



# ViewONE Pro HTML and Installation Manual

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## Introduction

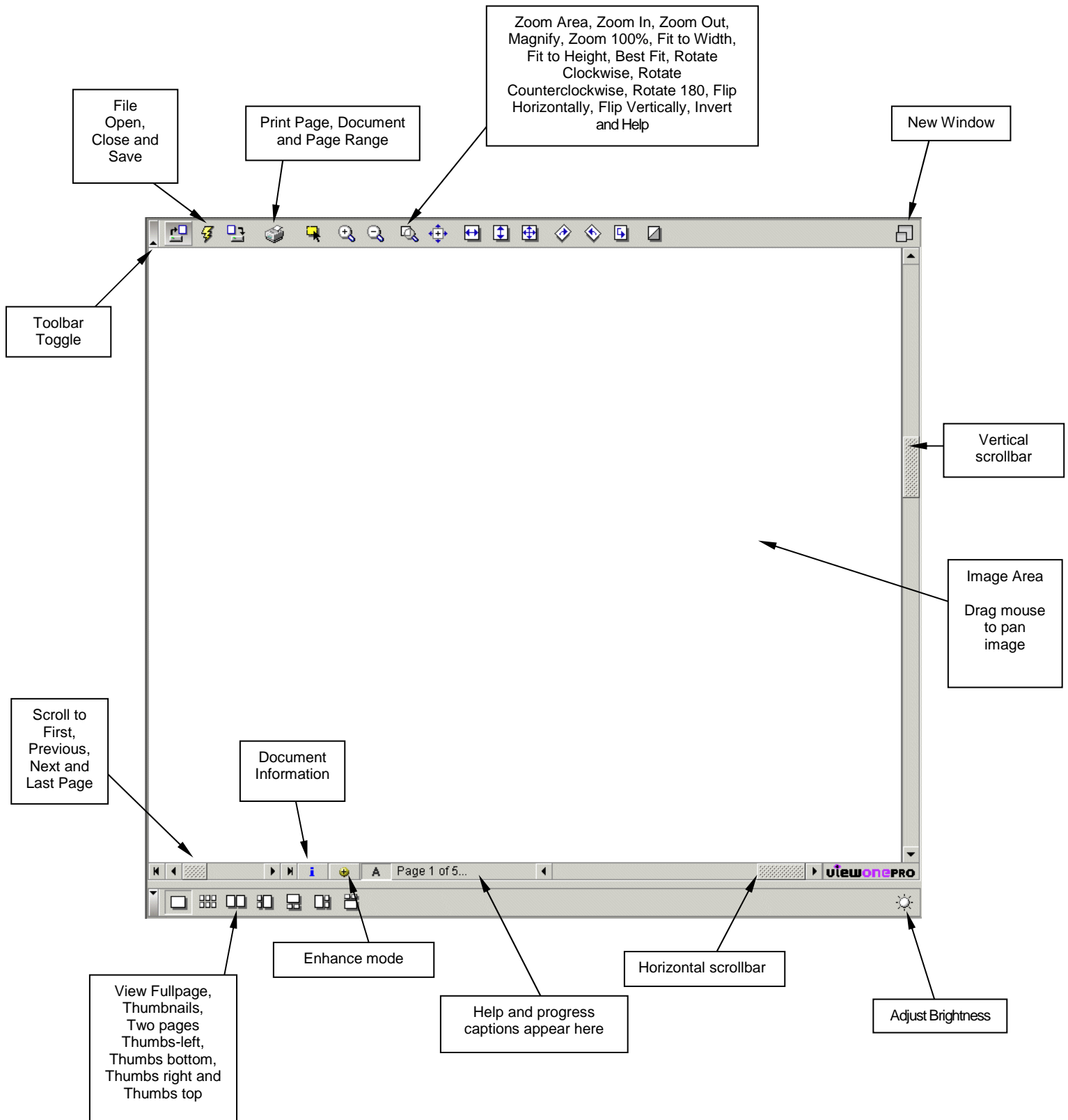
**ViewONE Pro** is a Java applet that extends your web browser so that you can view, zoom, magnify, scroll, pan, rotate and print your images and image documents quickly and easily. ViewONE Pro offers additional features over ViewONE Standard (see following sections for details).

This document is the Applet installation and HTML Manual for ViewONE Pro.

For further information about ViewONE (Standard and Pro) please consult the following documents...

- ViewONE HTML User Manual
- ViewONE User Manual
- ViewONE JavaScript API Manual
- ViewONE Annotations User Manual
- ViewONE Annotations Configuration Manual
- Various White Papers for in-depth analysis of specific areas
- Latest ViewONE release notes found at <http://www.daeja.com/support/updates.asp?id=3>.

# The Applet user interface



## Installing ViewONE Pro

### **HTML:**

To install ViewONE on your web site you must first download the 'Update' zip file from the Daeja web site. This can be found by visiting <http://www.daeja.com/support/login.asp>

After unzipping the downloaded file you should have a directory named "**v1files**". This directory contains the essential files required to install and use ViewONE.

Copy **all** files found in the "**v1files**" directory to your web server, preferably in a separate directory similarly named.

ViewONE Pro can be used on one of two ways, as follows...

## Using ViewONE Pro with the ACM (recommended method)

The ViewONE Pro Advanced Cache Manager (ACM) will automatically cache ViewONE itself on your machine. This means that ViewONE will reside on your machine in a temporary space in a location chosen by ViewONE itself.

Since build 1.0.446 that location is the Windows temp directory (for Microsoft Windows platforms using the Sun JRE). For all other platforms, earlier viewer builds and the Microsoft Java Engine, that location will normally be within either your Windows installation directory (under the Java subdirectory) for users of the Microsoft Java Engine, or within your Program files/installation directory (for users of the Sun Java Engine).

The ACM caches ViewONE Pro in these locations in order to offer you the best possible performance for start-up and re-start-up of the viewer. Start-up performance of this method is better than the alternative (see other method below) because your browser does not need to perform any program downloads (or verification of those downloads) prior to starting the viewer.

Using this method you will however be provided with a progress bar the first time you use ViewONE whilst it downloads the necessary files for your chosen configuration. ViewONE will only download those files that it requires to view your particular type of document. If it later encounters a document type (e.g. PDF) that require additional downloaded components then you it once again provide you with a progress bar while this one time download occurs.

To use this method on your web site, setup a web page containing the following HTML...

```
<APPLET CODEBASE = "."  
ARCHIVE = "viewone.jar"  
CODE = "start.jiViewONE.class"  
NAME = "ViewONE"  
WIDTH = "100%"  
HEIGHT = "97%"  
HSPACE = "0"  
VSPACE = "0"  
ALIGN = "middle">  
</APPLET>
```

Please note: you must change the "codebase" value to point to the location of the 'v1files' directory that contains ViewONE's resource files (i.e. ji.jar, daeja1.jar and other .v1 files).

The codebase parameter specifies the location of the viewone.jar and other files relative to the location of the HTML page. So in this case it specifies the "current directory" which is "."

Our downloadable demos include examples to assist you.

## Using ViewONE Pro without the ACM

For ViewONE Pro builds earlier than 1.0.446 (\*\*\*) please see note below), in some installations it may not be possible for ViewONE to cache itself in either the Windows or program installation directories.

This is a typical problem in 'lock-down' situations where users are not permitted to create files in these directories.

In such situations it is still possible for those users to still use ViewONE Pro by resorting to the typical method used for all other applets.

We do recommend however that if possible (perhaps at a later convenient time) that you take the opportunity to pre-cache ViewONE by using a privileged account on the users machine. By pre-caching ViewONE using a privileged user account, your users (those with restricted privileges) will continue to get the performance benefits of having ViewONE cached on your machine as they will automatically pick-up the pre-cached ViewONE instance.

Please see the Pre-Caching ViewONE section for details on how to implement this solution.

If you are using a viewer build earlier than 1.0.446 and are not able to pre-cache or decide that the normal start-up performance is perfectly good enough for you then you can use the following HTML to setup ViewONE without using the ACM to cache ViewONE as follows...

```
<APPLET CODEBASE = "."  
ARCHIVE = "ji.jar, daeja1.jar, daeja2.jar, daeja3.jar"  
CODE = "ji.applet.jiApplet.class"  
NAME = "ViewONE"  
WIDTH = "100%"  
HEIGHT = "97%"  
HSPACE = "0"  
VSPACE = "0"  
ALIGN = "middle">  
</APPLET>
```

Please note: you must change the "codebase" value to point to the location of the 'v1files' directory that contains ViewONEs resource files (i.e. ji.jar, daeja1.jar and other .v1 files).

The codebase parameter specifies the location of the ji.jar, daeja1.jar and other files relative to the location of the HTML page. So in this case it specifies the "current directory" which is "."



\*\*\* Note about build 1.0.446+

Since 1.0.0446 ViewONE Pro is able to cache itself within the Windows temp directory (for Microsoft Windows platforms). This change was implemented to help reduce problems with locked-down machines since even locked-down machines usually enable write-access to a temp location indicated by the Windows TMP or TEMP environment variables (i.e. the "Windows Temp Directory").

This new feature can be disabled so that ViewONE Pro reverts to the earlier method by using the new HTML paramater below...

```
<PARAM NAME="useCustomInstallationPath" VALUE="false">
```

### **Important Note with use of "localhost" and/or IP Address "127.0.0.1"**

Please note that when referencing viewer and/or image files you should NOT use either "localhost" or IP address "127.0.0.1" in the URL. These are not allowed in full production files and are restricted within the code itself such that if you do use them, the core viewer will function but you may see unexpected behavior with more complex code. To avoid such issues, you should use the machine name by way of reference, for example:

```
Applet codebase ="http://localhost:8080/v1files"
```

becomes:

```
Applet codebase ="http://mymachinename:8080/v1files"
```

or:

```
<param name="filename" value="http://127.0.0.1/MyDocumentStore/example.tif">
```

becomes:

```
<param name="filename" value="http://mymachinename/MyDocumentStore/example.tif">
```

## Setting up Windows 2003 server

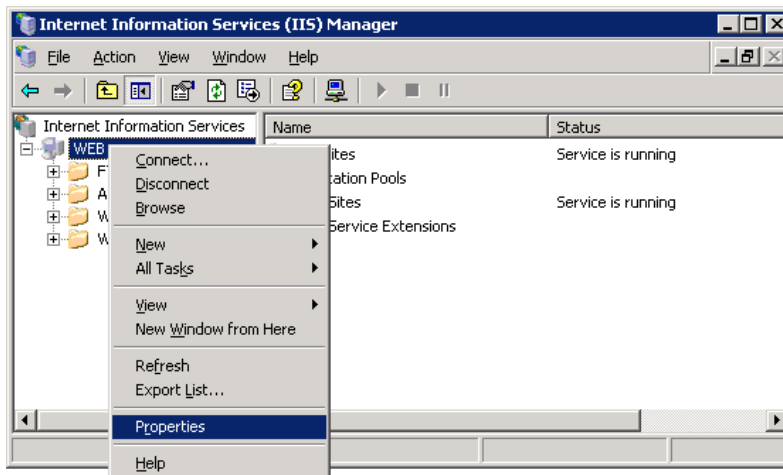
ViewONE does not require a specific web server or server platform, but if your server is running Windows 2003 with IIS 6, you will have to add two file extensions to your web site "MIME Types" (for both ViewONE Standard and ViewONE Pro).

Unlike previous Windows servers, Windows 2003 permits only a limited number of file extensions by default, all others must be enabled manually using the IIS console.

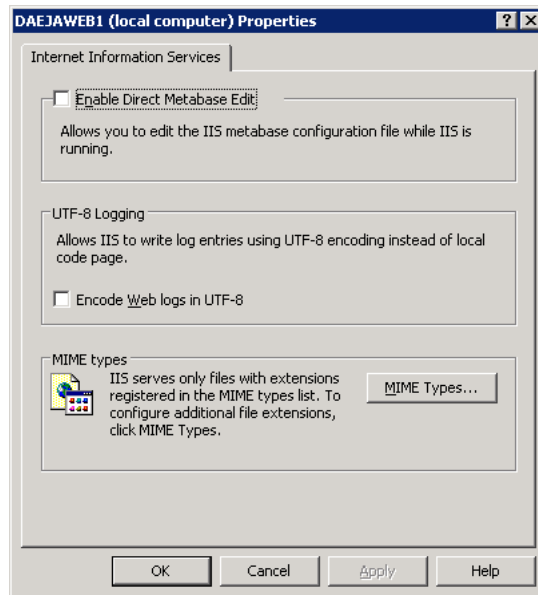
The additional mime types required to operate ViewONE are ".v1" and ".ant". Note: if they are not added to IIS 6 then ViewONE will display messages during start-up that files with these extensions could not be found).

Both file extensions should be set to the mime type "application/octet-stream", as follows..

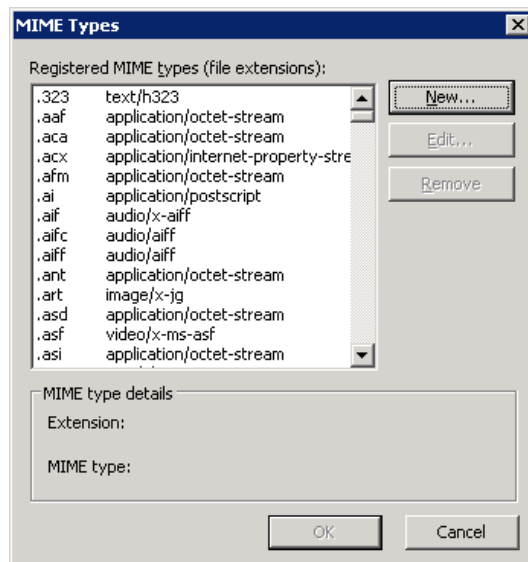
Open up IIS 6 console, then right-click on the top web space entry to highlight "Properties"...



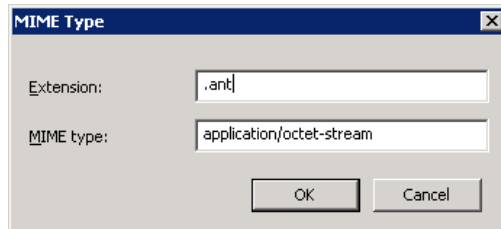
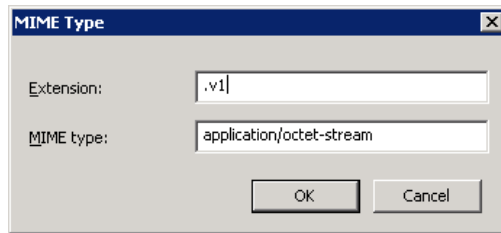
Click on the properties menu to display the properties dialog...



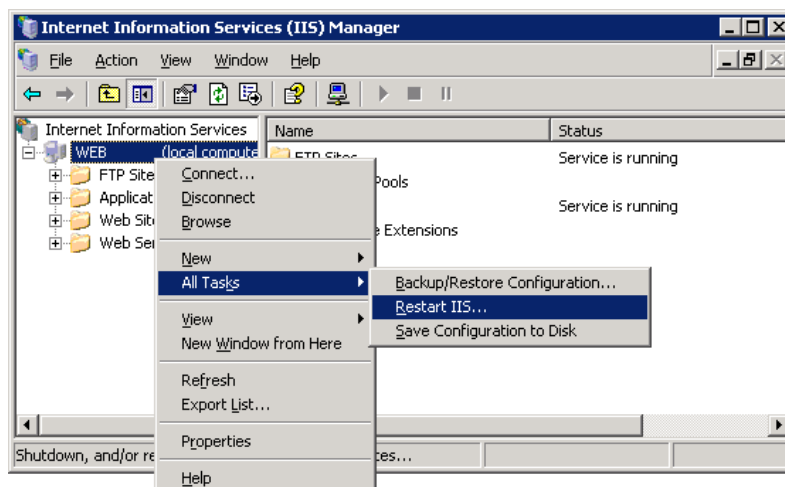
Click on the MIME Type button to display the MIME Type dialog...



Use the New button to add two new MIME types...



Click OK until you return back to the main console dialog. Right click once again on the main web space entry. Click on the Restart IIS menu to activate the new MIME Types.



## Applet Parameters

The following list describes the optional (**ViewONE Pro specific**) parameters.

*Please note: There are many more optional parameters that are available for ViewONE Pro and ViewONE Standard. Those parameters are described in the ViewONE Standard HTML manual (html.pdf).*

The general format for adding a parameter to your HTML is as follows:

<PARAM NAME="*name*" value="*value*">

Where *name* is replaced by the parameter name and *value* replaced by the parameter value.

All parameters are specified as strings.

Filenames and hyperlink addresses are expressed using the internet URL address format (Uniform Resource Locator), e.g. "http://mysite/myimage.tif". If any part of the address before "myimage.tif" is not included then the applet will assume a base address which is the same as the applet location (the codebase).

With the exception of filenames and hyperlink addresses, all parameters are case insensitive.

Some parameters are available only for ViewONE Version 3 onwards (marked with **V3-Only**) and some only for ViewONE Pro (marked with **Pro-Only**).

### Checking your parameters

If you are unsure whether ViewONE has processed any of your parameters correctly, or are having problems using a particular parameter, then a special hot key (Shift-T) can be used to display the processed parameters. To use this key, start ViewONE (by visiting your web page that contains the applet), click in the center of the applet then hold the Shift key down while pressing key "T".

(If a parameter that you have specified in your HTML does not appear in the list provided by Shift-T then this usually indicates that you have misspelt the parameter name in the HTML).

## Advanced Cache Manager

ViewONE Pro introduced the Advanced Cache Manager (ACM).

The ACM is responsible for independently caching and updating ViewONE (rather than the usual browser caching). This can have significant performance benefits because the applet archive files are considerably smaller (and so browser processing of them is quicker) and ViewONE can handle all cache processing more effectively for applet and module extensions. Additionally this also means ViewONE can also be cached in secure environments (those that use https) whereas ordinarily the browser does not cache applets where https is used.

### **Parameter:**

#### **ACMEnabled**

**(Pro-Only)**

```
<PARAM NAME="ACMEnabled" value="false"> ...or...  
<PARAM NAME="ACMEnabled" value="true">
```

Setting this parameter to false will disable the ACM. Use this parameter with caution, since disabling the ACM will result in ViewONE not being able to cache extension modules (this will adversely affect performance). If you wish to disable the ACM you will also have to add archive files to your Archive HTML parameter (so ViewONE can still access the module resources). Please consult Daeja if you wish to do this for advice on what Archive settings you will require (as changes will be application dependent).

The default value for this parameter is true.

### **Parameter:**

#### **UseCustomInstallationPath**

**(Pro-Only)**

```
<PARAM NAME="UseCustomInstallationPath" value="false">
```

(Version Pro 1.0.346+)

Setting this parameter to "false" cause ViewONE Pro to revert to the old method of installing itself under the Windows Program Files directory for the Sun JRE or Windows installation directory for the Microsoft JVM.

The default value for this parameter is true.

**Parameter:**

**ACMUpdate**

(Pro-Only)

<PARAM NAME="ACMUpdate" value="false">

Setting this parameter to false will disable the ACMs automatic update feature. This feature is responsible for ensuring the user has the same version of ViewONE Pro caches as resides on the server.

This parameter may be useful is helping to schedule update downloads to users (to help control network bandwidth usage).

For example, where there are many users, you may wish to only have certain batches of users update per day. Therefore you could set this parameter to false for all except those that you want to update.

The default value for this parameter is true (all users will update).

**Parameter:**

**ACMReInstall**

(Pro-Only)

<PARAM NAME="ACMReInstall" value="true">

Setting this parameter to true will force ViewONE to update its cache no matter what version is already cached. The update will force the version on the server to be cached on the users' machine.

Once the re-install has been performed ViewONE will not execute. If you want to run ViewONE or perform other functions following a re-install then you must use this parameter in conjunction with the ACMRedirect parameter described below.

**Parameter:**

**ACMRemove**

(Pro-Only)

<PARAM NAME="ACMRemove" value="true">

Setting this parameter to true will force ViewONE to remove the current cached version of ViewONE from the users' machine.

Once the removal has been performed ViewONE will not execute. If you want to run ViewONE or perform other functions following a re-install then you must use this parameter in conjunction with the ACMRedirect parameter described below.

**Parameter:**

**ACMRedirect**

(Pro-Only)

<PARAM NAME="ACMRedirect" value="http://mysite/mywebpage.html">

This parameter is for use only with the ACMReInstall and ACMRemove parameters described above.

Setting this parameter to a web page will force ViewONE to open that page after performing either a re-install or removal. This may be useful if you want to confirm that a re-install or removal has occurred.

**Parameter:**

**ACMRedirectTarget**

(Pro-Only)

<PARAM NAME="ACMRedirectTarget" value="\_blank">

This parameter is effective only when used with the ACMRedirect parameter above.

When this parameter is specified, ViewONE will redirect the browser in the following ways..

"_blank"	In a new window.
"_self"	In the same window/frame that contains ViewONE.
"_top"	In the top level frame of ViewONE's window (this will be "_self" if frames are not used).
"_parent"	In ViewONE's parent frame (this will be "_self" if frames are not used).
<i>name</i>	In window which is named <i>name</i> . If a window of this name does not exist, then a top-level window will be created with this name.

ACMRedirectTarget

**Parameter:**

**ACMDownloadPrompt**

(Pro-Only)

<PARAM NAME="ACMDownloadPrompt" value="false"> ...or...  
<PARAM NAME="ACMDownloadPrompt" value="true">

By default ViewONE will monitor the network performance. Where a Pro extension module (such as the PDF module) is downloaded (on first use) and the predicted time to download (based on the network monitoring) exceeds a pre-set limit then ViewONE will provide the user with a warning prompt.



This prompt can be turned on by setting this parameter to true.

The default value for this parameter is false.

***Parameter:***

**ACMDownloadPromptTrigger**

**(Pro-Only)**

<PARAM NAME="ACMDownloadPromptTrigger" value="10">

This parameter controls the trigger point at which the user is prompted for downloads (see ACMDownloadPrompt parameter above). This parameter sets the trigger point to the number of 'seconds' required before the user gets prompted.

The default value for this parameter is 15 seconds.

## Caching

### ***Parameter:***

#### **CacheMenus**

**(Pro-Only)**

<PARAM NAME="cacheMenus" value="false"> ...or...  
<PARAM NAME="cacheMenus" value="true">

(Version Pro 1.0.808+)

This parameter specifies whether the cache pop-up menu is available. A value of "true" (default) indicates the menu is available and "false" indicates is not.

## PDF Viewing Options

ViewONE Pro introduced an optional PDF module. The module comes with various optional parameters as follows...

### ***Parameter:***

#### **DefaultPDFPixelDepth**

***(Pro-Only)***

<PARAM NAME="defaultPDFPixelDepth" value="8">

This parameter changes the default pixel-depth for PDF document viewing.

(Lower pixel depths result in higher viewing performance but fewer colors).

The default value for this parameter is 8 (grayscale).

### ***Parameter:***

#### **DefaultPDFResolution**

***(Pro-Only)***

<PARAM NAME="defaultPDFResolution" value="100">

This parameter changes the default resolution for PDF document viewing.

(Lower resolutions result in higher viewing performance but less quality and higher resolutions result in slow viewing performance but higher quality).

The default value for this parameter is 200.

### ***Parameter:***

#### **DefaultAutoLimitPDFResolution**

***(Pro-Only)***

<PARAM NAME="defaultAutoLimitPDFResolution" value="true">

When this parameter is set to true, ViewONE will dynamically limit the PDF resolution in order to obtain maximum performance when viewing PDF documents.

ViewONE will attempt to use the default PDF resolution (see above) but if that resolution is likely to result in slow performance, ViewONE will reduce the resolution on a per document

and page basis depending on the "autoLimitPDFResolutionValue" HTML parameter described below.

**Parameter:**

**AutoLimitPDFResolutionValue**

**(Pro-Only)**

<PARAM NAME="AutoLimitPDFResolutionValue" value="50000000">

This parameter controls the way ViewONE limits resolution when using the DefaultAutoPDFResolution limiter above.

This parameter dictates the maximum amount of memory that is permitted for a decompressed PDF page. If a page exceeds this amount (e.g. when using high default PDF resolutions) then ViewONE will use a resolution for that page that brings it under this memory limit. The actual resolution used will depend on the page dimensions and color depth. To discover the limited resolution a page must first be viewed, then you can display the Image Information dialog (see Image Information button).

The default value for this parameter is 5Mb ( $5 * 1024 * 1024 = 5242880$  bytes).

If you find the limited resolution is resulting in degraded viewing quality, but you also wish to keep using the auto limiter, then try increasing the default value using this parameter. The best value for you can only really be discovered by experimentation since it depends upon your documents, PC and network performance and user preferences.

**Parameter:**

**alwaysShowPDFAnnotations**

**(Pro-Only)**

<PARAM NAME="alwaysShowPDFAnnotations" value="true">

This parameter controls whether the annotations that are stored in the actual PDF are shown or hidden when the "Show/Hide Annotations" button is pressed. Setting this parameter to "true" means that the annotations are always shown.

The default value for this parameter is "false".

**Parameter:**

**findResultColor**

**(Pro-Only)**

<PARAM NAME="findResultColor" value="R,G,B">

This parameter sets the color of the fill color for the annotation highlight used to indicate words found by searches.

The default value for this parameter is "152,192,217" (shade of blue).

***Parameter:***

**findResultHighlightColor**

***(Pro-Only)***

<PARAM NAME="findResultHighlightColor" value="R,G,B">

This parameter sets the color of the border for the annotation highlight used to indicate words found by searches.

The default value for this parameter is "0,0,0" (black).

***Parameter:***

**findResultHistoryListSize**

***(Pro-Only)***

<PARAM NAME="findResultHistoryListSize" value="5">

This parameter sets the color of the border for the annotation highlight used to indicate words found by searches.

The default value for this parameter is "0,0,0" (black).

## Email Module

The Email module is shipped with the Office module available since version 4.0.2+ of ViewONE Pro and enables viewing of Microsoft Outlook email (MSG) and RFC822 (EML) message files and saving of attachments.

The module is a pure Java implementation that enables the viewing of Outlook and EML messages without the need to have an email client (Outlook, Thunderbird) on the machine.

The module allows you to view any email as a single page, limited only by the amount of memory available (configured via parameter), and be able to save the attachments embedded within the message to the local file system. Prints message on a single page.

### *Restrictions:*

- A Sun Java 2 (v1.2+) runtime environment is required
- email messages are displayed and printed as a single page (A4/letter).
- Outlook MSG files support RTF, HTML and plain text, only the HTML and plain text are currently available in the viewer.

### **Parameter:**

#### **blockEmailModule**

**(Pro-Only)**

<PARAM NAME="blockEmailModule" value="true">

(Version Pro 1.1.168+)

Default value is false. When true the email module will not be available even if the license file permits it. This will prevent emails being viewed.

### **Parameter:**

#### **allowSaveEmailAttachments**

**(Pro-Only)**

<PARAM NAME="allowSaveEmailAttachments" value="true">

If this parameter is set to true then any attachments located within the message file will be available for saving to the local file system. This default value is false.

### **Parameter:**

#### **allowExternalEmailImages**

**(Pro-Only)**

<PARAM NAME="allowExternalEmailImages" value="true">

If this parameter is set to true then it is possible for external email images to be loaded into the displayed email message. The default value is false.

**Parameter:**

**showExternalEmailImages**

**(Pro-Only)**

<PARAM NAME="showExternalEmailImages" value="true">

If this parameter is set to true and 'allowExternalEmailImages' is true then an attempt will be made to retrieve the image resources with remote URL addresses and display them in the message.

This parameter may also be set via JavaScript.

**Parameter:**

**listEmailAttachmentsInHeader**

**(Pro-Only)**

<PARAM NAME="listEmailAttachmentsInHeader" value="true">

If this parameter is set to true then attachments will be listed in the header section of the displayed email.

The default value is true.

**Parameter:**

**emailHeaderInfo**

**(Pro-Only)**

<PARAM NAME="emailHeaderInfo" value="true">

If this parameter is set to true then all the available internet mail headers, server routing etc., will be displayed in the document information dialog.

The default value is false.

**Parameter:**

**showPlainTextForRTFEmail**

**(Pro-Only)**

<PARAM NAME="showPlainTextForRTFEmail" value="true">

Some Microsoft email messages are stored in RTF format instead of HTML. RTF format is not currently supported by the email module. Setting this parameter to true will cause the email module to look for a plain text alternative within the email and display this where it is available.

Setting this parameter to true does not cause the RTF content to be interpreted as plain text – it only tells the module to display plain text if the email also contains a plain text alternative content.

The default value is false.

## Excel Module

The Excel module is shipped with the Office module available since version 4.0.2+ of ViewONE Pro and enables viewing of Microsoft Excel spreadsheets (.xls, .xlsx) in either spreadsheet or page view modes.

The module is a pure Java implementation that enables the viewing of Excel Spreadsheets without the need to have MS Office installed on the machine.

### *Restrictions:*

- A Sun Java 2 (v1.4.2+) runtime environment is required
- This supports the Excel spreadsheet format only – so derivatives such as .csv files are not supported with this module.

### ***Parameter:***

#### **excelViewMode**

#### ***(Pro-Only)***

<PARAM NAME="excelViewMode" value="pref">

By default, the Excel module will initially attempt to view spreadsheets in a user-friendly "sheet view" in order to more accurately reflect how the document is viewed in the native viewer. The viewer is optimized for performance in this respect and will only attempt to display the spreadsheet in this mode where there are enough resources available, else it will revert to displaying in "page view" mode and bring up a dialog box informing the user of this.

This parameter allows you to specify force a particular mode for the spreadsheet view. Allowed values are:

pref - set on or off according to user preference  
sheet - force to sheet view mode for all spreadsheets  
page - force to page view mode for all spreadsheets

The default value is "pref".

### ***Parameter:***

#### **excelGridlines**

#### ***(Pro-Only)***

<PARAM NAME="excelGridlines" value="show">

This parameter allows you to specify if and when grid lines are presented in the spreadsheet view. Allowed values are:

pref - set on or off according to user preference  
show - force to on  
hide - force to off

The default value is "pref".



## Word Module

The Word module is shipped with the Office module available since version 4.0.2+ of ViewONE Pro and enables viewing of Microsoft Word documents (.doc, .docx)

The module is a pure Java implementation that enables the viewing of Word documents Spreadsheets without the need to have MS Office installed on the machine.

## Universal Viewing Module

ViewONE Pro introduced an optional Universal Viewing module. The module comes with the following optional parameters...

### **Parameter:**

#### **obfuscateUV**

#### **(Pro-Only)**

<PARAM NAME="obfuscateUV" value="false">

(Version Pro 1.1.52+)

This parameter is used either when the "obfuscate" parameter is set to "true" OR if you are using the Daeja Streaming servlet component as part of your application configuration and deliver documents that are rendered by the Universal Viewing module (because the streaming servlet obfuscates all documents that are passed through it)

. The Universal Viewing Module cannot deal with the cached file format used when the "obfuscate" parameter is set to "true". To get around this set this parameter to the value of "false".

Please note that setting this parameter to false means that documents displayed using the Universal Viewing Module will be cached using their native format. This could be a problem where access to images is a particularly sensitive issue or users are charged for image viewing/printing.

The default value for this parameter is "true".

### **Parameter:**

#### **uvTextDirectionMethod**

#### **(Pro-Only)**

<PARAM NAME="uvTextDirectionMethod" value="2">

(Version Pro 4.0.18+)

Valid values are:

- 0 – do nothing
- 2 – use Unicode

This parameter is used to ensure that documents loaded with the Universal Viewing module will be displayed right to left where the language is a right to left language such as Arabic or Hebrew.

The default value for this parameter is "0".

## COLD Viewing Options

ViewONE Pro introduced an optional COLD module.

The COLD module is responsible for implementing image merging and text formatting processes.

A COLD document (Computer Output to Laser Disk) is traditionally a document that has both text and image content and is usually used with forms packages.

During COLD forms' input, the fields are separated from the actual form (also known as the background or template) and during viewing they need reconstituting so that the user sees the complete form with completed fields.

The ViewONE COLD module allows any of its support files formats to be used either as a background template or foreground content.

For example, it is possible to have a TIFF or JPEG image as the background template and simple text as the foreground.

The COLD module is particularly effective when combined with the PDF module. It then becomes possible to have PDF used as either or both background and foreground.

Although more commonly one would use an image (typically TIFF based) as the background (thereby getting best performance and compression) and utilize the advanced text PDF formatting to handle the foreground (thereby able to create advanced forms for display).

Note: There are many proprietary COLD document formats in circulation. Daeja will look at any sample (with specifications) that you provide to assess the feasibility of adding specific format support to ViewONE. Currently the COLD module supports simple ASCII text and PDF document types.

The module comes with various optional parameters as follows...

### **Parameter:**

#### **BackgroundImage**

#### **(Pro-Only)**

<PARAM NAME="backgroundimage" value="http://mysite/mybackimage.tif">

This parameter defines the source file to be used as a background template. When this parameter is defined, the same image is used for all pages of the document but ViewONE will only retrieve the template once from the server (therefore optimizing performance).

**Parameter:**

**BackgroundImage<N>**

**(Pro-Only)**

```
<PARAM NAME="backgroundImage1" value="My first page">  
<PARAM NAME="backgroundImage2" value="My second page">  
<PARAM NAME="backgroundImage3" value="My third page ">
```

This parameter allows you to specify a different background template for each page of a multi-page document.

**Parameter:**

**BackgroundImagePageNumber**

**(Pro-Only)**

```
<PARAM NAME="backgroundImagePageNunber" value="2">
```

This parameter allows you force ViewONE to use a specific page from the source background file for the background template (e.g. where that file supports multiple pages such as TIFF and PDF documents).

# Document Thumbnails

(Version Standard 3.0.490+, Pro 1.0.490+)

ViewONE Pro has an option to show thumbnail and/or a text index for each document specified using the HTML parameter Doc<N> (see HTML manual for details).

The following parameters can be used to enable and customize this functionality.

## **Parameter:**

### **docThumbsEnabled**

**(Pro-Only)**

(Version Standard 3.0.490+, Pro 1.0.490+)

<PARAM NAME="docThumbsEnabled" value="true">

When set to true and the Doc<N> HTML parameter is in use (see HTML manual for details), two extra thumbnail views are enabled that display either a list of available documents or a thumbnail of the first page of each document in the document list.

The default value for this parameter is "false".

## **Parameter:**

### **docThumbsImageEnabled**

**(Pro-Only)**

(Version Standard 3.0.490+, Pro 1.0.490+)

<PARAM NAME="docThumbsImageEnabled" value="false">

This parameter is used to disable the document thumbnail view and remove it's icon from the thumbnail toolbar.

NOTE: If all available thumbnail views are removed from the thumbnail toolbar, the toolbar will no longer be displayed.

The default value for this parameter is "true".

**Parameter:**

**docThumbsTextEnabled**

**(Pro-Only)**

(Version Standard 3.0.490+, Pro 1.0.490+)

<PARAM NAME="docThumbsTextEnabled" value="false">

This parameter is used to disable the document text index list view and remove it's icon from the thumbnail toolbar.

NOTE: If all available thumbnail views are removed from the thumbnail toolbar, the toolbar will no longer be displayed.

The default value for this parameter is "true".

**Parameter:**

**DocThumbLabel<N>**

(Version Standard 3.0.490+, Pro 1.0.490+)

<PARAM NAME="docThumbLabel1" value="My first page">

<PARAM NAME="docThumbLabel2" value="My second page">

<PARAM NAME="docThumbLabel3" value="My third page ">

This parameter allows you to specify a different label for each document thumbnail; thumbLabel1 for document thumbnail 1, thumbLabel2 for document thumbnail 2, etc. The text will appear in the bottom right corner of each corresponding thumbnail.

**Parameter:**

**DocThumbLabelColor<N>**

(Version Standard 3.0.490+, Pro 1.0.490+)

<PARAM NAME="docThumbLabelColor1" value="255,255,192">

<PARAM NAME="docThumbLabelColor2" value="255, 192, 255">

<PARAM NAME="docThumbLabelColor3" value="192,255, 255">

This parameter allows you to specify the color of each document thumbnail label. The color is defined using standard RGB values. The default color is white (i.e., when a color label is not found).

**Parameter:****DocumentIndex<N>****(Pro-Only)**

(Version Standard 3.0.490+, Pro 1.0.490+)

```
<PARAM NAME="index1" value="Click for Page 1">
<PARAM NAME="index2" value="Click for Page 2">
<PARAM NAME="index3" value="Click for Page 3">
```

This parameter allows you to specify a different text index for each document; index1 for document 1, index2 for document 2, etc. The text will appear in the document text index list.

**Parameter:****DocumentIndexList****(Pro-Only)**

(Version Standard 3.0.490+, Pro 1.0.490+)

```
<PARAM NAME="documentIndexList" value="http://mysite/myindex.txt">
```

This parameter allows you to specify a different file that contains the replacement text. The file must be a simple text file, with <LF> delimiting successive page indexes.

**Method:****setDocumentIndexList()****(Pro-Only)**

(Version Standard 3.0.490+, Pro 1.0.490+)

```
E.g. ViewONE.setDocumentIndexListFile("mylist.lst", 1);
```

This method allows you to dynamically specify a different file that contains the replacement text. The file must be a simple text file, with <LF> delimiting successive page indexes.

**Parameter:****DocThumb<N>****(Pro-Only)**

(Version Standard 3.0.490+, Pro 1.0.490+)

```
<PARAM NAME="docThumb1" value="images/doc1-t.tif">
<PARAM NAME="docThumb2" value="images/doc2-t.tif">
<PARAM NAME="docThumb3" value="images/doc3-t.tif">
```

In some instances, it may be advantageous to have separate files for document thumbnails (smaller files are quicker to download and view). This parameter allows a separate thumbnail file to be specified for each document.

Notes: If you use this parameter you must ensure that a file is specified for all pages of the document and that they match the corresponding full-resolution document files specified using the "doc<N>" parameter.

This parameter is only for use only when the "doc</>" and "docThumbsEnabled" parameters are used.

***Parameter:***

**hideThumbnailCloseIcon**

***(Pro-Only)***

(Version Pro 1.1.216+)

<PARAM NAME="hideThumbnailCloseIcon" value="true">

ViewONE Pro has a button just above the thumbnails that allow the thumbnail view to be close. This button is not available in ViewONE Standard.

This parameter allows that button to be hidden.



## Document Indexes

ViewONE Pro introduced an option to specify a text index for multi-page documents. A text index acts as an alternative to the thumbnail pane and with large documents can offer better performance than thumbnails (due to not having to handle image decompression display).

ViewONE offers a default text index which displays page numbers, however the list may be customized using the following parameters:

### ***Parameter:***

#### **Index<N>**

***(Pro-Only)***

```
<PARAM NAME="index1" value="Click for Page 1">  
<PARAM NAME="index2" value="Click for Page 2">  
<PARAM NAME="index3" value="Click for Page 3">
```

This parameter allows you to specify a different text index for each page; index1 for page 1, index2 for page 2, etc. The text will appear in the text index list.

### ***Parameter:***

#### **IndexList**

***(Pro-Only)***

```
<PARAM NAME="indexList" value="http://mysite/myindex.txt">
```

This parameter allows you to specify a different a file that contains the replacement text. The file must be a simple text file, with <LF> delimiting successive page indexes.

**Parameter:**

## DefaultThumbsDisplayMode

(Pro-Only)

<PARAM NAME="defaultThumbsDisplayMode" value="text">

This parameter specifies the default thumbnail display mode for ViewONE.

If 'text' is specified, ViewONE will default to the text index view for pages in a document, if enabled.

If 'image' is specified, ViewONE will default to the thumbnail view for pages, if enabled.

(Version Pro 1.0.490+)

If 'docText' is specified, ViewONE will default to the document text index view, if enabled.  
If 'docImage' is specified, ViewONE will default to the document thumbnail view, if enabled.

The default value for this parameter is 'image'.

**Parameter:**

## prefOverrideThumbsDisplayMode

(Pro-Only)

<PARAM NAME="prefOverrideThumbsDisplayMode" value="true">

(Version Pro 1.1.176+)

This parameter specifies whether the **defaultThumbsDisplayMode** value is always used for the thumbnail display mode.

When this parameter is set to false, the value stored in the preferences file is used to determine the thumbs display mode. If the display mode is never changed, then the **defaultThumbsDisplayMode** value is used.

When this parameter is set to true, the value stored in the preferences file is ignored and the **defaultThumbsDisplayMode** value is always used.

The default value for this parameter is 'false'.

**Parameter:**

## ThumbsText

(Pro-Only)

<PARAM NAME="thumbsText" value="false"> ...or...  
<PARAM NAME="thumbsText " value="true">

Specifies whether the thumbnails pane allows a text index to be displayed. The default value is true.

***Parameter:***

**ThumbsImageEnabled**

***(Pro-Only)***

<PARAM NAME="thumbsImageEnabled" value="false">

(Version Pro 1.0.490+

This parameter is used to disable the page thumbnail view and remove it's icon from the thumbnail toolbar.

NOTE: If all available thumbnail views are removed from the thumbnail toolbar, the toolbar will no longer be displayed.

The default value for this parameter is "true".

***Parameter:***

**ThumbsTextEnabled**

***(Pro-Only)***

(Version Pro 1.0.490+)

<PARAM NAME="thumbsTextEnabled" value="false">

This parameter is used to disable the text index list view and remove it's icon from the thumbnail toolbar.

NOTE: If all available thumbnail views are removed from the thumbnail toolbar, the toolbar will no longer be displayed.

The default value for this parameter is "true".

## Enabling additional security

ViewONE Pro offers additional security that enables protection of all parameters and images. Some environments may require this additional protection (for example where proxy-servers are used) to prevent unauthorized modification (or capture) of parameters or images during transit (from server to proxy-server to viewer).

The use of SSL (https) is usually sufficient to prevent unauthorized modification between servers and the client, however once data is cached by a proxy-server (e.g. an image as in this case) it could become inadvertently accessible to unauthorized personnel who have access to the proxy-server. Further, once the image has been retrieved to the user's machine (the client) then it may also become inadvertently available to other users of that machine (other than the source user).

ViewONE Pro offers the option of encrypting both parameters and images prior to transmission (whether or not SSL is used). By encrypting at this stage, if the parameters or images are cached midway (e.g. by a proxy-server) then the cached data will already be encrypted, preventing misuse. Subsequently, images that are cached by the viewer (or any other caching device) will remain encrypted to further prevent misuse after retrieval. Only by using ViewONE Pro will the images be viewable and printable.

### **Parameter:**

#### **EncConfig**

#### **(Pro-Only)**

```
<PARAM NAME="encConfig" value="{encrypted parameter string}">
```

This parameter specifies the encrypted string of all the configuration parameters applied to your ViewONE Pro implementation. When this parameter is in use, ViewONE Pro only obtains its configuration parameters through this parameter. Any other parameters specified to the viewer will be ignored. In addition, if this parameter is in use, ViewONE Pro will require any image data to be supplied to it in encrypted form.

For further protection, the use of this parameter requires a modified license file (supplied by Daeja), and once modified, the viewer will insist that all data supplied must thereafter be encrypted. Therefore even if someone attempted to remove the "encConfig" parameter and replace it with a traditional parameter list (via a proxy or other means), ViewONE Pro will still ignore any and all parameters other than the correctly encrypted encConfig. It is therefore not possible to bypass the use of encConfig.

For those customers that wish to make use of this feature, Daeja will supply a server-side Java class library which enables generation of encrypted parameters and images. The class library is for use with Java servlets.

A JSP example below demonstrates how to use this class library when generating the web page that contains the viewer and a sample servlet follows that shows how to generate encrypted images. You are free to use these samples to help create your own versions.

*Additional note: Please note that turning on JavaScript extensions (via the "JavaScriptExtensions" parameter) could allow unauthorized users to manipulate ViewONE Pro through JavaScript methods in order to obtain access to secure information, documents or annotations. This functionality is disabled by default and is specifically not used in this example (please refer to the ViewONE JavaScript API Manual for additional information).*

Viewer configuration is performed by creating a "ji.secure.EncryptedParameters" object and using it to set parameters via the "setParameter(String name, String value)" method (see lines 14-23). Calling the method "getParametersAsString()" will return a 7-bit clean string which should be passed to ViewONE Pro (see line 25).

Sample JSP demonstrating class library usage:

```
1  <%@ page language="java" %>
2  <%@ page import="ji.secure.EncryptedParameters" %>
3
4  <html>
5  <head>
6
7  <title>Encrypted parameter example</title>
8  </head>
9  <body>
10
11  <%
12      String encodedString = null;
13
14      EncryptedParameters p = new EncryptedParameters();
15      p.setParameter("page1",
16          "http://server:8080/encryptimage/ImageServer?id=1");
17      p.setParameter("page2",
18          "http://server:8080/encryptimage/ImageServer?id=2");
19      p.setParameter("viewMenus", "false");
20      p.setParameter("pageMenus", "false");
21      p.setParameter("preferenceMenus", "false");
22      p.setParameter("backColor", "200,200,100");
23      p.setParameter("activeColor", "255,0,0");
24
25      encodedString = p.getParametersAsString();
26
27      if (encodedString != null)
28      {
29  %>
30      <applet CODEBASE="resource/" ARCHIVE="ji.jar" width='640'
31          height='480' CODE="ji.applet.jiApplet.class"
32          NAME="viewONE" ID="viewONE" HSPACE="0" VSPACE="0"
33          ALIGN="middle">
34          <param name="cabbase" value="ji.cab"/>
35          <param name="scriptable" value="true"/>
36          <param name="encConfig" value="<%= encodedString%>" />
37      </applet>
38  <%
39      }
40      else
41      {
42  %>
43      <p>Viewer creation failed.</p>
44  <%
45      }
46  %>
```

```
47
48 </body>
49 </html>
```

When ViewONE is operating with "encConfig", it expects all images also to be sent to it in encrypted form. This can be done by utilizing a server-side servlet with the same Daeja-supplied Java class library, which encrypts images before sending them to the viewer.

The Servlet code below demonstrates how an image can be encrypted using the class library. In this simple example, the filename is indicated to the Servlet via the "id" parameter. The encryption work is done via the "EncryptionFilterInputStream". In this particular case, the document is assumed to be a TIFF.

Sample Servlet demonstrating encrypted image generation:

```
1  package sample;
2
3  import java.io.BufferedInputStream;
4  import java.io.File;
5  import java.io.FileInputStream;
6  import java.io.IOException;
7
8  import javax.servlet.ServletException;
9  import javax.servlet.ServletRequest;
10 import javax.servlet.ServletResponse;
11 import javax.servlet.http.HttpServlet;
12
13 import ji.secure.EncryptionFilterInputStream;
14
15 public class EncryptedImageServlet extends HttpServlet
16 {
17
18     public void service(ServletRequest request,
19                        ServletResponse response)
20         throws ServletException, IOException
21     {
22         String id = request.getParameter("id");
23
24         if (id == null)
25             throw new ServletException("No document supplied");
26
27         if (Integer.valueOf(id).intValue() == 1)
28             filename = "c:\\documents\\page1.tif";
29         else if (Integer.valueOf(id).intValue() == 2)
30             filename = "c:\\documents\\page2.tif";
31
32         if (filename == null)
33             throw new ServletException("Invalid document ID");
34
35         File f = new File(filename);
36
37         if (f.exists())
38         {
39             response.setContentType("image/tiff");
40             response.setContentLength((int) f.length());
41
42             {
43                 int bufferSize = response.getBufferSize();
44                 byte[] buffer = new byte[bufferSize];
```

```

45
46         BufferedInputStream is =
47             new BufferedInputStream(
48                 new EncryptionFilterInputStream(
49                     new FileInputStream(f)));
50         int len;
51
52         while ( (len = is.read(buffer)) != -1)
53         {
54             response.getOutputStream().write(buffer);
55             response.flushBuffer();
56         }
57     }
58 }
59 else
60     throw new ServletException("File not found");
61
62     response.flushBuffer();
63 }
64 }

```

The above code is available for download available from  
<http://www.daeja.com/support/servlets1.asp>

## APPENDIX A: Deprecated Microsoft JVM

(Version Standard 3.1.200+, Pro 1.1.200+)

The Microsoft JVM has been deprecated by Microsoft themselves for sometime now as per this statement from the Microsoft website:

**"The MSJVM reached the end of its life as of June 30, 2009. Customers are encouraged to take proactive measures to stay informed about obsolete software and move away from the MSJVM in a timely fashion. The MSJVM is no longer available for distribution from Microsoft and there will be no enhancements to the MSJVM. Microsoft products and SKUs currently including the MSJVM have been retired or replaced by versions not containing the MSJVM."**

The Daeja viewer has continued to support use of this JVM until version 3.1.200\1.1.200 of the viewer released in May 2011 and you should be aware that this version of the viewer represents the last supported version of the viewer that will work with the Microsoft JVM – any attempt to use a later version of the viewer will result in a banner explaining that the platform is no longer supported so if you have a specific reason for needing to use the Microsoft JVM (typically legacy software) then you must ensure you are using version 3.1.200\1.1.200 of the viewer or earlier.

This step is part of an overall move away from needing to support the Java 1 environment and allows Daeja to make significant improvements in areas of the viewer currently hampered by the necessity of supporting these deprecated JVM's which are in reality, never used by customers any more.

So please note that the following configuration options for the viewer are specific to use of the MS JVM and/or other Java 1 JVM's:

### Declaration of .cab files

Typically most installations of the viewer include a separate location for the "ji.cab" or "viewone.cab" files but in fact these CAB files are only required where the viewer encounters the MS JVM so if you are using a version of the viewer later than 3.1.200\1.1.200 you should remove any reference to these files from your HTML source code.



## Pre-Loader

ViewONE Pro introduced the Advanced Cache Manager (ACM) – see previous section for details. The ACM as a whole is however only available for ViewONE pro users, but a minor part the ACM (known as the pre-loader) has also been incorporated into ViewONE Standard.

The pre-loader feature allows the users Internet Explorer (IE) browser cache to be pre-loaded with ViewONE Standard prior to its actual use so that the user is not burdened by the browser download (without a progress bar) at viewing time. A good time to pre-load would be at logon time for the user (before viewing images).

Pre-loading is only necessary for ViewONE Standard since Standard does not have a way to provide a progress bar to the user (whereas ViewONE Pro does).

However this feature is only able to pre-load ViewONE Standard into IE's cache when the user is using Microsoft's Java (the MS Virtual Machine). When using Sun's java (the JRE), pre-loading is ineffective since the JRE blocks any attempts at populating its cache.

Despite the limitation to IE, Daeja recommends using the pre-loader, since it is designed to auto-detect when the Sun JRE is being used and if it is it will automatically skip the pre-load.

This mechanism allows you therefore to use the pre-loader for all users and so removing the burden from you of knowing which users are using which Java engine but adding a benefit for those that use IE and Microsoft's Java.

To use the pre-loader, a specific set of HTML parameters with specific values must be used.

For that reason we have provided the parameters and settings as a whole (rather than individually describing each one), as follows...

## APPENDIX B: Pre-Caching ViewONE Pro

ViewONE Pro ordinarily caches itself (when your users first use it). However, it may be helpful in some cases (especially where users do not have sufficient privileges) to perform a the caching process (using a privileged user account) prior to your the users actually using ViewONE.

This can be accomplished by setting up a specific web page (for use by the privileged) user using the following HTML. Your privileged user should then open this web page which will in turn automatically cache ViewONE on the user's machine (ready for less privileged users).

When you open this web page you will see a series of progress bars (depending on how many ViewONE Pro modules you have purchased), each one showing the caching progress of the purchased modules.

Please note: if you later purchase additional modules, then you will need to re-open this web page using the privileged user account and it will then automatically pre-cache your newly purchased modules.

```
<APPLET CODEBASE = "."  
ARCHIVE = "viewone.jar"  
CODE = "start.jiViewONE.class"  
NAME = "ViewONE"  
WIDTH = "100%"  
HEIGHT = "97%"  
HSPACE = "0"  
VSPACE = "0"  
ALIGN = "middle">  
<PARAM NAME=" ACMPreInstall" VALUE="true">  
<PARAM NAME=" ACMredirect" VALUE="<mycompletewebpage>">  
</APPLET>
```

Please note: The ACMPreinstall parameter causes the viewer to download and pre-cache all the required files to the client machine – you will see progress bars as this process is carried out. Once the pre-cache process has completed, the web page identified by <mycompletewebpage> will be displayed. Please substitute this value for any valid web page of your choosing.

We have prepared a demo of this web page and an example of how to invoke the pre-install from a command line (so for example, if you need to invoke a pre-install remotely or from a central administration account). This demo can be found at [www.daeja.com/support/servlets1.asp](http://www.daeja.com/support/servlets1.asp) (see download that begins with "Pre-Installing ViewONE Pro...");