



User Guide
Javelin PDF readers for
Apple MacOS
v10.10 and later



Overview

Javelin and Javelin3 PDF readers for MacOS are fast, very small PDF readers that can open and view standard PDF files (.pdf) and Drumlin DRM-secured PDF files (.drmz and .drmz files). For advice on downloading our special DRMZ and DRMZ format files, please see the [Downloading](#) and [Catalogs](#) sections of this document. Note that for security reasons Javelin3 for Mac must be run without the Terminal app active.

User interface

The screenshots below provide a sample PDF displayed within the Javelin for Mac and Javelin3 for Mac readers with the Outline tab area displayed. As can be seen, the Javelin readers are based on the standard Apple Mac PDF reader software "Preview". The main difference is that when a .drmz or .drmz file is opened it will ask for an authorization code before the secured PDF is displayed (on the first occasion).

The screenshot shows the Javelin PDF reader interface. The window title is 'Javelin File View Window Help' and the document is 'StatsRef.pdf'. The page number is 48. The interface includes navigation controls (Back/Forward, Navigation, Page, Search) and an Outline panel on the right. The document content is as follows:

Bar charts, Histograms and Frequency distributions

- **Bar chart:** The process of measurement may produce data that are recorded as counts and assigned to purely nominal classes, for example counts of different bird species in a woodland. In this instance a simple bar chart may be produced to illustrate the different relative frequencies of each species. Each class is assigned an individual vertical or horizontal bar and typically each bar being the same width (so height indicates relative frequency). Bars are separated by distinct gaps and the order in which the bars are placed on the horizontal or vertical axis is of no importance. The example below (upper diagram) shows the results of the UK parliamentary election in May 2010. The bar chart indicates the seats one in the "first past the post" system used currently in the UK, with a geographic map of the spread of these results.

© 2010 Dr M J de Smith : WWW.STATSREF.COM

BBC UK Election 2010 results

UK - NATIONAL SEATS AT A GLANCE

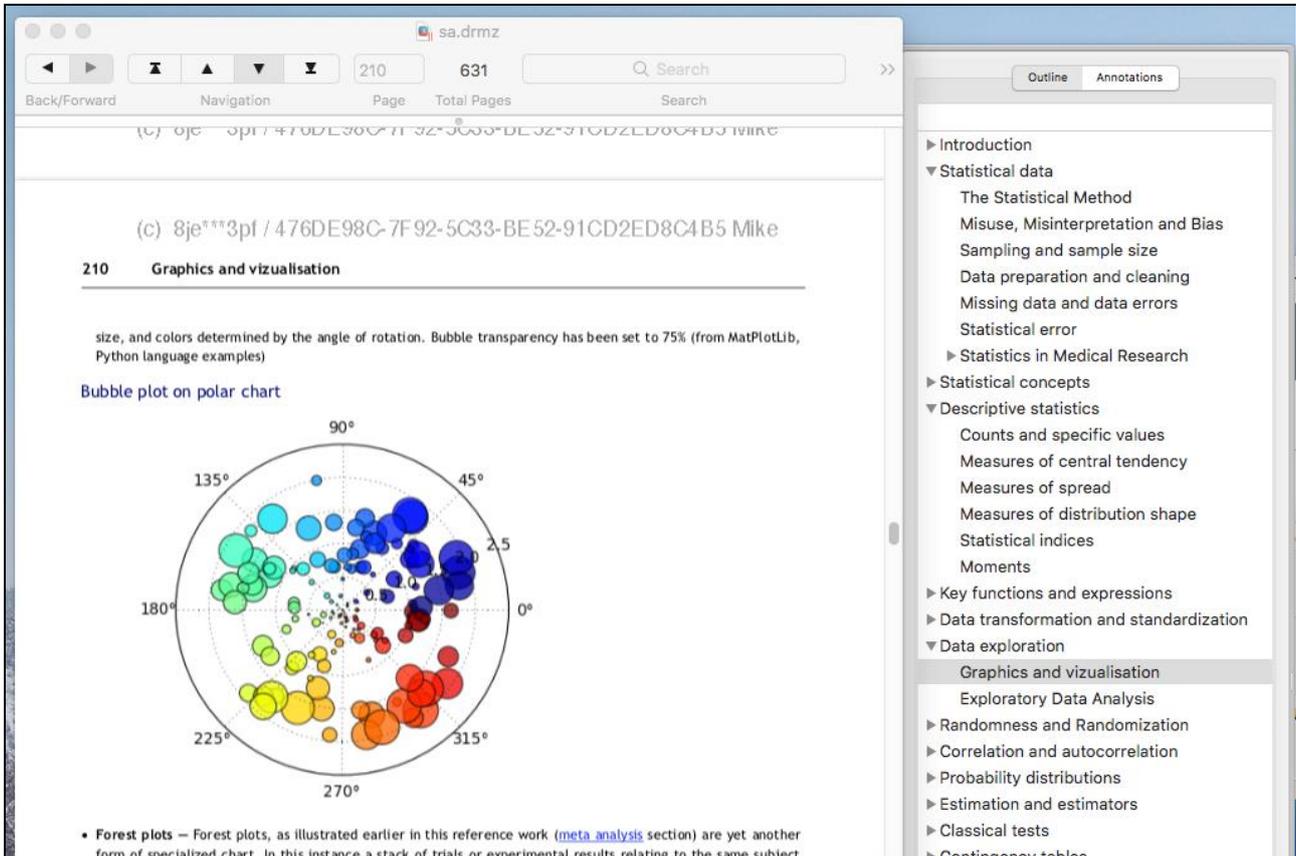
Party	SEATS	CHANGE
Prediction	326 to win	
Conservative	307	+97
Labour	258	-91
Liberal Democrat	57	-5
Democratic Unionist Party	8	-1
Scottish National Party	6	0
Others	14	0

SHARE

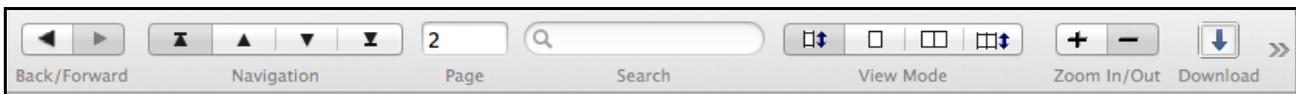
CON	35.1%
LAB	29.0%
LD	23.0%
OTHERS	11.9%

SWING

50%
From LAB to CON



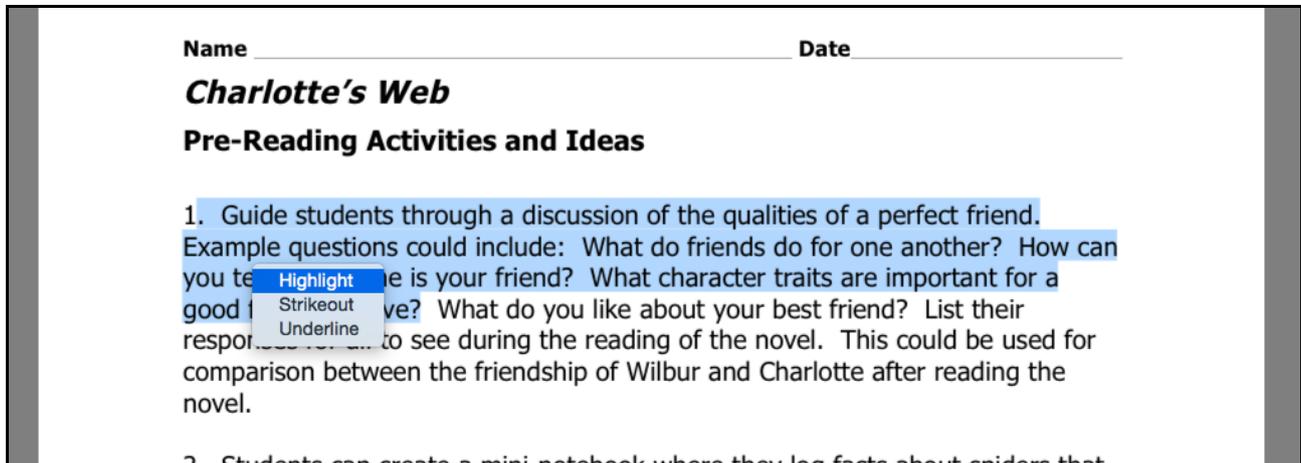
The menus and toolbar displayed are also similar to the Mac Preview program, with the File menu being specific to the Javelin program. The items on this menu are described in the sections below ([File menu](#)). The toolbar includes facilities for navigation, page selection, searching text, view modes, zooming and downloading. These are illustrated on the screenshot below, with all being essentially the same as in Preview except for the [download icon](#) (see later in this document for more details). The toolbar can be customized (see the [View menu](#) item, described later in this document).



Markup, Annotation and Text to speech

Markup

Javelin readers support markup and annotation. The screenshot below illustrates this for a section of a document that has been selected by left-clicking the mouse and dragging across the text to be highlighted - this procedure can be carried out for both standard PDFs and secured PDFs (drmz files). After highlighting the markup can be removed, line-by-line by clicking on the line in question and right-clicking to obtain the delete highlighting option for that line.

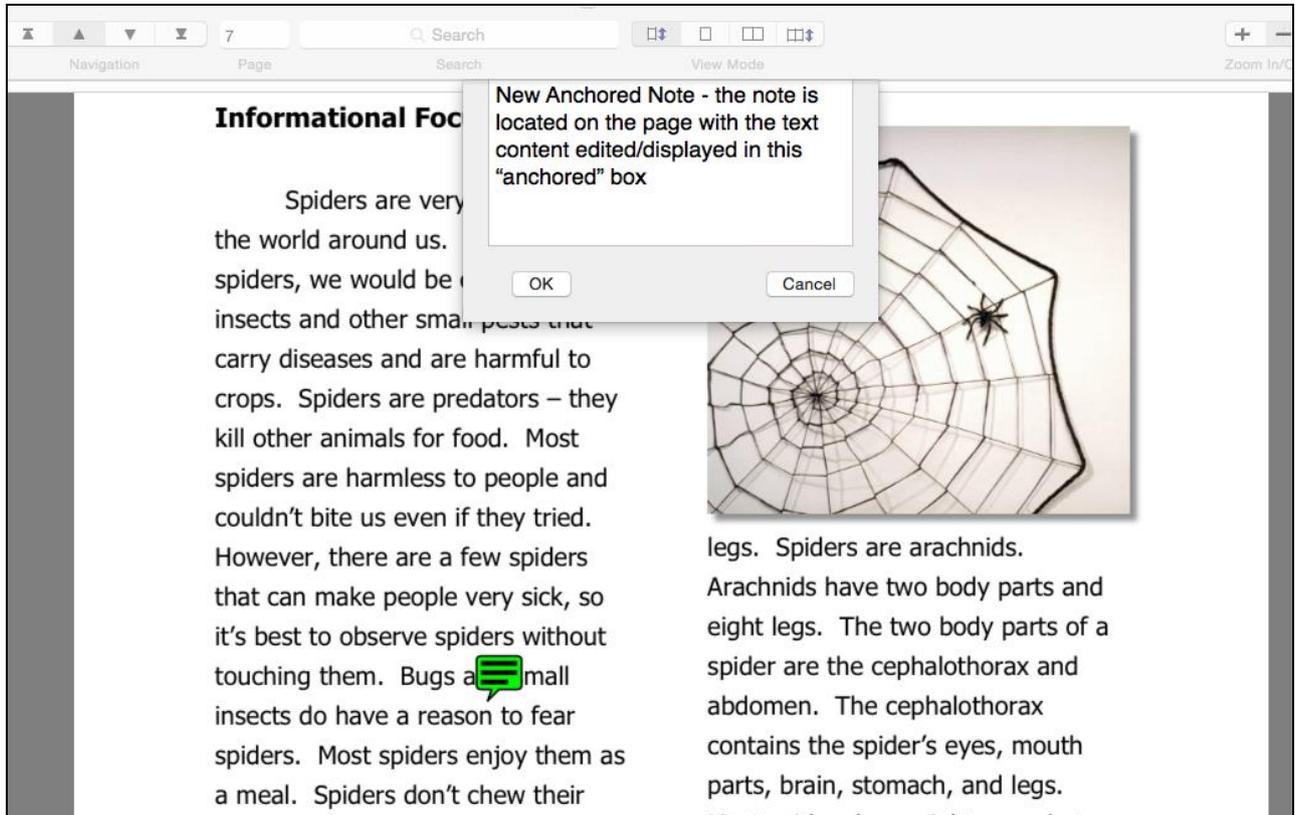


Markup is shown in the selected format as marked blocks of text. Frequently these will be a series of lines. Each line or section of a line that is marked can be subsequently selected and optionally deleted via right-click on the mouse. Markup will be saved after a document is exit-ed.

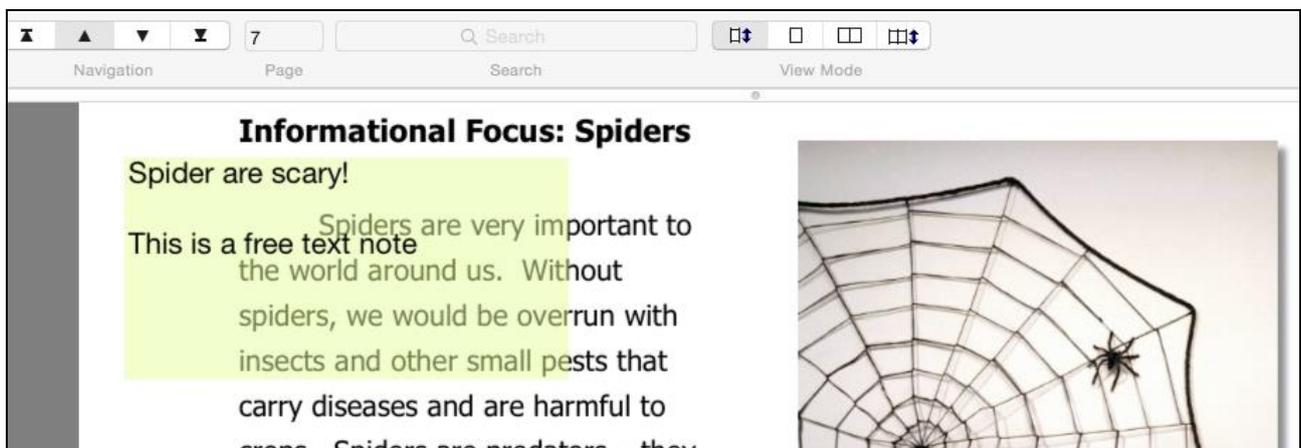
Annotation

In a similar manner, right mouse clicking on a location in the document that is not previously selected allows notes to be added (annotation). Two variants of annotation are supported: Anchored notes, which are displayed as an icon on the screen, with the text displayed when the item is double-clicked (only for older versions of Javelin); and Free notes, which are displayed as transparent yellow sticky notes on the page itself. Each is described below. For Javelin3 this is implemented with a single note type, located where you place it but can be dragged to a new position on the page, and access to the notes is available via the Annotations sidebar.

A new note can be added by right-clicking on a location on a page that is not highlighted. Right-clicking on an existing note will enable the item to be deleted. For secured PDFs annotations are stored in an external file with extension .nts in the same folder as the document. In the first example shown below we have already added an Anchored note to the page by right-clicking on the page where we want to add the note, and this is displayed as a green annotation icon. Text is then entered in the box at the top of the screen. The green icon can be moved around the page by selecting it with a left mouse click and dragging it to a new location. The note can be opened by double-clicking the green icon (left mouse button) and a pop-up form will be displayed allowing the content to be viewed and/or edited.



The second option is to create a Free floating note, which is similar to an anchored note but overlays the page as a transparent sticky note (see example below). In this case text entry is via a pop-up form and when OK is pressed the sticky note is displayed. As with the icons, sticky notes can be moved around the page and can be edited by double-clicking them or via right click, or deleted via right click. In Javelin3 annotations are save via the File menu during a session and/or when the file is closed. The annotations /notes may also be exported to a text file via the File menu in Javelin3.



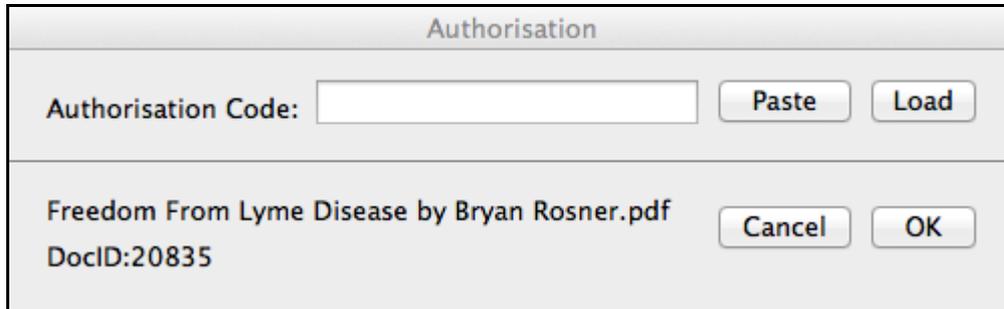
Read aloud (text to speech)

Read aloud is supported within the Javelin3 for Mac reader, with either page-based reading aloud or when reading selected text regions. The standard Mac OSX/Catalina "Settings" facility, "Dictation and Speech" option is used to provide this facility.

Authorizing documents

Online authorization

To authorize a .drmz or .drmz file simply run Javelin, select the File menu, Open... option, and pick the file to open. An authorization form is displayed the first time this document is viewed, as shown below:



The screenshot shows a dialog box titled "Authorisation". It has two main sections. The top section contains the label "Authorisation Code:" followed by a text input field, a "Paste" button, and a "Load" button. The bottom section contains the document name "Freedom From Lyme Disease by Bryan Rosner.pdf" and the document ID "DocID:20835", with "Cancel" and "OK" buttons to the right.

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 Paste 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: 20835 shown on this form - each secure PDF has a unique DocumentID and this is used to identify the document on your Mac, even if you change the filename (but not the file extension).

Once authorized a document remains accessible on the device 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).

Removal of authorization

Occasionally it is necessary to remove authorization for a document that has previously been authorized. This can be achieved via the File menu, remove authorization option. The simplest way to use this facility is to open the document to be "un-authorized" and then select the file menu item. If the document is not already open Javelin will prompt for you to enter the documentID of the document in question - e.g. 20835 in the example shown in the previous section. Note that removal of authorization for a specific device does not make the authorization code available once more - ask the document publisher for a code reset or new code if this is required.

File menu

Open, Open recent...

The Open menu item enables DRM or DRMZ files and PDF files to be opened and read. If a DRM 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.

Properties

The Properties menu item displays the properties for PDF files, and in addition, the DRM properties (permission settings) for secured PDFs (.drm and .drmz files). An example for a .drmz file is shown below:

The screenshot shows the 'PDF Properties' dialog box with the 'PDF Properties' tab selected. The fields are as follows:

Title:	OSCEhome Package		
Subject:	OSCE Preparation		
Author:	Al Imari		
Keywords:	[Medical OSCE Exam] [USMLE Step 2 CS] [LMCC MCCQE II]		
Creator:	ImageToPDF		
Producer:	ImageToPDF		
Created:	5 Aug 2013	Modified:	7 Aug 2013
Pages:		File Size:	
File Name:			

An 'OK' button is located at the bottom right of the dialog.

The screenshot shows the 'DRM Properties' dialog box with the 'DRM Properties' tab selected. The fields are as follows:

Document ID:	17378
Allowed to be Opened:	<unlimited>
Allowed to be Printed:	<unlimited>
Allowed to Print Pages:	1300
Valid From Date:	N/A
Valid To Date:	2020-12-30

An 'OK' button is located at the bottom right of the dialog.

Save, and Close

Save is a manual operation to ensure that any markup and annotations made are saved as at that moment, thereby ensuring that there is no risk of such changes being lost (e.g. due to a computer fault) prior to exit-ing a document. There is no auto-save facility so users are recommended to use the Save option regularly if they are making extensive markups and/or annotations.

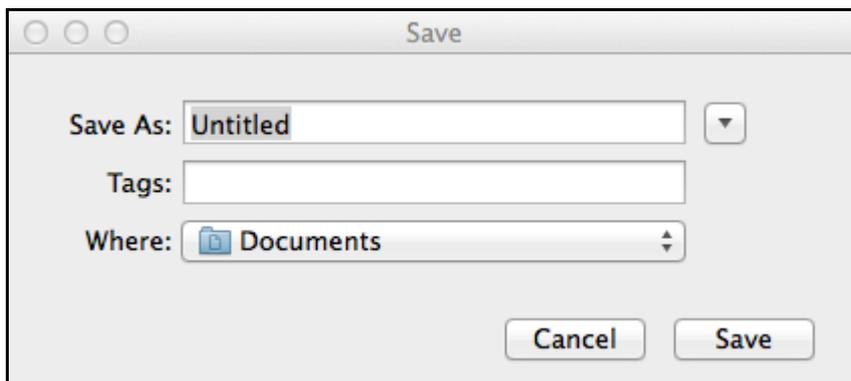
Close closes the currently viewed file and prompts to save any markup/annotation changes made and as yet unsaved. Note that Javelin for MacOS is a multi-windowing application so it is possible to have multiple documents open at the same time. When all documents are closed only the menu items are displayed, as per other Mac apps.

Remove authorization

Removal of authorization is a facility which is provided for two reasons. The first is to ensure that the stored information relating to a document and its permissions are removed from the Mac, in order to clear these and enable an updating version of the document to be re-authorized with new permission settings. This is very occasionally necessary, and useful when running tests before documents are distributed. The second reason for removal of authorization is where this is agreed with the publisher as a means of demonstrating that the document has been removed from the device in question. The removal process de-authorizes the current Mac for that document and also logs this on the DRM server so the publisher can confirm the action specified has taken place.

Log file

Javelin creates a log of the current session which it retains in memory. This includes diagnostic information which we may request if you have a technical support issue. When selected the option displays a form as shown below - simply provide a convenient name for the file and it will be saved on your Mac as a text file, which you can then either open and copy the text into an email, or attach to an email for us to review:



Check version

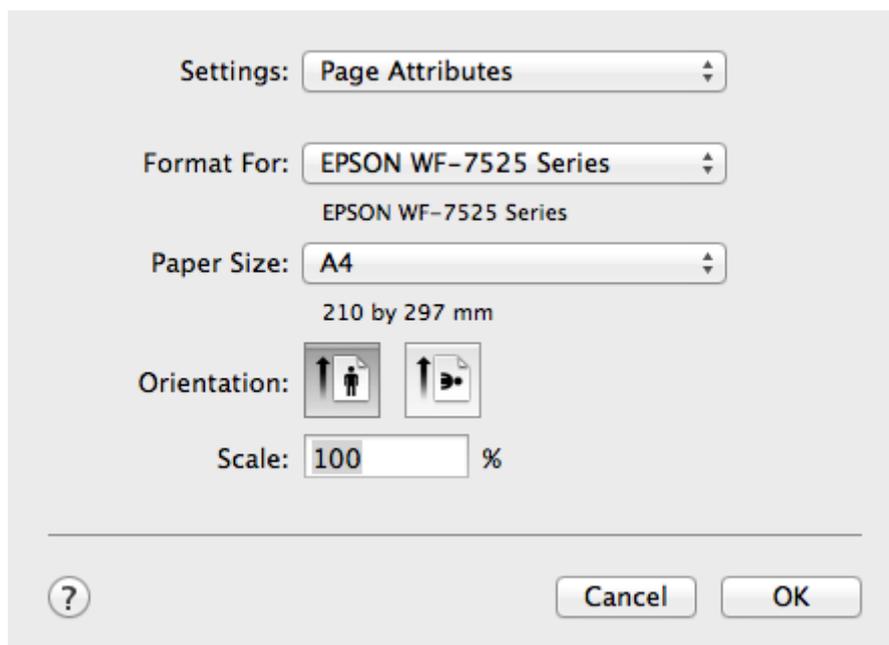
Manually checks to see if a new version of Javelin3 is available. The Release Notes page on the drumlinsecurity.com website provides a summary of updates.

Page setup and Print...

Printing from Javelin is very similar to printing from any other Mac application. In fact it is exactly the same for PDF files, but for secured PDF files (e.g. .drmz files) printing may or may not be permitted. If it is not permitted then a message will be displayed explaining this. We recommend only printing a small number of pages at a time, and always to a locally attached printer.

If permission to print the document has been provided, but the permitted number of pages printed or times printed has been reached, a message explaining this is displayed. The permitted count can be reset under certain circumstances so ask the document publisher or service provider for assistance. For example, the OSCEhome Package document whose [properties](#) were illustrated earlier does permit printing. In this case a maximum number of 1300 pages can be printed. The document itself is shorter than this (642 pages) so the publisher is allowing his customers to print the document in its entirety twice. Note that even if printing is permitted it is possible that printing will be prevented by the software. This will depend on the print device selected - for example, printing to a PDF is not permitted (it will result in an error message being displayed confirming that you cannot print to or save as a PDF).

The print Page setup.. form is shown below as an example - note that printing from Javelin includes auto-rotate functionality, so a mixed layout document (portrait and landscape pages) will print correctly without having to specify the page orientation for some pages.



Download file...

In most instances secured PDF files (with .drmz or, drmx file extensions) will be either provided via an email attachment, Dropbox distribution or similar file delivery mechanism, or they will be placed on a website and a link for downloading provided. Alternatively access to files may be provided via the Catalogs... menu (if provided - see Catalogs section below for more details).

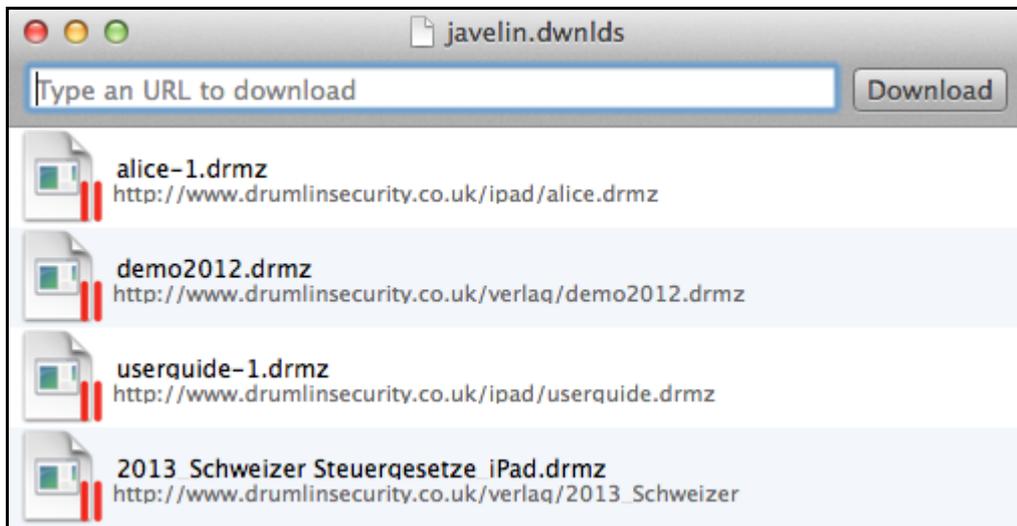
An example of an internet link would be the sample test file:

<http://www.drumlinsecurity.co.uk/ipad/testfonts.drmz>

Note that when you click on a link like this you should make sure the file is downloaded to a permanent location on your Mac, not a temp file that is then opened. To be certain of this check your Downloads folder to see if the file has been saved there or make sure the file is SAVE'd to your Documents folder or Desktop before trying to open it with Javelin (via the File menu, Open... option).

If you have a problem downloading DRMx or DRMz files from the Internet using Safari (for example it puts rubbish text all over your screen) we recommend that you run Javelin, select the File menu, Downloads option and enter (or drag in) the web address of the file to download and press the Download button.

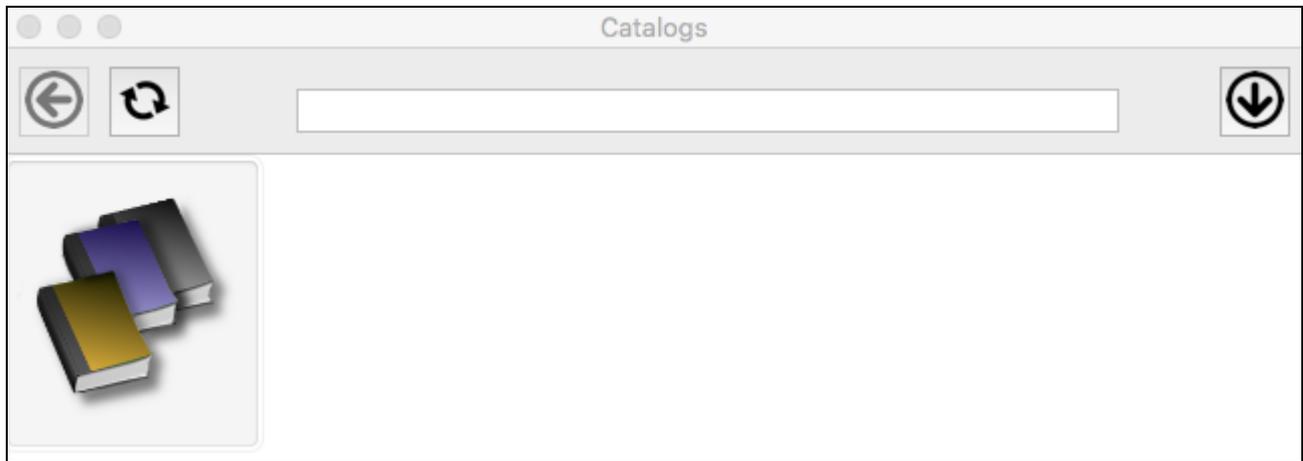
The Download facility in Javelin allows you to download a drmz or drmx file direct from within the program, which can be much easier than using a web browser. When the download file menu item or toolbar icon is accessed a form is displayed as shown below. You can type in the web address (URL) of the document to download, or if you have the address (e.g. in an email) you can drag it to the input field and then press the Download button to download the file. This process saves the file to your Downloads folder and asks if you would like to open it - if you say Yes, and the file is a PDF, it just opens, but if it is a drmz file then it will ask you for an authorization code. Previously downloaded files are shown listed in the box below the input field - these can be clicked to re-download a file if necessary. In general, you do not need to include the http:// bit of the web address as the program will recognize that the entry is a URL if it follows the basic rules for web addressing.



Catalogs...

The Catalog menu item displays the form shown below. This menu item is only displayed for recent versions of MacOS (e.g. not for 10.10 and 10.11). If the folder icon with books is clicked (or automatically refreshed) a set of books and further catalogs is displayed. These additional catalogs provide access to titles from a wide range of publishers. Alternatively, the URL (web address) of a publisher's catalog can be entered in the download field shown at the top of this form. A catalog URL has the file extension .xml or .zip so a typical example would be: www.pdfz.org/test.xml or www.pdfz.org/mpbooks.zip

The left arrow icon takes you back a level, the second icon allows the catalog to be refreshed (e.g. if new titles have been added), and the final icon is the action/download icon. Right-clicking on a catalog provides additional functionality: Delete catalog, Catalog Info, Refresh Catalog, Open catalog folder, Open catalog as text



Within a catalog icons corresponding to documents are displayed. Clicking on an entry will download that item automatically and then prompt you for an authorization code if it is a drmz or drmx file. The book cover image will be displayed if the publisher provides one. Right clicking on an entry in a catalog displays an additional menu of items: Delete document, Document info, Refresh catalog, Open document folder, Refresh document image

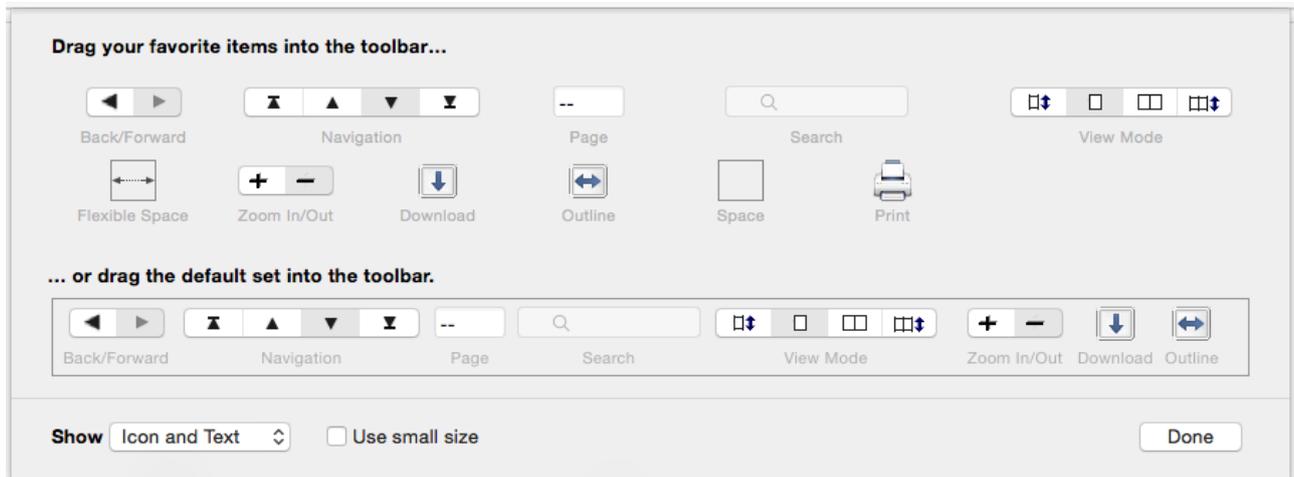
View menu

View/hide toolbar

This is a simple option that enables the toolbar to be hidden in order to increase the available screen display area. Note that the View menu option for full screen display (see below) provides an extended form of this functionality.

Customize toolbar

The toolbar is customizable, simply by adding or removing elements using drag and drop. The screenshot below illustrates this, with the default toolbar shown. For example, you may wish to add the Print icon to the default toolbar.



Full screen mode/slideview mode

The View menu includes the option to select Full Screen mode display. This facility displays pages in a form suitable for projection on screens, with right and left mouse clicks providing forward and backward page movement. The mode can be exit-ed via the View menu, Toggle full screen mode, or using the Apple key sequence displayed on the menu item (alt cmd F).

Additional information

Additional information relating to the Javelin apps can be obtained by contacting Drumlin Security Ltd. Special apps that incorporate functionality similar to Javelin 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, <https://www.drumlinsecurity.com>

The secured PDF files used in the 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 Windows using Javelin readers for these platforms. For more details, please see the Drumlin Security website.