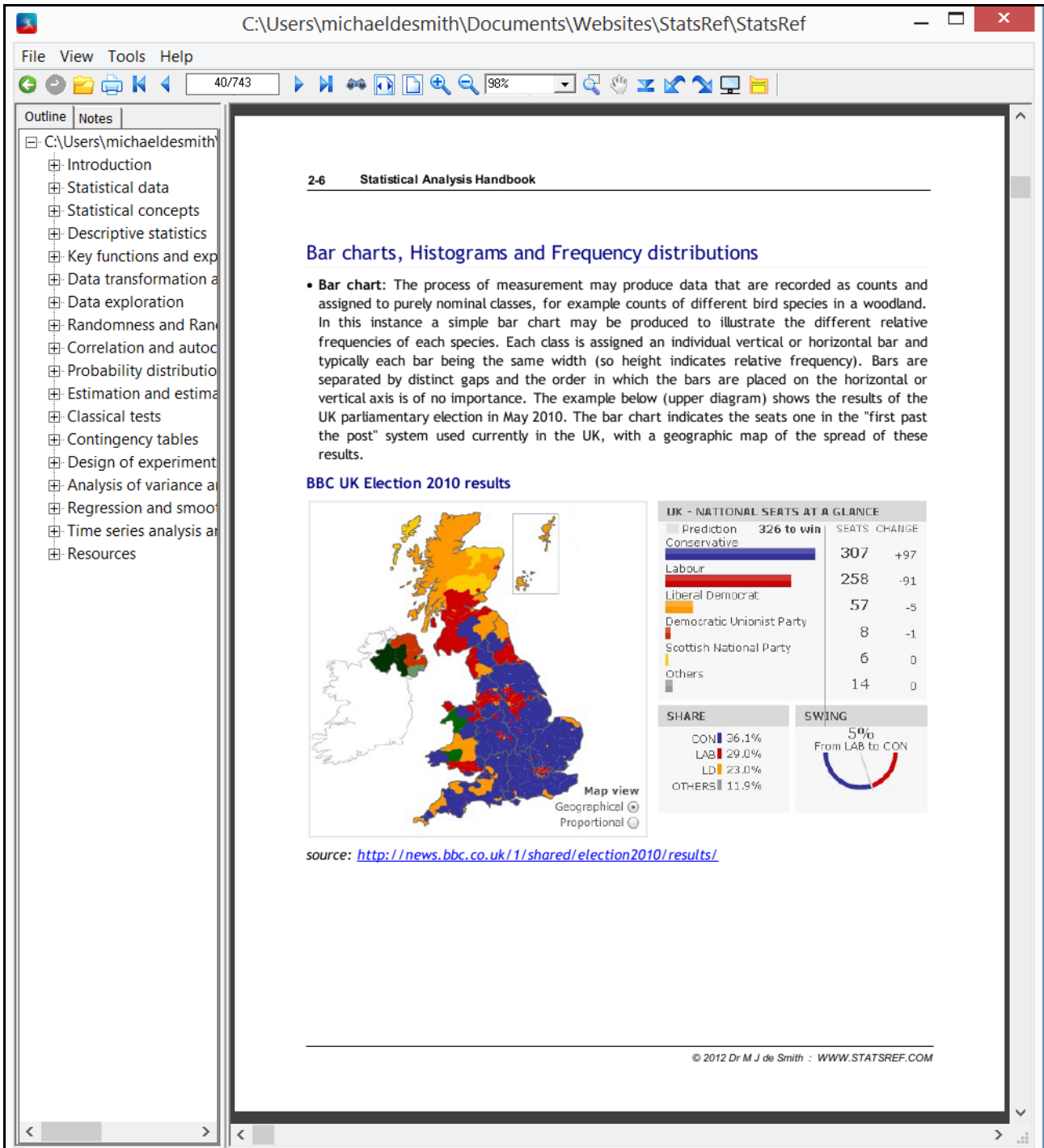
Once the email you sent has been received, the details will be manually entered for you on our central server and a Client ID and Code created - these will then be sent back to you by email and when you receive them, simply run JavelinPro again and enter the two items of information provided in the appropriate fields on the registration form, and then press **Close**. Your copy of JavelinPro is now registered.

Removal or amendment of registration details

As noted in the previous section the JavelinPro Tools menu item includes an option Registration... If you select this option the registration form will be displayed with all the details completed. There is an **Un-register** option available on this form which will remove your existing registration details. You can then re-register as described above. You can also amend the existing registration details and re-submit them (manually or automatically) to ensure the information provided is correct and complete. Note that if you change any information in the first three fields any existing .jvl license files issued to you may no longer work. Therefore, only change these fields if absolutely necessary and/or before any license files have been issued to you. If you do have to change the details, you will need to ask for new versions of the license files you have previously been sent.

User interface

The user interface for JavelinPro for is shown below. As can be seen, when a PDF or secured PDF (drmx or drmx file) is opened, a full range of navigation, toolbar and menu items are provided. Sections of this document provide details of the functionality provided via the menu items and toolbar icons:



Opening pdf and drmz/drmx files

To open a standard PDF, simply use the File menu, Open... option to select and open the PDF for viewing, printing etc.

To open a secured PDF (a .drmz or .drmx file) use the File menu, Open... option and select the secured file to be opened. You must be registered in order to open secured PDF files. The first time you do this JavelinPro will ask you for an authorization code if you do not have a valid license file for that document, stored alongside the document itself (i.e. in the same folder or directory, or in your AppData directory). JavelinPro also supports an additional "Password to Open" facility. If a password to open has been set when the secure file was created, it will prompt for this whenever the file is opened. This provides an extra level of security so that a file that has been authorized or licensed for use on a particular device, cannot be viewed by someone who has access to that device without knowing this additional password.

If you do not have a license file then you can either request one for that particular document from the document publisher, or if you have been provided with an authorization code, enter the code you have been provided with by the publisher (type it in or use copy/paste) and press OK. The code will be checked over the internet and if OK, the file will be displayed for you. In general you only need to do this the first time you access the file - your PC will remember the details and the file can be read offline, i.e. with no internet connection required.

Please see the [authorization](#) section for more details on authorization options.

Navigation

In addition to using the mouse to navigate documents, menus and icons, many features can be accessed using standard keyboard actions, e.g. Alt+F for the file menu, Ctrl+f for quick access to the Find text facility, PgUp and PgDn plus arrow keys for moving up and down the PDFs etc. When zoomed in, pages may be dragged up/down/left/right using the mouse (left mouse button, held down). Additional features are provided using right-click on the mouse (insertion of notes/comments).

For full details of the features in JavelinPro for Windows, please see the main sections provided in this manual.

Additional features in Javelin and JavelinPro

Some of the additional features in Javelin and JavelinPro include:

- annotation - the ability to add notes to secure PDFs. Notes are stored separately from the secured PDF in a .nts file located in the same directory (folder) as the document itself. Notes are added using a right mouse click or via the tools menu, Notes option, or via the toolbar icon for notes
- properties - a facility to provide both PDF property details and DRM properties, where secure PDFs are viewed
- authorization removal - a facility (accessed via the tools menu) to allow an authorized document to be 'un-authorized' - useful during testing (for publishers) and where a publisher asks a user to remove an existing document from their PC (the details of this process are centrally logged)
- enhanced zooming, with a drop-down fixed zoom facility plus a marquee zoom option (zooming to a selected region)

- downloading - a built-in file downloader, enabling direct downloading of secure files without using a separate browser. When a secured PDF (drmz or drmx file) is downloaded, the software automatically asks if the user wishes to open/authorize it
- auto-rotation of pages when printing - documents with mixed portrait/landscape page layouts can be printed in a single pass with landscape pages auto-rotated to ensure the correct print results
- navigation (contents/outline) trees with accented and other character sets now fully supported
- tooltips for toolbar icons
- support for Drumlin's "password to open" facility
- support for user-specific watermarking (%U field) - for JavelinPro registered users only
- central logging of activity specific to the user and companyID in question

Authorizing documents

With JavelinPro there are two authorization modes for DRM-protected files:

(A) **License file based offline authorization:** The JavelinPro reader is downloaded and installed, and then the secure PDF is downloaded and opened using JavelinPro. The secure PDF is a separate file of the form MyFile.drmx or MyFile.drmz. An additional file is also placed in the same directory or folder as the secured PDF, e.g. a file of the form 8020-119.jvl

(B) **Code-based online authorization:** As in (A) above, simply run JavelinPro, select the File menu, Open option, and pick MyFile.drmz as the file to read. If there is no license file in the folder where MyFile.drmz is located then JavelinPro displays an authorization form for the first time this document is viewed, as shown below:

Enter the code provided to you by the document publisher (typically a 9 character string of text in lower case plus numbers). You can COPY the code and then use the Clipboard button to enter it into the field shown and press OK. You must have an active internet connection at this point because the code is checked against our server to ensure it is valid. If all is OK the file is opened for viewing, and the process typically does not have to be repeated on subsequent occasions.

Note the DocumentID: 8020 shown on this form - each secure PDF has a unique DocumentID and this is used to identify the document on your PC, even if you change the filename (but not the file extension).

Once authorized a document remains accessible on the PC where it has been authorized, but copies will not be usable if a copy is made and transferred to another device. In some instances (e.g. expiry of number of times a file may be viewed or printed) it may be possible to re-authorize a file that has "expired", generally using a new code provided by the publisher of the document or the same code may still be available for use (if multiple use of the code is permitted or the code is reset for you).

Re-authorization

License files include information on when the associated document file can be viewed. The start and end date are included in the license file, and should not be modified as this will prevent the file from being viewed at all. The start and end dates take precedence over any start/end date information stored within the encrypted file itself. If a file that has been opened in the past, using a license file, and gives a message to say

that it can no longer be viewed because the license file has expired, contact the provider of the license file to obtain a new one to replace the one you have.

Some protected PDFs may include a limit on the number of times a document is viewed, or the number of pages that can be printed, or the number of days the document can be viewed. When these 'counters' have been reached the document will no longer be available, but may be re-instated for viewing or printing by re-authorizing it with a valid and available authorization code. This can be done via the file menu, re-authorize option, or via an automatic prompt to re-authorize.

Removal of authorization

Once a document has been authorized for viewing the details are stored locally on the PC. Very occasionally it is desirable to remove these details from the PC and this can be done from within JavelinPro for Windows via the Tools menu, Remove authorization... option. When invoked JavelinPro displays a form and asks for a documentID (if the file is not currently the open and active file) - typically a number that uniquely identifies the document, like 123456. By default it will remove authorization for the currently open document, but if a secure document is not already open but has previously been authorized on this PC, the documentID can be entered and it will remove the details. If that document is required once more it can be opened but will immediately ask for a valid authorization code (or license file) again.

File menu

Open

The Open menu item enables DRMX or DRMZ files and PDF files to be opened and read. If a DRMX or DRMZ file is opened for the first time, the authorization process described above will be invoked. Once a file has been authorized it can be opened using the File menu, Open option, without requiring re-authorization UNLESS some feature expires (e.g. number of times it can be printed) and then requires re-authorization or is no longer available for that facility. The File menu also displays recently opened files which may be selected and will then be displayed.

Close

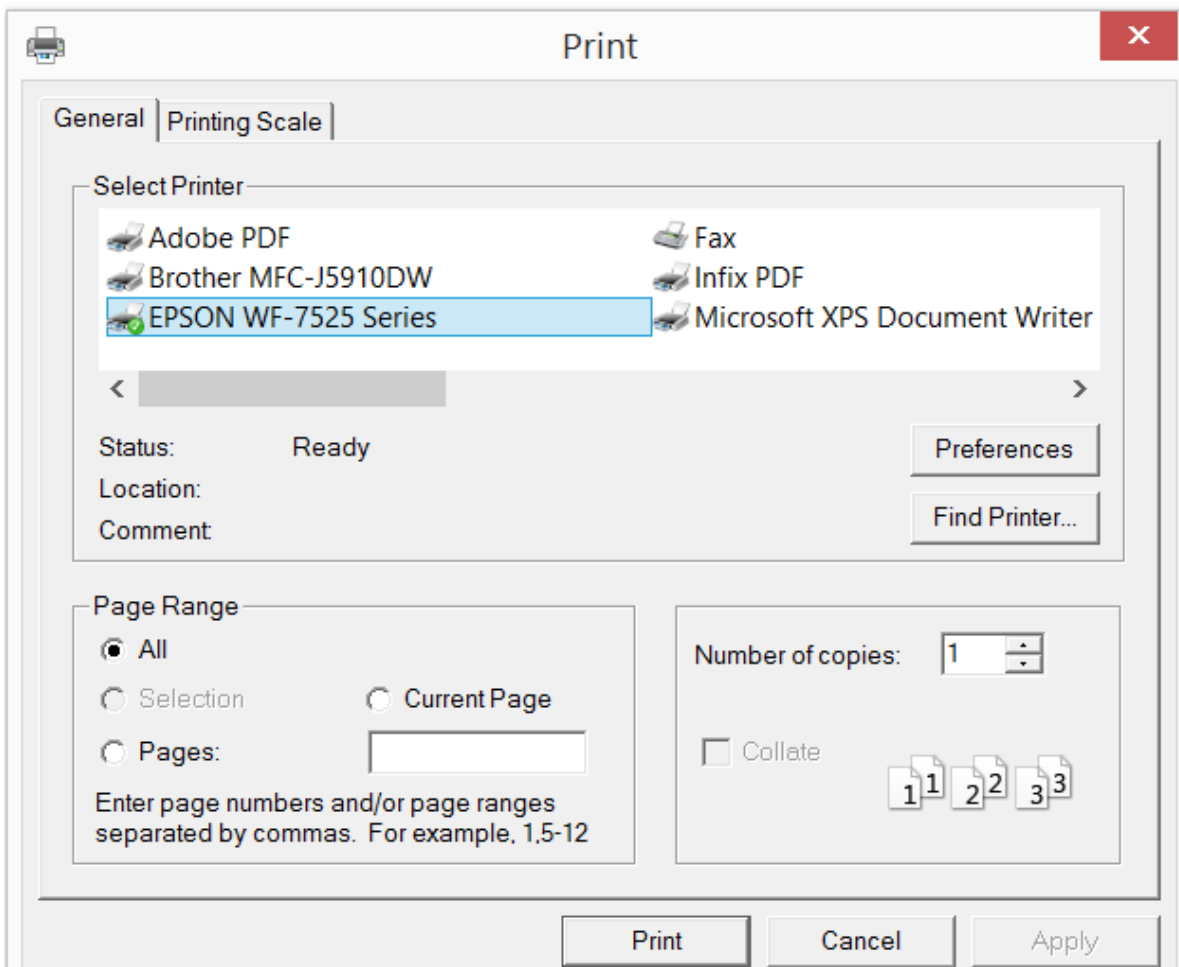
File Close option simply closes the current file.

Rename file as

This option enables you to rename a drmz file to a name that is easier/better for you to remember. It does not change the format of the file. For example, some publishers use abbreviated names or ISBN numbers as their file names. You may wish to change this to a meaningful text name for ease of use. Changing the name of a drmz or drmx file does not affect it - it is the internally stored documentID that defines the file for the software and service. File extensions (.pdf, .drmz and .drmx) should not be amended.

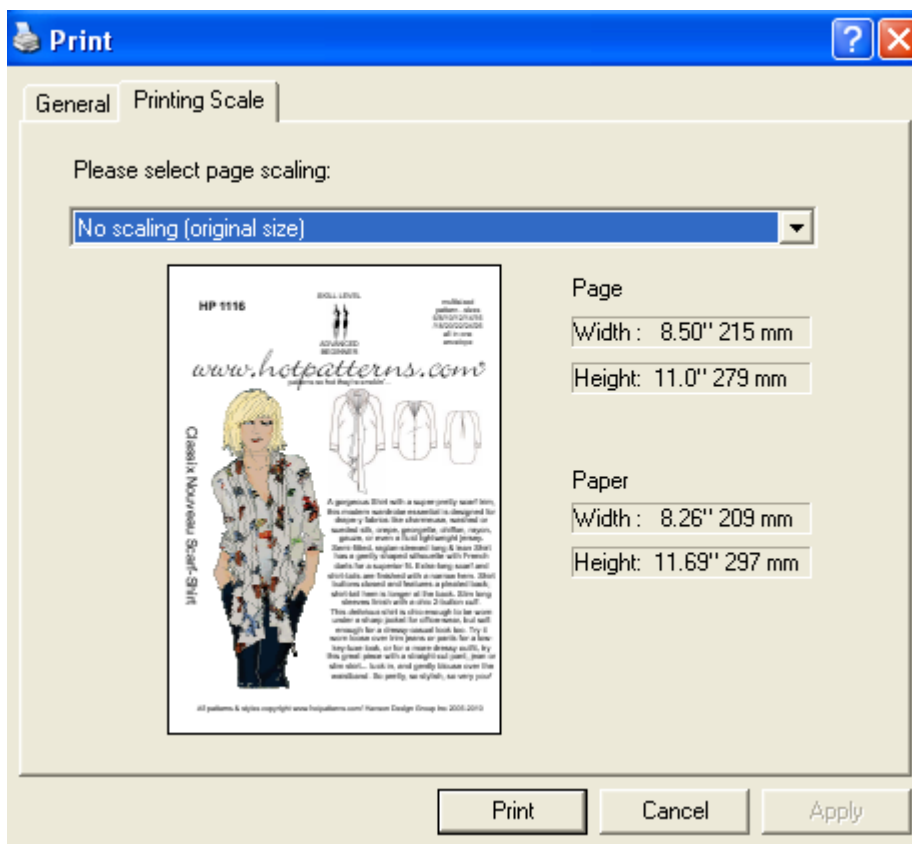
Print

The File|Print menu item results in a print dialog form being displayed:



The JavelinPro print dialog looks very similar to the standard Windows print dialog, but has a number of differences:

- (i) for PDF files this dialog is always shown, but for secure PDFs it will only be shown if printing is permitted, otherwise an error/warning message will be displayed. If printing is permitted and the allocated number of times or pages that are allowed has been reached, an error message will be displayed. Print counters can be reset by re-authorizing a file, but this will generally require a new or reset code from the publisher
- (ii) for secure PDFs where printing is permitted, some functions will not be available - for example, printing if permitted must be to physical printers, and if the copies option is set to greater than 1 the setting will be ignored
- (iii) an extra tab, print scaling is provided. This enables pages that are not the same size as the printer paper to be re-scaled proportionally or stretched, to fit. The default is for no scaling to occur, with other options selectable from the drop-down menu shown in the example below:



In general we recommend using the default setting, or ensuring that the source document is tiled if very large, to facilitate printing on standard A4/US Letter format paper. For complex printing tasks publishers should consider restricting printing (not enabling it) and offering a printed version as a separate item that may be ordered

Properties

The properties option provides details on both the PDF properties, as created by the PDF file generation software, and the DRM properties of the file (e.g. number of pages available to be printed, expiry date etc.) if it is a drmz or drmx file. Examples of both for the Statsref file illustrated previously are shown below:

PDF		DRM	
Title:	Statistical Analysis Handbook	ID	8973 [StatsRef.pdf]
Subject:	Statistics Reference Handbook	Basic or Fully Protected:	Full protection
Author:	Dr Michael J de Smith, University College London	Allowed to be Opened:	<no limit>
Keywords:		Allowed to be Printed:	0 / 0
Creator:	Help & Manual 6	Allowed Page Number:	0 / 0
Producer:	wPDF3 by WPCubed GmbH	Valid From Date:	2012-09-17
Created:	D:20120912160254Z	Valid To Date:	2020-10-31
Subject:			
Pages:	743		
Filename:	StatsRef.pdf		
File Size:			
Dimensions:	8.50" : 11.00"		

Test connection

When the test connection option is selected the form below is shown - pressing the TEST button checks the internet link - an example of such a test is shown in this screenshot:

Test Connection

```

Testing connection ...
Not using proxy!
Connection is OK!
*****
* SUCCESS *
*****

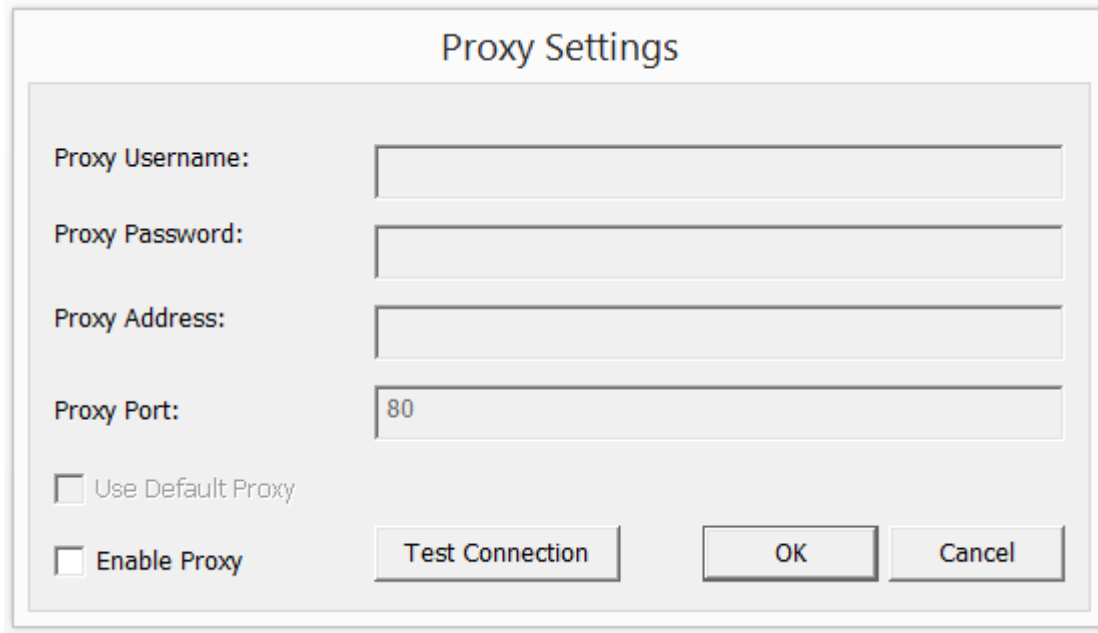
DCL version: 1.05
ZGB version: 115
Web service: 1.10 05/July/2014
    
```

Test

Close

Connection settings

If the test connection fails and indicates that a proxy server is present, blocking communications from JavelinPro, then it “may” be possible to use the Connection settings option (illustrated below) to enable access via the proxy server. Initially use the Enable proxy button to enable the various fields, and then apply settings as advised by your IT services department, and then re-test the connection.



The image shows a 'Proxy Settings' dialog box with the following fields and controls:

- Proxy Username: [Empty text box]
- Proxy Password: [Empty text box]
- Proxy Address: [Empty text box]
- Proxy Port: [80]
- Use Default Proxy
- Enable Proxy
- Test Connection button
- OK button
- Cancel button

Even if the connection can be made, it may still fail on some sites owing to the way the site firewall is configured. Again, IT services can enable access from the DRM service web address (<http://www.drumlinsecurity.co.uk/service.asmx>) which will resolve this problem. However, several other options are available: (i) using a laptop or mobile device DRM secured files can be authorized offsite (a one-time process) via an open WiFi connection or home internet connection, and then used in the office/whilst travelling etc as required; (ii) offline authorization is supported when using the License file authorization mechanism (see also the [authorization section](#) of this user guide); (iii) there are online browser-based options for access from PCs and other devices, as described in our [Managed Online services](#) section of the main website

Log file

JavelinPro creates a log file of activities as it opens and closes documents. In the event of a problem, we may ask you to use this menu option to save the log file, copy its contents, and email them to us to help in our diagnosis of the problem you experience

Re-authorize

When one of a number of counter variables reaches its limit JavelinPro will request re-authorization if continued use is to be provided. Examples of counter variables include: the number of days during which the file can be viewed; the number of times the file can be opened for viewing; the number of times the file can be printed; and the number of pages in total that can be printed. These variables can be checked via the Properties form for drmx and drmx files. If necessary, contact the document publisher to obtain a new code. Files with an explicit expiry date cannot be re-authorized.

View menu

The view menu enables you to select a range of features of the program that are also provided as toolbar icons. JavelinPro remembers your last setting for window size, zoom level and sidebar (ticked or not) when re-starting the program.

Fit page, Fit width

The first set of options specify the size of the page display within the overall program window - larger sizes are easier to read but may not fit within the available window.

Zoom in

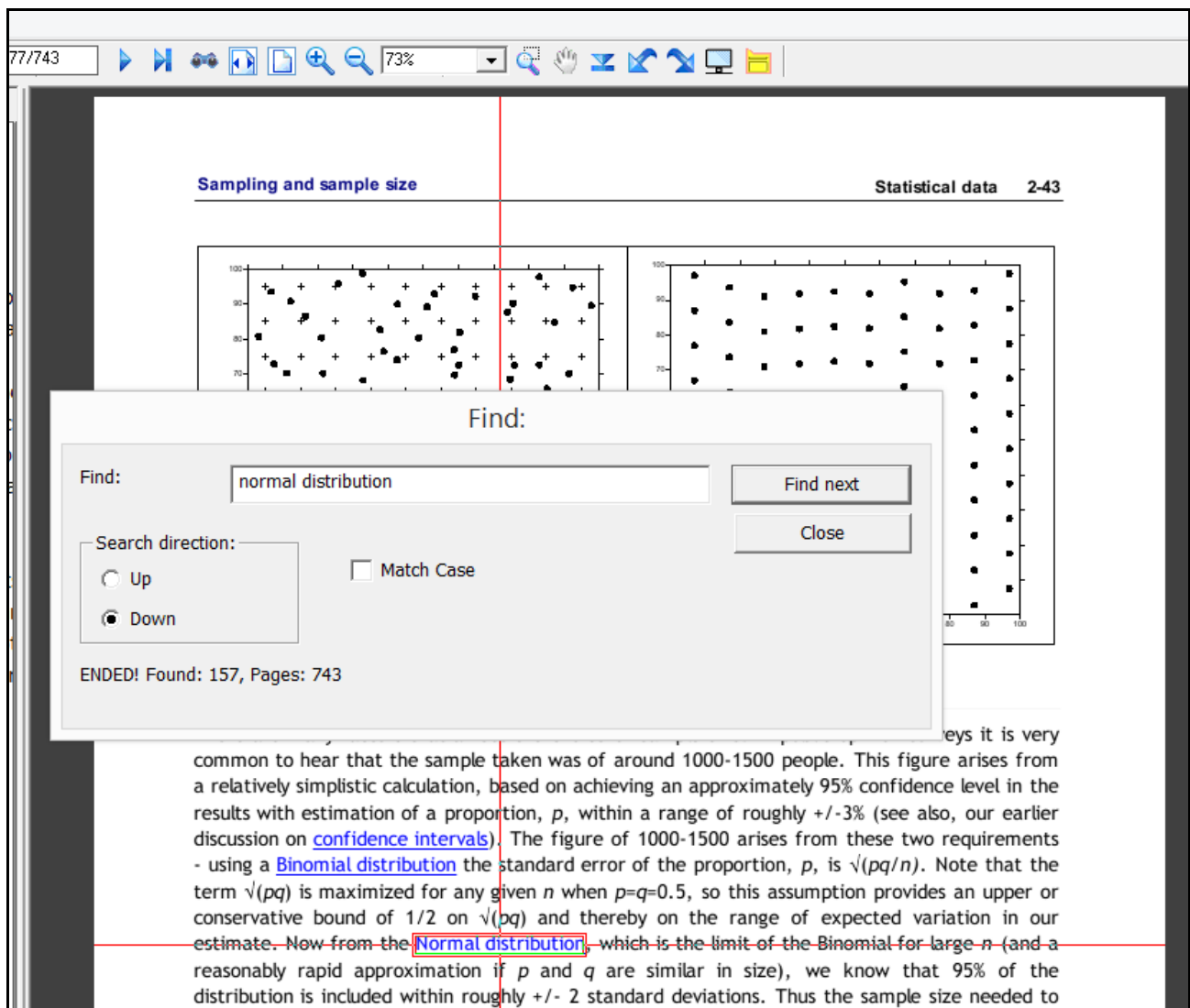
Single step zoom into the document (font etc becomes larger)

Zoom out

Single step zoom out from the document (font etc becomes smaller)

Find text

Text search facility - enter the word or word string you wish to search for (wildcards, like *, are not supported) - an example is shown below:



Sidebar

The outline/navigation tree for a PDF is automatically displayed in a sidebar to the left of the page display, if one is provided within the source PDF file. If required this can be hidden via the Sidebar option, or enabled (e.g. for displaying the Notes information) even if no outline has been provided.

Full screen mode

The final option shown, which is also available as a separate icon on the toolbar, is Full Screen Mode. This displays the PDF with no surrounding controls or menus, filling the entire available screen space. In full screen mode you can move forward and backwards in the display using the left mouse button and right mouse button. The full screen mode is Exit-ed using the Esc key. Full screen mode is designed for maximization of the available screen area for page display and for use with digital projectors, e.g. in teaching and training environments.

Tools menu

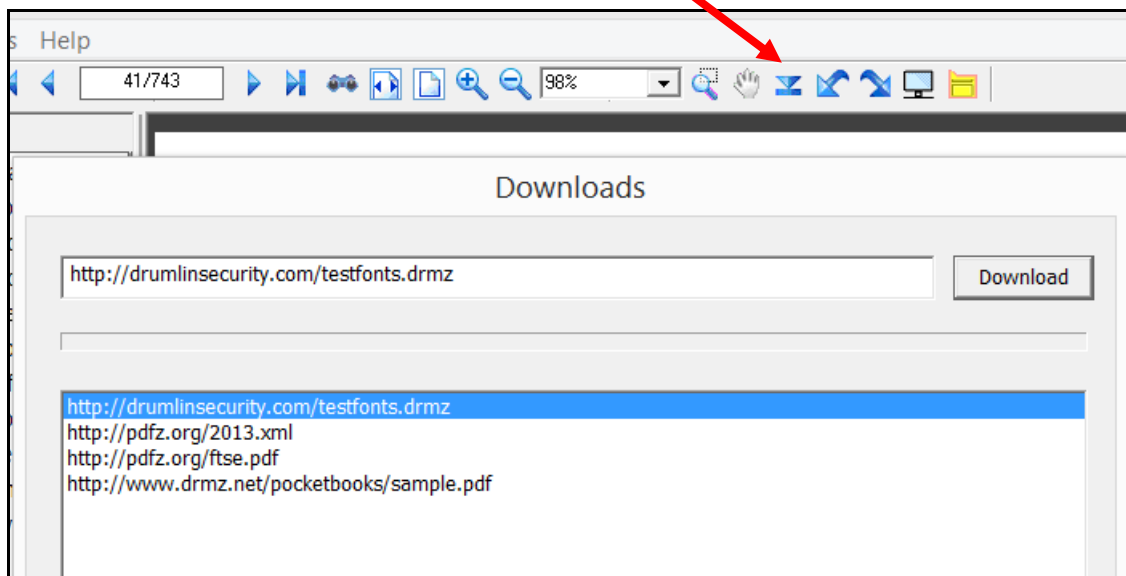
Languages

The Tools menu provides access to the language selection facility - available languages for menus and dialog boxes (not PDF content!) are listed (e.g. French, Chinese, etc) and switching between languages is immediate. Note that the default language used when JavelinPro is started can be specified using the -L command line option. This facility is used in the JavelinPro for Windows French and Arabic version kits that are provided on the JavelinPro downloads page.

Download

The download option on the menu or toolbar enables downloading of a PDF or secure PDF without using a web browser.

To download a file directly from the internet select the download icon on the main screen toolbar, as shown below:



You will be prompted to enter a full internet address (a URL) - you do not need to include `http://`, for example, you can try downloading the free Statistics file:

www.drumlinsecurity.co.uk/samples/StatsRef.pdf

Note that the URL should not contain any spaces in the name, and for some websites will require the correct use of upper and lower case - in the example above the website does not require the correct case so `statsref.pdf` would also be accepted. As a general rule it is worth making sure the URL is correctly entered or you will receive an error message. To be certain you can check the URL by typing it into the address bar of a browser on your computer first.

Whilst downloading is in progress you will see a progress bar with the percentage of the file that has been downloaded. Very large files may take a while to download, depending on the speed of your internet connection.

When downloading is complete you are offered the option to open the file (for PDFs) or for secured PDFs (drmz files) you will be prompted to enter an authorization code. You must have a valid code for the publication in question, and you obtain this from the document publisher. For example, the code might be 123456789, so touch the input field in order to enter the code and a keyboard will pop-up for you to enter the information. Press the OK button and then the code is checked on our server and if OK,

the file will be loaded. Again please wait while this takes place as it may take a few seconds. The book or document is then available for you to read - you should not need to authorize the document again unless you delete it or you change to using another device, e.g. an iPad, Android tablet, another PC or Mac for this file. Previous downloads are displayed in the box below the input field - clicking on one of these will bring it up to the input field and enable you to re-download that item

Remove authorization

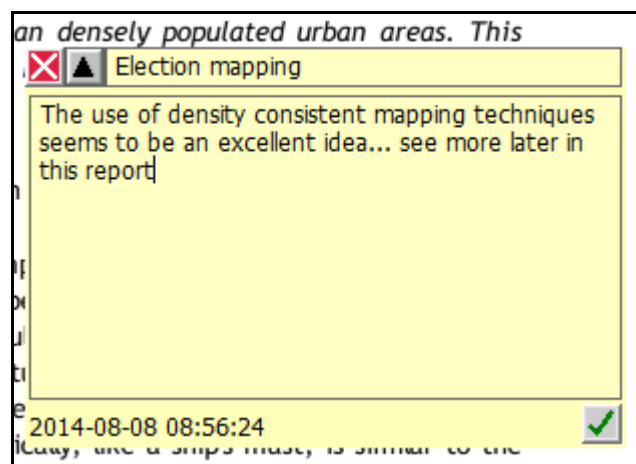
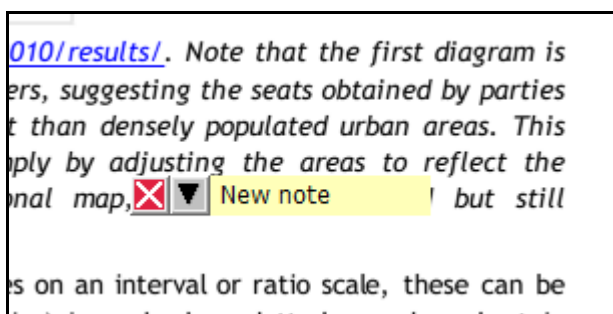
Sometimes you may wish to remove details relating to a document authorization from your PC. The section above on [removal of authorization](#) explains the process.

Mode

JavelinPro for Windows has two modes of usage: Hand mode (the default mode, with the cursor displayed as a hand icon) which allows you to use the mouse to drag the page around when zoomed in, and Zoom mode. The zoom mode changes the cursor from a hand to a zoom icon and enabled an area of the screen to be selected and zoomed into. This mode is also referred to as “marquee zoom”. To return to the default mode click on the Hand icon on the toolbar or use the menu item to select Hand mode again.

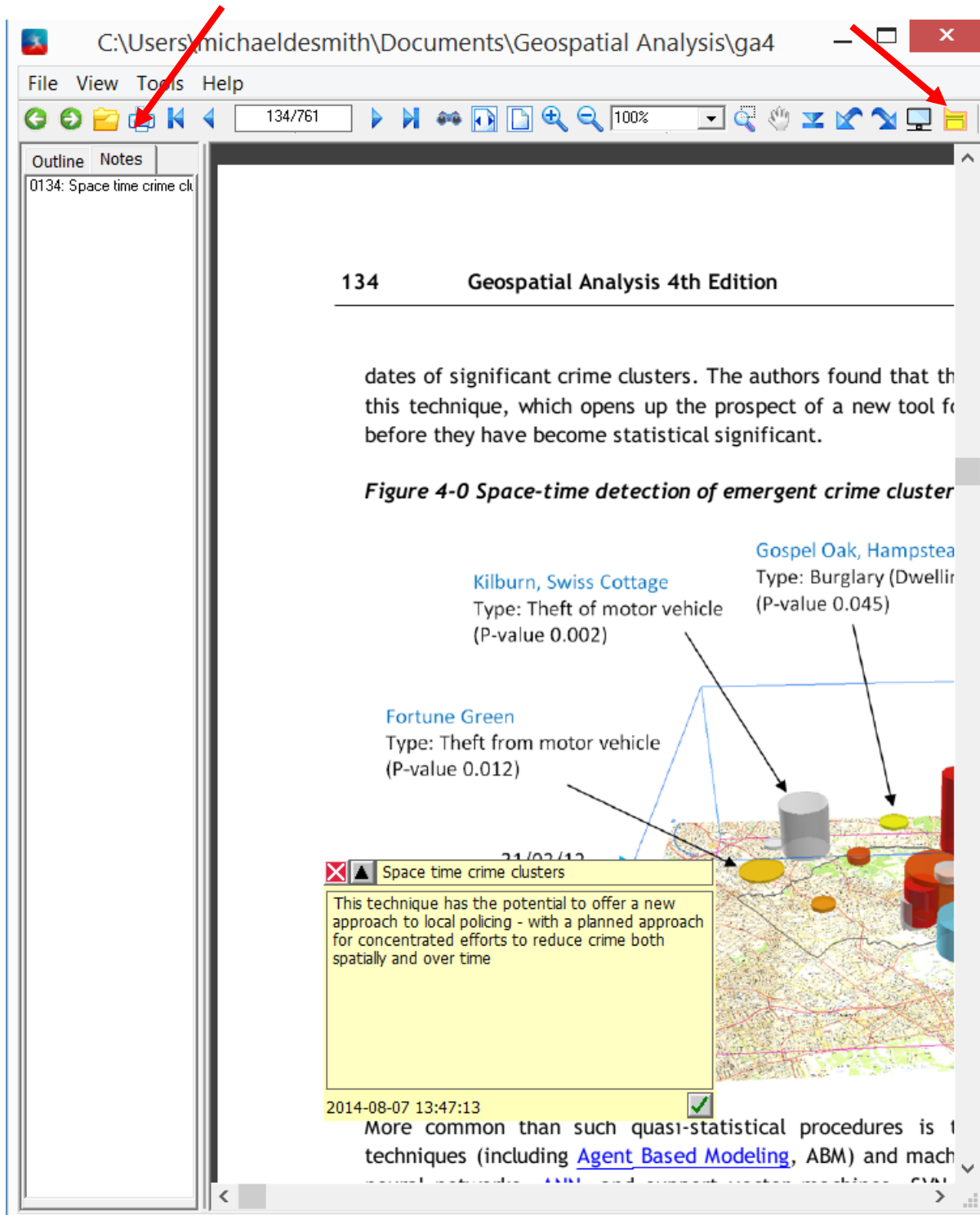
Note (Document annotation)

JavelinPro for Windows supports annotation of documents. This feature is invoked via the tools menu, notes option, or from the toolbar notes icon (yellow notes icon at the right hand end of the toolbar) or by a right button mouse click at the location on the page where the note is required. This results in a note object being added to the page at the location selected, as shown below. Click on the black downward-facing button to open the note and enter a title for the note and text in the box provided. When the note is complete, press the tick icon to save it and update the Notes tab on the sidebar (where the document outline or navigation tree is displayed). You can also use the black upward-facing arrow to close the note box and then drag the note object on the page to a better location if you wish. Use the red x icon to delete a note.



Once notes have been created they are stored in a separate file on your PC disk, called <filename>.nts - this file contains all the notes associated with your document and it must be possible to write to the file, so the document being viewed must be in a folder/directory with read/write access, e.g. your Documents folder or a sub-folder of this main folder. If you move your PDF or drmz file to a different location, or email it to someone else, remember to copy across the .nts file as well, and then the notes will be available as before.

In the example shown below a note has been added to a page by clicking on the notes icon in the toolbar (right-hand end) and saved, and appears in an extra “Notes” tab on the sidebar. This indicates the page number where the note is located and the note title - just click on an entry in this tab area to go directly to the note in question.



Registration...

The final entry in the Tools menu is the Registration... option, which is described in details earlier in this document.

Help menu

About

The Help menu provides access to the About... form. This provides details relating to the current document, together with a link to the Drumlin website where additional information and help can be found. Scroll down the form window shown to view all the information provided. In branded versions of the reader the company branding is provided on this form including a link to the company website. Also note the option selector to enable Extra Menu Items - if ticked or un-ticked the extra items appear/are hidden on the File menu. More details regarding the document are now provided on the File menu, Properties option.

Toolbar

The JavelinPro for Windows toolbar is shown below. The actions of most elements are obvious from the icons provided. Those at the leftmost end (green arrows when available, grey when not) are like Browser buttons for Previous page viewed (backward and forward selection through the history of recently displayed pages of the file). This differs from page selection using the familiar first page/previous page, next page/last page selectors and page number selector. All the facilities (except for page rotation) are also available on the menus.



From left to right the toolbar functions are:

- Back, Forward (previous/next for viewed pages)
- Open file
- Print (if permitted)
- Page selection: first, previous, select page number, next, last
- Search/find
- Fit width
- Fit page
- Zoom in one step, zoom out one step, select zoom extent (drop-down list)
- Marquee zoom mode (zoom to selected area)
- Hand mode (default) - drag page around when zoomed in
- Download a PDF or secured PDF file (without requiring a browser)
- Rotate left, rotate right
- Full screen mode (Esc to exit)
- Create a note (annotation/comment)

Command line options

JavelinPro can be modified at startup by the addition of command line parameters. The standard JavelinPro for Windows install kit is provided as a convenient way of ensuring that the JavelinPro.exe file has desktop and Start menu links, and includes file association for .DRMX and DRMZ files (i.e. if such files are double-clicked the file is opened using JavelinPro). Currently the command line options included in the kit for the shortcut links include -R6 and -E (see below).

Currently a number of optional parameters can be defined:

Filename

-F<filename> defines a file to open when JavelinPro is run

Graphics mode

-r or -R:

With these parameters the default rasterization algorithm is changed to use a preferred algorithm. For some PDF files this can result in improved display of images, especially when zooming in or out. The -r parameter is temporary and just applies to the currently launched exe, whilst -R sets the selection as the default within the Windows registry. To select a specific algorithm it must be assigned a value which are the same as those used in the main Drumlin PDF reader (settings file). Entries are thus of the form -r6 or -R10 (6, Bresenham, is the default for the latest JavelinPro kit). The available values are:

Box = 0,
 Bell = 1,
 CatmullRom = 2,
 Cosine = 3,
 CubicBSpline = 4,
 CubicConvolution = 5,
 Bresenham = 6,
 Hermite = 7,
 Lanczos3 = 8,
 Lanczos8 = 9,
 Mitchell = 10,
 Quadratic = 11,
 QuadraticBSpline = 12,
 Triangle = 13

Extended menus

-E

this option, which is now standard in the latest JavelinPro for Windows kit, ensures that the full menu of options is displayed on the File menu (i.e. including connection options and log file access). For branded readers this can be enabled or disabled, as required

Print resolution

-Pnnn

this option enables the default print resolution of 300dpi to be over-ridden with the value nnn, typically this would be 600, but could be a lower or higher target resolution than 300. Example: -P600

Language

-l or -L:

With these parameters the default language used can be set. The structure is similar to that described above, with the language values being:

- 0 - english
- 1 - croatian
- 2 - german
- 3 - spanish
- 4 - french
- 5 - japanese
- 6 - chinese (traditional)
- 7 - chinese (simplified)
- 8 - arabic
- 9 - danish
- 10 - italian
- 11 - hungarian

Note: The numbers shown above are those that should be used to set the default language - this differs from the order in which languages are displayed in the Tools menu of JavelinPro, as these are shown alphabetically. Other command line parameters may be available for special application requirements. If in doubt contact us for more details.

Additional information

Additional information relating to the JavelinPro apps can be obtained by contacting Drumlin Security Ltd. Special apps that incorporate functionality similar to JavelinPro can be developed on a bespoke basis. The Taxbooks app, for example, available as a free download from the iPad App Store and Android App Store is a good example of this. Information regarding Javelin on other platforms is provided on our website, www.drumlinsecurity.com

The secured PDF files used in the JavelinPro and Javelin apps are created using the free Windows-based software program called Drumlin, available from the Drumlin Security website. Standard PDF files are converted to a new file format with file extension .DRMZ - this file format can be read on other platforms such as iPad, Android and Mac OSX using Javelin readers for these platforms. For more details please see the Drumlin Security website.